

# CONTRACT NAS1-99151

The following information has been determined to be exempt from disclosure and has been deleted from the contract:

- Section H.8: Small Disadvantaged Business Participation – Contract Targets, pgs. H-3 & H-4.
- Exhibit D: Subcontracting Plan, 7 pages.

The deleted material is exempt from disclosure under 14 C.F.R. 1206.300 (b) (4) which covers trade secrets and commercial or financial information obtained from a person and privileged or confidential. It has been held that commercial or financial matter is “confidential” for purposes of this exemption if its disclosure would be likely to have either of the following effects: (1) impair the Government’s ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained, National Parks and Conservation v. Morton, 498 F2d 765 (D.C. Cir. 1974).

Disclosure of the Small Disadvantaged Business Participation – Contract Targets was submitted as part of the contractor’s proposal which is proprietary and would provide insight into the business practices and operating methods of the company. Furthermore, disclosure would discourage other companies from participating in future competitive procurements, thereby impairing the Government’s ability to obtain complete and accurate data, and in turn frustrating the mandate to obtain maximum competition in negotiated procurements.

Disclosure of the information in the Subcontracting Plan would discourage future submission of detailed data concerning the company’s implementation of their Subcontracting Plan and impair the Government’s ability to obtain necessary information in the future as well as cause substantial harm to the competitive position of the company.

**SOLICITATION, OFFER AND AWARD**

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) - C9 PAGE 1 OF 103

2. CONTRACT NO. NAS1-99151  
 3. SOLICITATION NO. 1-122-AFA.2249  
 4. TYPE OF SOLICITATION  
 SEALED BID (IFB)  
 NEGOTIATED (RFP)  
 5. DATE ISSUED 4/22/99  
 6. REQUISITION/PURCHASE NO. AFA.2249  
 7. ISSUED BY National Aeronautics and Space Administration  
 Langley Research Center  
 Hampton, VA 23681-2199  
 8. ADDRESS OFFER TO (If other than Item 7)  
 9A Langley Boulevard, Building 1195B, Room 125  
 NASA, Langley Research Center  
 Hampton, VA 23681-2199

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

**SOLICITATION**

9. Sealed offers in original and 7 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in 9A Langley Boulevard, Building 1195B, Room 125 until 4:00 pm local time 5/24/99. CAUTION LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL  
 A. NAME Carolyn A. Wells  
 B. TELEPHONE NO. (NO COLLECT CALLS)  
 AREA CODE 757 NUMBER 864-2529 EXT.  
 C. E-MAIL ADDRESS c.a.wells@larc.nasa.gov

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**OFFER (Must be fully completed by offeror)**

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.  
 12. In compliance with the above, the undersigned agrees, if this offer is accepted within 60 calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8) N/A	10 CALENDAR DAYS (%) %	20 CALENDAR DAYS (%) %	30 CALENDAR DAYS (%) %	CALENDAR DAYS (%) %
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
	1	4/22/99	3	5/14/99
	2	4/30/99		

15A. NAME AND ADDRESS OF OFFEROR  
 Hernandez Engineering, Inc.  
 17625 El Camino Real, Suite 200  
 Houston, Texas 77058  
 DUNS NO: 109022202  
 CODE  
 FACILITY  
 16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)  
 Miguel A. Hernandez, Jr., P.E.  
 President/CEO

15B. TELEPHONE NUMBER  
 AREA CODE 281 NUMBER 280-5159 EXT.  
 15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.  
 17. SIGNATURE  
 18. OFFER DATE  
 May 24, 1999

**AWARD (To be completed by Government)**

19. ACCEPTED AS TO ITEMS NUMBERED N/A  
 20. AMOUNT \$3,961,334  
 21. ACCOUNTING AND APPROPRIATION SCA.1002; JO:MB166; 99230070100 \$47,000 (C) RFR.1009; JO:805820; RTR 99224012000 \$52,800 (C)  
 22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:  
 10 U.S.C. 2304(c) ( )  41 U.S.C. 253(c) ( )  
 23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)  
 ITEM G.1  
 24. ADMINISTERED BY (If other than Item 7)  
 DCAA  
 Houston Branch Office, Suite 500  
 Houston, TX 77017-6544  
 CODE  
 25. PAYMENT WILL BE MADE BY  
 Financial Management Office, MS 175  
 Langley Research Center  
 Hampton, VA 23681-2199  
 CODE  
 26. NAME OF CONTRACTING OFFICER (Type or print)  
 Mary Jane Yeager  
 27. UNITED STATES OF AMERICA  
 Mary Jane Yeager  
 (Signature of Contracting Officer)  
 28. AWARD DATE  
 8-31-99

IMPORTANT: Award will be made on this Form, or on Standard Form 26, or by other authorized official, written notice.

**FILE**

**PART I - THE SCHEDULE****Section B - Supplies or Services and Prices/Costs****B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED**

The Contractor shall perform, and provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to perform the requirements delineated in the Description/Specifications/Work Statement in Section C, C-1.

**B.2 ESTIMATED COST AND INCENTIVE FEE**

The estimated cost of this contract is \$3,802,082 exclusive of the maximum available incentive fee of \$159,252. The total estimated cost and maximum available incentive fee is \$3,961,334.

**B.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 contract is \$95,700. This allotment is for tasks and covers the following estimated period of performance: October 1, 1999 through October 19, 1999.

(b) An additional amount of \$4,100 is obligated under this contract for payment of incentive fee.

**PART I – THE SCHEDULE****Section C -- Description/Specification/Work Statement****C.1 STATEMENT OF WORK**

**NOTE:** The SOW work under paragraphs 1000.8, 1000.10, 3000.2.2, 3000.2.3 and “field verify drawings” under 1000 shall be implemented via Technical Direction clause (See Section I, 1852.242-70).

The Contractor shall provide configuration management, computerized maintenance management system support and high pressure system recertification services for a multitude of facilities at the NASA Langley Research Center (LaRC). The services to be provided under this contract are divided into three areas: Statement of Work (SOW) line items in the 1000 area are for configuration management support (CM); SOW line items in the 2000 area are for computerized maintenance management support (CMMS); and SOW line items in the 3000 area are for pressure systems recertification support (RECERT).

**Scope****1000 Configuration Management (CM)**

Configuration management services shall include a) the processing of Change Notification Sheets (CNS) for facilities in our high risk configuration management program; b) the processing of Changes in Laboratory Equipment/Procedures (CLEP) for facilities in our Laboratory Risk Evaluation Program (LREP); c) facilitating Annual Configuration Management Meetings for each of the facilities in the High-Risk Configuration Management Program and the Laboratory Risk Evaluation Program; d) processing of Asbestos Configuration Management Notification Sheets; e) scheduling operational procedure demonstrations and processing document changes; f) maintaining and implementing continuous improvement projects for the Configuration Management On-Line System; g) acting as the technical secretary for the Center's Systems Operations Committee, Executive Safety Board, and Facility Systems Engineering Division Formal Design Reviews; h) providing systems safety engineering support services for special projects or facilities at LaRC; i) operating the 8-Foot High Temperature Tunnel (8'HTT), Building 1265 document library; and j) Maintaining the configuration management program for flight projects.

The following requirements apply to 1000.1, 1000.2 and 1000.4 below:

- Langley Handbook 1740.4 “*Facility Systems Safety and Configuration Management*”, describes each of the configuration management activities listed below and can be used to obtain additional information about the processes.
- The Contractor shall perform safety and risk engineering evaluations. At completion, the Contractor shall submit the evaluations to the Government for review and approval. Upon approval and implementation, the Contractor shall perform the following functions:
  - Review documentation associated with the evaluation, and ensure all configuration controlled documentation affected are identified and red-lined. This includes the facility Safety Analysis Report (SAR), Standard Operating Procedures (SOPs), Emergency and/or Administrative Procedures, Checklists, and drawings.
  - Make the necessary changes to the source documentation such as:

- Update Microsoft Word electronic files for checklists, Standard Operating Procedures, Safety Analysis Report, Asbestos Configuration Management Plans, etc.
- Update AUTOCAD drawings;
- Update "hardcopy" drawings;
- Update raster images created using a FORMTEK system;
- Update Microsoft Access database of components for pressure systems.
- Obtain Technical Project Engineer, Facility Coordinator, Facility Safety Head and other approval signatures on the updated master documents, as may be required. This includes ensuring that facility personnel have field verified requisite changes.
- Distribute Working Master copies of the documents to the facilities. The point of distribution and the number of copies to be distributed in each facility will be determined by the cognizant Facility Safety Head.
- Update the Configuration Management On-Line (CMOL) System, to reflect the document changes required by the evaluation, close the evaluation, add the new or revised documentation into the CMOL system, and move obsolete or outdated documents to the historical archive.
- Field verify drawings when requested by cognizant Office of Safety and Facility Assurance (OSFA) engineer.
- Deliver completed sets of the updated documentation to Engineering Drawing Files, complete forms for microfilming of documents, designate outdated documents as obsolete or superseded.

1000.1 Change Notification Sheet Processing – LaRC uses a Change Notification Sheet (CNS) for the tracking of design and hardware/software changes for systems in the high-risk research facility configuration management program. (A list of facilities and/or systems is shown in Exhibit E.)

The CNS is also used to track changes to the Pressure Systems Configuration Management (PSCM) database as described in Section 3000.

1000.2 Change in Laboratory Risk Evaluation Program Processing – LaRC uses a Change in Laboratory Equipment/Procedures (CLEP) form for tracking design and hardware/software changes for systems in the Laboratory Risk Evaluation Program (LREP). (A list of facilities and/or systems is shown in Exhibit F.)

1000.3 Facilitating Annual Configuration Management Meetings for each of the facilities in the High-Risk Configuration Management Program and the Laboratory Risk Evaluation Program – LaRC has traditionally held annual meetings with personnel representing the research community, operations, facility systems engineering, the Office Safety and Facility Assurance (OSFA) and the Contractor to discuss facility plans, status of CNSs or CLEPs active in the CM programs and needed or anticipated updates to configuration controlled documents. The Contractor shall:

1000.3.1 Generate meeting packages to include a copy of last meeting minutes, documentation status, Risk Assessment status, any problem areas with regard to configuration

management, any known facility plans, summary of CNSs processed since last meeting, historical CNS status, and a status of outstanding CNSs.

1000.3.2 Generate and disseminate annual schedule for meetings and meeting notices to be held for facilities in the High Risk Research and Laboratory Risk Evaluation Programs.

1000.3.3 Attend meetings.

1000.3.4 Generate meeting minutes and action items.

1000.4 Asbestos Configuration Management Notification Sheet Processing – LaRC has many facilities with known asbestos containing materials in them. Information on facilities with asbestos and related documents have been placed in the configuration management program to assist in planning facility renovations or modifications, which may potentially disturb this material. Anytime work is planned in a facility with asbestos, or sampling is performed which identifies new areas of asbestos, an Asbestos Configuration Management (ABCM) Notification Sheet shall be generated. The Contractor shall:

1000.4.1 Generate and process ABCM Notification Sheets.

1000.4.2 Update the appropriate facility Asbestos Configuration Management Plan, note area of removal of asbestos or the newly identified asbestos.

1000.5 Scheduling Operational Procedure Demonstrations and Processing Documentation Changes – As a part of the facility assurance activity, the OSFA strives to conduct standard operating procedure demonstrations in each of its high risk research facilities annually. The purpose of these procedure demonstrations is to ensure that facilities are maintaining their configuration-controlled documentation to match the physical state of their facilities, ensuring that operators are familiar with and using the procedures, and performing spot-checks of the configuration-controlled documents, verifying the field verification status of those documents. The Contractor shall:

1000.5.1 Schedule the procedure demonstrations with the facility personnel, ensure they are performed at a time that will not adversely impact research within the facilities, and when facility personnel can be available to support the demonstration.

1000.5.2 Participate in a "live demonstration" of facility operation or a "walk through" or "dryrun" if live demonstration is not possible.

1000.5.3 Prepare and maintain records of the demonstration, and work with facility to initiate any required CNSs upon completion of the demonstration to update applicable procedures.

1000.5.4 Perform a spot check of facility "Working Master" documents comparing the Revision on site to the Revision recorded in the Facility Baseline Listing and document any discrepancies.

1000.6 Maintaining and Improving the Configuration Management On-Line (CMOL) System – The Contractor shall serve as the system administrator for the CMOL system and perform all functions necessary to keep this system operating at a peak level of performance. The primary functioning systems for CMOL will be Government-owned computers. The Contractor shall:

1000.6.1 Maintain a Contractor owned and operated back-up system at the Contractor's site, and be able to make its system the 'primary system' within four hours if the Government owned system fails. This swapping of machines shall be transparent to the end users at LaRC.

1000.6.1.1 Within 90 days of the award of the Contract, develop a detailed procedure for swapping from the Government's primary system to the Contractor's back-up system and back to the Government's primary system.

1000.6.1.2 After the approval of the procedure, perform an initial demonstration of the capability.

1000.6.1.3 After the initial swap demonstration, demonstrate the capability to swap from the Government's primary system to the Contractor's back-up system and back to the Government's primary system once each year.

1000.6.2 Maintain the list of active users of the CMOL system, issue new log-on names and passwords.

Conduct periodic review of the active user log and cross check of list with personnel who have access to the Center, to ensure that employees no longer requiring access to the system, are purged in a timely manner.

1000.6.3 Perform daily back-ups of system databases and documents.

1000.6.4 The Contractor shall customize workflow for configuration-controlled document processing.

Generate customized workflow to provide electronic configuration management services for special projects.

1000.6.5 Recommend the necessary hardware and software configurations that allow the special projects to administer a stand-alone CMOL documentation control system.

1000.6.6 Assist Government end-users in debugging their computers and associated software associated with the operation of the CMOL system so that they may be fully able to use all of the functions and capabilities of the CMOL system.

1000.6.7 The Contractor shall be knowledgeable of the latest state-of-the-art technology (both hardware and software) relative to the processing of documents and controlling their review and approval over the World-wide Web. The Contractor shall:

Provide a semi-annual status report regarding state-of-the-art changes taking place in the computer industry relative to CMOL equipment. Review the Government's CMOL systems against these changes, and make recommendations for improvements. The Government will assess the recommendations and allow the Contractor to implement these improvements when warranted, within technical and budgetary constraints. These assessments will include all aspects of system use including back-up strategies, uninterruptible power supplies and "hot swaps", disk storage, processor speeds, RAM requirements, access control and logging, etc.

1000.6.8 Monitor CMOL system use and look for sabotage efforts or unauthorized access attempts

1000.6.8.1 Maintain the proper level of access control to the system and report any suspected system threats to Government personnel, so that the proper investigations may be launched.

1000.6.8.2 If further investigations of the threats are required, provide all available information to assist in conducting these investigations.

1000.6.9 Obtain Government review and approvals prior to updating the electronic records of documents within the CMOL system. Adequate system safeguards shall be put into place to ensure that no unauthorized updates can occur without the requisite reviews and approvals.

1000.6.10 Maintain and update the Government web-site as related to Recertification and Configuration Management.

1000.6.11 Place new databases in the CMOL.

1000.7 Technical Secretary for the Center's Systems Operations Committee, Executive Safety Board and Facility Systems Engineering Division Formal Design Reviews – The Contractor shall serve as the Technical Secretary for the LaRC Systems Operations Committee, Executive Safety Board (ESB) and Facility Systems Engineering Division Formal Design Reviews. The Contractor shall:

1000.7.1 Schedule the meetings with appropriate Government points of contact.

1000.7.2 Issue meeting notices.

1000.7.3 Attend meetings and develop meeting minutes and action items requested by the Committee or Board.

1000.7.4 Distribute meeting minutes and action items to meeting attendees, and electronically post the minutes of these and all other ESB Sub-Committees.

1000.7.5 Track action items to closure, and issue monthly status reports on the status of open/closed actions, and update the CMOL database.

1000.7.6 Place minutes in the CMOL system.

1000.8 Systems Safety Engineering Support Services for Special Projects or Facilities at LaRC – Frequently, facilities at LaRC undergo significant modifications or require systems safety engineering support services. When requested, the Contractor shall:

1000.8.1 Perform hazards analysis, risk assessments and abatement design in accordance with LHB 1740.4, *Facility Systems Safety and Configuration Management*.

1000.8.2 Generate or update Safety Analysis Reports, Standard Operating Procedures, checklists, drawings, and other configuration-controlled documentation.

1000.8.3 Present analysis, risk assessments and abatement designs to NASA review panels. Coordinate presentation with the OSFA point-of-contact

1000.8.4 Review the Facility Baseline List, verify which design and construction documents will ultimately be configuration-controlled, and recommend changes to the Facility Baseline List.

1000.9 Operate the document library located at 8-Foot High Temperature Tunnel (8'HTT), Building 1265. The Contractor shall:

1000.9.1 Issue the latest copies of all procedures for test runs to the Test Director, 8'HTT.

1000.9.2 Maintain an inventory of all library documents



1000.9.3 Assure that all 8'HTT Supporting Facility Drawings are filed in Engineering Drawing Files, Building 1130T2 at LaRC.

1000.9.4 Receive information on all 8'HTT Problem Failure Reports (PFR) and Task/Test Requests (TTR) and record on appropriate form.

1000.9.4.1 Populate existing databases with information from PFRs and TTRs.

1000.9.4.2 Assure that required signatures are obtained when a TTR or PFR is initiated and prior to closure.

1000.9.4.3 File originals of TTRs and PFRs in the document library.

1000.10 Maintain the configuration management program for flight projects. The contractor shall maintain the configuration management program for flight projects using LaRC and NASA guidelines.

1000.10.1 Review changes packages for completeness and prepare packages for distribution including suspense control, tracking, and scheduling of Configuration Control Board (CCB) actions.

1000.10.2 Coordinate scheduling of the LaRC CCB meetings and serve as secretary.

1000.10.3 Prepare completed change packages for the concurrence of the flight project office.

1000.10.4 Perform CM audits and assist in quality assurance and physical audits.

1000.10.5 Participate and support Flight Project design reviews.

#### 2000 Computerized Maintenance Management System (CMMS)

The CMMS is a computer aided maintenance system that is used to track required maintenance on systems and components located throughout LaRC. The CMMS consists of databases that are stored and retrieved using MAXIMO and Oracle software. CMMS support shall include:

2000.1 Maintaining and Improving the CMMS – The Contractor shall provide MAXIMO<sup>1</sup> and Oracle<sup>2</sup> expertise to facilitate the continued development and maintenance of the CMMS. The Contractor shall:

2000.1.1 Provide all on-site MAXIMO training.

2000.1.2 Provide detailed system requirements and MAXIMO implementation plan to meet CMMS project objectives.

2000.1.3 Provide software customization, custom report writing, and MAXIMO specific functionality development.

<sup>1</sup> MAXIMO is developed by Project Software and Development, Incorporated of Bedford, MA.

<sup>2</sup> MAXIMO supports a variety of relational databases. Langley has chosen to standardize on Oracle.

2000.1.4 Establish a Help-Desk to provide application-specific support to all MAXIMO users. Document, review, and investigate reported software anomalies through a formal Software Problem Report (SPR) within MAXIMO itself.

2000.1.5 Serve as the MAXIMO/Oracle database administrator for the CMMS. The Contractor shall maintain user accounts and group management with associated security access rights. The Contractor shall review the accounts no less than annually to disable any accounts no longer active.

2000.1.6 Provide web authoring services to communicate information stored in Maximo/Oracle to outside organizations.

2000.1.7 Perform the day-to-day operations of the NT based CMMS server. The server shall be available 7 days per week, 24 hours per day except during scheduled downtime for maintenance. Provide disaster recovery plan and demonstrate its success for returning the system to service 2 hours after a failure of the government owned on-site equipment. Ensure the system complies with Langley computer security policies.

2000.1.8 Provide support to configure and populate the MAXIMO database

2000.1.9 Provide quality assurance services to determine the accuracy and completeness of CMMS data entered into the database.

### 3000.0 Recertification Services

To perform the recertification services, the Contractor shall follow the guidelines and definitions outlined in NASA Procedure and Guideline NPG 1700.6A, "*Guide for Inservice Inspection of Ground Based Pressure Vessels and Systems*".

The recertification work is subdivided in three phases of work. In Phase I, the contractor assembles a documentation package for all the system components and all pressure containing welds, analyzes the system components, performs sample nondestructive examination (NDE), generates a recertification report including a list of all components identified as non-code compliant and a summary sheet with the Contractor's recommendations to bring the system components under code compliance. In Phase II, the contractor performs additional NDE, performs an in-depth evaluation of the non-code complying components, implements emergency repairs if necessary, develops repair specifications, updates Phase I documentation after repairs are completed, develops an inservice inspection plan for the system, generates all necessary documentation to place the system in the Pressure Systems Configuration Management (PSCM) system, and issues a recertification letter to the cognizant Facility Safety Head. In Phase III, the contractor performs periodic inservice inspections and updates the documentation after inspections are completed.

3000.1 In performing the Phase I work on high-pressure systems, the Contractor shall:

3000.1.1 Develop isometric system drawings/sketches identifying each component in the system with a unique ID number.

3000.1.2 Maintain a computer database of all components in the system, which includes information such as the component manufacturer's name, model number, size, maximum allowable working pressure, actual working pressure, and recertification status.

3000.1.3 Develop isometric weld location drawings/sketches identifying each weld in the system with a unique ID number.

3000.1.4 Maintain a computer database of all welds in the system, which includes information such as the weld size, wall schedule, actual working pressure, and NDE status.

3000.1.5 Use the applicable National Consensus Codes, NASA handbooks, and guidelines to analyze and document the code compliance of the high-pressure system components. If required, the Contractor shall additionally perform fatigue and fracture mechanics analyses to assess the cyclic life of the components.

3000.1.6 NDE 10%  $\pm$  1/2 % of all the high pressure welds and 100% of all high stress areas of the systems identified in the analyses.

3000.1.7 Assemble a recertification report for the system.

3000.2 In performing the Phase II work on high pressure systems, the Contractor shall:

3000.2.1 Perform any additional NDE required by the applicable National Consensus Codes to complete the system recertification.

3000.2.2 The Government may direct further NDE.

3000.2.3 Perform emergency repairs whenever the analyses and NDE results indicate the possibility of imminent system failure.

3000.2.4 Develop engineering drawings showing the scope and extent of any repairs to be performed, including any special notes, site conditions, and repair requirements.

3000.2.5 Develop contract specifications using the NASA SPECSINTACT system clearly indicating the scope of the repair work, the contract schedule, any special site conditions, and all necessary technical and administrative requirements.

3000.2.6 Develop cost estimates for the repairs including labor insurance costs, overhead costs and escalation costs.

3000.2.7 Develop an inservice inspection plan for the system in compliance with NPG 1700.6A.

3000.2.8 Generate all necessary documents and Change Notification Sheets (CNS) to place the system in Pressure Systems Configuration Management (PSCM) through the Configuration Management On-Line (CMOL) System. A PSCM report is comprised of an up-to-date component database, as well as the isometric component drawings/sketches and the weld location maps.

3000.2.9 Update the system's documentation after the repairs are completed.

3000.3 In performing the Phase III work on high pressure systems, the Contractor shall:

3000.3.1 Provide the Government with a 3-year plan of upcoming inservice inspections, and cost estimates for performing these inspections. The Contractor shall update the plan and cost estimates as required, but not less than twice a year.

3000.3.2 Perform the inspections required by the inservice inspection plans developed in Phase II.

3000.3.3 Update the system's documentation after the inspections are completed.

3000.4 The Contractor shall utilize the NDE techniques described in Section V of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, when conducting nondestructive examinations of welds and high stress areas. The Contractor shall provide all necessary staging for performing NDE.

3000.5 The Contractor shall utilize the radiographic examination method (RT) for the nondestructive examination of all pressure containing welds. The Contractor shall follow the requirements in LAPD 1710.5, "*Ionizing Radiation*". The Contractor shall provide certified radiography monitors to conduct all radiographic examinations. In addition to this certification, the Contractor's radiation monitors will be required to attend a training course conducted by NASA.

3000.6 The Contractor shall provide all radiographic examination interpretation sheets and radiographic film to NASA. After acceptance of the nondestructive examination results by NASA, the contractor shall mark the location of all unacceptable areas identified by the NDE on the outside surface of the welds.

3000.7 To evaluate defects detected with NDE, the Contractor shall utilize the acceptance criteria specified in the applicable National Consensus Codes, with the following exceptions:

3000.7.1 The acceptance criteria for piping system butt welds undergoing radiographic examination shall be the criteria in the ASME B31.3, "*Chemical Plant and Petroleum Refinery Piping*" for severe cyclic conditions.

3000.7.2 The acceptance criteria for piping system socket and branch connection welds undergoing any type of examination shall be the criteria in LAPG 1710.41 "*Langley Research Center Standard for the Evaluation of Socket and Branch Connection Welds*".

3000.8 The Contractor shall provide continuous storage and security for all existing and future radiographic film of high-pressure systems. The radiographic film storage shall be protected from the weather by storing it in a temperature and humidity controlled environment, and shall be protected from fire hazards.

3000.9 The Contractor shall coordinate access to each facility with the cognizant NASA Facility Coordinator in order to perform the required recertification services.

3000.10 All drawings and sketches are generated and maintained using the Autodesk AutoCAD® Release 14 drafting software. All new drawings and sketches shall be fully compatible with this software. All existing drawings shall be maintained using the AutoCAD® software. All drawing files shall be provided in the AutoCAD Release 14 DWG file format.

**PART I – THE SCHEDULE**

**Section D – Packaging and Marking**

There are no Section D clauses.

**SECTION I - THE SCHEDULE**

**Section E - Inspection and Acceptance**

E.1 FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (OCT 1992)

Final inspection and acceptance of all items specified for delivery under this contract shall be accomplished by the Contracting Officer or his duly authorized representative at destination.

**PART I - THE SCHEDULE**

**Section F - Deliveries or Performance**

F.1 DELIVERY

The reports and documentation required by Section J. Exhibit C, Contract Documentation Requirements; shall be delivered at the times and to the places specified therein.

F.2 PERIOD OF PERFORMANCE (LaRC 52.211-91) (AUG 1997)

The period of performance shall be 24 months from the effective date of this contract.

F.3 PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be:

The Contractor's facility and NASA Langley Research Center.

**PART I – THE SCHEDULE****Section G – Contract Administration Data****G.1 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 a reference to the number of this contract.

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

NASA Langley Research Center  
Attn: Financial Management Division, MS 175  
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:

DCAA  
Houston Branch Office, Suite 500  
Houston, TX 77017-6544

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

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

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

(d) Public vouchers of payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to:

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

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

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

**G.2 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



available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Work area space and utilities (Building 1265, Room 105). Government telephones are available for official purposes only; pay telephones are available to contractor employees for unofficial calls.

(b) (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 contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

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

(d) 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.3 CONTRACT CLOSEOUT (LaRC 52.242-90) (JUN 1988)

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 contract will be reassigned to the NASA Langley Research Center Contracting Officer for Contract Closeout. All transactions subsequent to the physical completion of the contract should, therefore, be addressed to the said Contracting Officer at NASA Langley Research Center, Mail Stop 127, who may be reached by telephone at (757) 864-2500.

B. "Quick Closeout"--Paragraph (f) of the Allowable Cost and Payment clause of this 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 contract, 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 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 contract have been delegated.

**G.4 INCENTIVE FEE INVOICES AND PAYMENTS**

All fee vouchers shall be submitted in accordance with Clause G.1, Submission of Vouchers for Payment (NASA 1852.216-87) and Exhibit I, Incentive Fee Plan. Notwithstanding Clause 52.216-10 the "target fee" identified in the clause is referred to as "maximum available incentive fee" throughout this contract and the fee referred to in paragraph e., "Fee Payable" shall be the fee payable pursuant to Exhibit I, "Incentive Fee Plan."

Monthly provisional payments of the maximum available incentive fee will be made in amounts not exceeding 50% of the monthly available fee; i.e., 50% of the value of the maximum available incentive fee for the period of performance divided by the number of months therein. Subsequent to each incentive fee determination, pursuant to Exhibit I, Incentive Fee Plan, an adjustment will be made to pay such additional incentive fee as may not have been paid through monthly provisional payments or to make a downward adjustment in fee payments should the provisional payments have exceeded the predetermined incentive fee. Both the provisional incentive fee invoices and the adjustment fee invoices shall be submitted through the NASA Contracting Officer with a copy to the delegated audit agency and delegated Administrative Contracting Officer.

**G.5 INVOICES AND PAYMENTS**

- A. General--Invoices shall be addressed as shown in Block 12 page 1 of this contract and shall be identified by the contract number. Cost and fee invoices shall be submitted separately.
- B. Cost--Payments of cost shall be made in monthly installments.
- C. Cost invoices shall be submitted through the delegated Government Audit Agency.
- D. Provisional payments of incentive fee shall be made in monthly installments pursuant to G.4.

**PART I – THE SCHEDULE****Section H - Special Contract Requirements****H.1 RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)**

Except for data contained on pages none, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated May 24, 1999, upon which this contract is based.

**H.2 OPTION TO EXTEND THE TERM OF THE CONTRACT (FAR 52.217-9) (MAR 1989)**

(a) The Government may extend the term of this contract by unilateral written notice to the Contractor within the current contract period of performance; provided, that the Government shall give the Contractor a preliminary notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option provision.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 60 months.

**H.3 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)**

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

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

<u>Employee Class</u>	<u>Monetary Wage</u>
Nondestructive Examination Technician II	\$17.43
Technician I	\$15.82
Technician II	\$17.43
Drafter/Cad Operator	\$17.43
Word Processor	\$ 8.32
Data Entry	\$ 9.33
Clerk	\$ 8.32
Computer Programmer	\$15.82

**FRINGE BENEFITS**

Annual Leave - Receives 13 days paid leave for service up to 3 years; 20 days for 3 to 15 years service; and 26 days for 15 years service or over.

Sick Leave - Receives 13 days paid leave per year.

Holidays - Receives 10 paid holidays per year.

- Health Insurance - Government pays up to 60% of health insurance.
- Group Life Insurance - Government pays two-thirds of life insurance rate premiums.
- Retirement - The Government provides three retirement plans identified as the Civil Service Retirement System (CSRS), the Federal Employees Retirement System (FERS), and the CSRS Offset. Under the CSRS, the Government contributes 7% of the employees' base pay towards the retirement benefit and 1.45% towards Medicare. Under the FERS, the Government contributes 11.4% of the employees' base pay towards a basic benefit plan, 6.2% to Social Security, 1.45% towards Medicare, and 1% (plus matching contributions of up to 4% of basic pay, depending on employees' contributions) to a thrift savings plan. Under the CSRS Offset, the Government contributes 0.8% of the employees' base pay towards the retirement benefit, 6.2% to Social Security, and 1.45% towards Medicare.

Part-time Federal employees receive pro rata annual leave, sick leave, holiday leave, health insurance, and group life insurance benefits based on the number of hours worked.

#### H.4 OPTIONS

##### Priced Options/Extended Term

Pursuant to the Section H clause entitled "Option to Extend the Term of the Contract (MAR 1989)," the Contractor hereby grants to the Government options to extend the term of the contract for 3 additional periods of 12 months each. Such options are to be exercisable by issuance of a unilateral modification. 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>
Period of Performance (Ref. F.2)	12 months	12 months	12 months
Estimated Cost (Ref. B.2)	\$1,932,547	\$1,969,632	\$2,002,567
Maximum Available Incentive Fee (Ref. B.2)	\$ 81,167	\$ 82,725	\$ 84,108

#### H.5 CONTRACTOR EMPLOYEE'S SECURITY CLEARANCE (LaRC 52.204-90) (OCT 1996)

By virtue of their particular work assignment, certain Contractor employees, may be required to have a security clearance granted in accordance with the National Industry Security Program Operating Manual (NISPO) dated March 14, 1996. Clearances will be issued by the Department of Defense (DOD). Within 10 working days after an employee is identified by the Government and/or the Contractor as requiring a SECRET or higher clearance, the Contractor shall submit to the Contracting Officer evidence of the submittal of a request for clearance to DOD for such employee. If the clearance for an employee has not been issued by DOD within 120 calendar days of the submittal of the request for clearance to DOD, the Contractor may be required to remove the employee from the contract.

H.6 OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.211-104) (AUG 1998)

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 4:30 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.

H.7 INCORPORATION OF SECTION K OF THE PROPOSAL BY REFERENCE (LaRC 52.215-107) (JUN 1998)

Pursuant to FAR 15.204-1(b), the completed Section K of the proposal dated May 24, 1999 is hereby incorporated herein by reference.

H.8 SMALL DISADVANTAGED BUSINESS PARTICIPATION—CONTRACT TARGETS (LaRC 52.219-91) (JAN 1999)

(a) This clause does not apply to, and should not be completed by, Small Disadvantaged Business (SDB) offerors unless the SDB offeror has waived the price adjustment evaluation adjustment [see Paragraph (c) of FAR clause 52.219-23].

(b) FAR 19.1202-4(a) requires that SDB participation targets be incorporated in the contract. Targets for SDB participation as subcontractors in authorized SIC Major Groups, as determined by the Commerce Business Department, are as follows:

	<u>Department of Commerce Major SIC Group</u>	<u>Dollar Target</u>	<u>Percent of Contract Value</u>
1. Basic Year 1	██████████	██████████	██████████
2. Basic Year 2	██████████	██████████	██████████
3. Option Year 1	██████████	██████████	██████████
4. Option Year 2	██████████	██████████	██████████

5. Option Year 3

Total

(c) FAR 19.1202-4(b) requires that SDB concerns that are specifically identified by the offeror be listed in the contract when the extent of the identification of such subcontractors was part of the SDB evaluation subfactor. SDB concerns (subcontractors) specifically identified by the offeror are as follows:

Name of Concern(s):

Mainthia Technologies, Inc.

The Contractor shall notify the Contracting Officer of any substitutions of firms that are not SDB concerns.

(d) If the prime offeror is an SDB (including joint venture partners and team members) that has waived the price evaluation adjustment, the target for the work it intends to perform as a prime contractor in authorized SIC Major Groups, as determined by the Commerce Department, is as follows:

	<u>Dollars</u>	<u>Percent of Contract Value</u>
1. Basic Year 1		
2. Basic Year 2		
3. Option Year 1		
4. Option Year 2		
5. Option Year 3		

#### H.9 VIRGINIA AND LOCAL SALES TAXES (LaRC 52.229-92) (APR 1992)

To perform this contract, the Contractor must be knowledgeable of relevant state and local taxes when making purchases of tangible personal property. The Contractor shall refrain from paying nonapplicable taxes or taxes where an exemption exists, but shall pay applicable taxes that are reimbursable pursuant to FAR 31.205-41, Taxes. Even though title to property purchased under this contract may pass to the Government and the price is reimbursable under contract cost principles, such transactions do not in themselves provide tax immunity to the Contractor. Therefore, within 30 days after the effective date of this contract, the Contractor shall request from the Virginia State Tax Commission a ruling on any tax exemptions that may be applicable to purchases made under this contract. The Contractor shall provide all facts relevant to the situation and shall pursue an interpretation of the law that is most favorable to both the Contractor and the Government.

#### H.10 YEAR 2000 COMPLIANCE (MAY 1998)

(a) Definition: "Year 2000 compliant", as used in this clause, means that the Information Technology (IT) (hardware, software and firmware, including embedded systems or any other electro-mechanical or processor-based systems used in accordance with its associated documentation) accurately processes date and date-related data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information technology, used in combination with the information technology being acquired, properly exchanges date and date-related data with it.

(b) Any IT provided or maintained under this contract must be Year 2000 compliant. To ensure this result, the Contractor shall provide documentation describing how the IT items demonstrate Year 2000 compliance.

Documentation and testing for Year 2000 compliance shall be based on complexity and the risk associated with the IT item. The Contractor shall use the documents "NASA Year 2000 Agency Test and Certification Guidelines and Requirements" dated July 2, 1998 (available at <http://cio.larc.nasa.gov/y2k/>) and "NASA LaRC Y2K Guideline for Documentation and Testing Requirements" (Exhibit J) as guidance to establish the appropriate testing and documentation. The Contractor shall provide the "Contractor Y2K Compliance Verification Form" (Exhibit J) for each IT item/system provided or maintained under this contract.

(c) The Contractor warrants that any IT items or services provided under this contract that involve the processing of date and date-related data are Year 2000 compliant. If the contract requires that specific listed products must perform as a system in accordance with the foregoing warranty, then that warranty shall apply to those listed products as a system.

(d) The remedies available under this warranty shall include repair or replacement, at no additional cost to the Government, of any provided items or services whose non-compliance is discovered and made known to the Contractor in writing within 90 days after acceptance. In addition, all other the terms and limitations of the Contractor's standard commercial warranty or warranties shall be available to the Government for the IT items or services acquired under this contract. Nothing in this warranty shall be construed to limit any rights or remedies the Government may otherwise have under this contract with respect to defects other than Year 2000 performance.

#### H.11 SUBCONTRACTING PLAN

The approved Contractor plan for subcontracting with small business, small disadvantaged (including Target and HUBZone, if applicable) business concerns is attached hereto as Exhibit D and is hereby made a part of this contract.

#### H.12 QUALITY SYSTEM REQUIREMENTS (ISO9001)

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 contract 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 do not flow down to subcontractors.

"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.

#### H.13 RIGHTS IN DATA

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

- (a) all data input into the Computerized Maintenance Management System;

- (b) data first produced in the performance of this contract; and
- (c) all data identified as a deliverable under this contract or delivered under this contract.

H.14 ADVANCE APPROVAL FOR RELEASE OF TECHNICAL INFORMATION  
(LaRC 52.227-92) (JUL 1998)

The Contractor shall not release technical information based on or containing data first produced in the performance of this contract and describing the work performed under this contract unless prior written approval is given by NASA. The Contractor shall submit technical information regarding the contract effort, such as journal articles, meeting papers, and technical documents to the Contracting Officer's Technical Representative (COTR) for review and concurrence with approval by the Center Export Administrator or designee prior to publication, presentation or release to others. The Contractor may proceed upon receipt of written concurrence by the COTR, unless directed otherwise in the COTR concurrence letter.



**PART II – CONTRACT CLAUSES****Section I – Contract Clauses****I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE:****FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES**

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.202-1	Definitions (OCT 1995)
52.203-3	Gratuities (APR 1984)
52.203-5	Covenant Against Contingent Fees (APR 1984)
52.203-6	Restrictions on Contractor Sales to the Government (JUL 1995)
52.203-7	Anti-Kickback Procedures (JUL 1995)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)
52.204-2	Security Requirements (AUG 1996)
52.204-4	Printing/Copying Double-Sided on Recycled Paper (JUN 1996)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (JUL 1995)
*52.211-10	Commencement, Prosecution, and Completion of Work (APR 1984)
52.211-15	Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	Audit and Records—Negotiation (AUG 1996)
52.215-8	Order of Precedence (OCT 1997)
52.215-11	Price Reduction for Defective Cost or Pricing Data—Modifications (OCT 1997)
52.215-13	Subcontractor Cost or Pricing Data--Modifications(OCT 1997)
52.215-15	Pension Adjustments and Asset Reversions (DEC 1998)
52.215-17	Waiver of Facilities Capital Cost of Money (OCT 1997)
52.215-18	Reversion Or Adjustment Of Plans For Postretirement Benefits (PRB) Other Than Pensions (OCT 1997)
52.215-19	Notification of Ownership Changes (OCT 1997)
52.216-7	Allowable Cost and Payment (APR 1998)
52.216-10	Incentive Fee (MAR 1997)
52.219-8	Utilization of Small Business Concerns (JAN 1999)
52.219-9	Small Business Subcontracting Plan (JAN 1999)--Alternate II (JAN 1999)
52.219-16	Liquidated Damages—Subcontracting Plan (JAN 1999)
52.219-25	Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (JAN 1999)
52.222-1	Notice to the Government of Labor Disputes (FEB 1997)
52.222-3	Convict Labor (AUG 1996)
52.222-4	Contract Work Hours and Safety Standards Act—Overtime Compensation (JUL 1995)
*52.222-6	Davis-Bacon Act (Feb 1995)
*52.222-7	Withholding of Funds (Feb 1988)
*52.222-8	Payrolls and Basic Records (Feb 1988)
*52.222-9	Apprentices and Trainees (Feb 1988)
*52.222-10	Compliance with Copeland Act Requirements (Feb 1988)
*52.222-11	Subcontracts (Labor Standards) (Feb 1988)
*52.222-12	Contract Termination--Debarment (Feb 1988)
*52.222-13	Compliance with Davis-Bacon and Related Act Regulations (Feb 1988)
*52.222-14	Disputes Concerning Labor Standards (Feb 1988)
*52.222-15	Certification of Eligibility (Feb 1988)

52.222-26	<b>Equal Opportunity (FEB 1999)</b>
*52.222-27	Affirmative Action Compliance Requirements for Construction (Feb 1999)
52.222-35	Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (APR 1998)
52.222-36	Affirmative Action for Workers with Disabilities (JUN 1998)
52.222-37	Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (JAN 1999)
52.223-2	Clean Air and Water (APR 1984)
52.223-5	Pollution Prevention and Right-To-Know Information (APR 1998)
52.223-6	Drug-Free Workplace (JAN 1997)
52.223-14	Toxic Chemical Release Reporting (OCT 1996)
*52.225-5	Buy American Act--Construction Materials (JUN 1997)
52.225-11	Restrictions on Certain Foreign Purchases (AUG 1998)
52.227-1	Authorization and Consent (JUL 1995)
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)
52.227-14	Rights in Data --General (Jun 1987)--as modified by NASA FAR Supplement 1852.227-14
52.228-7	Insurance--Liability to Third Persons (MAR 1996)
*52.228-14	Irrevocable Letter of Credit (Oct 1997)
*52.228-15	Performance and Payment Bonds--Construction (Sept 1996)
52.230-2	Cost Accounting Standards (APR 1998)
52.230-3	Disclosure and Consistency of Cost Accounting Practices (APR 1998)
52.230-6	Administration of Cost Accounting Standards (APR 1996)
52.232-5	Payments under Fixed-Price Construction Contracts (May 1997)
52.232-9	Limitation on Withholding of Payments (APR 1984)
52.232-17	Interest (JUN 1996)
52.232-22	Limitation of Funds (APR 1984)
52.232-23	Assignment of Claims (JAN 1986)
52.232-33	Mandatory Information for Electronic Funds Transfer Payment (AUG 1996)
52.233-1	Disputes (DEC 1998)--Alternate I (DEC 1991)
52.233-3	Protest After Award (AUG 1996)--Alternate I (JUN 1985)
*52.236-2	Differing Site Conditions (APR 1984)
*52.236-3	Site Investigation and Conditions Affecting the Work (DEC 1989)
*52.236-5	Material and Workmanship (DEC 1989)
*52.236-6	Superintendence by the Contractors (APR 1984)
*52.236-10	Operations and Storage Areas (APR 1984)
*52.236-11	Use and Possession Prior to Completion (APR 1984)
*52.236-12	Cleaning Up (APR 1984)
*52.236-13	Accident Prevention (NOV 1991)
*52.236-15	Schedules for Construction Contracts (APR 1984)
*52.236-26	Preconstruction Conference (FEB 1995)
52.237-2	Protection of Government Buildings, Equipment and Vegetation (APR 1984)
52.237-3	Continuity of Services (JAN 1991)
52.242-1	Notice of Intent to Disallow Costs (APR 1984)
52.242-3	Penalties for Unallowable Costs (OCT 1995)
52.242-4	Certification of Final Indirect Costs (JAN 1997)
*52.242-14	Suspension of Work (APR 1984)
52.243-2	Changes--Cost-Reimbursement (AUG 1987)--Alternate V (APR 1984)
52.244-5	Competition in Subcontracting (AUG 1998)
*52.244-6	Subcontracts for Commercial Items and Commercial Components (OCT 1998)

52.245-5	Government Property (Cost-Reimbursement, Time-and-(Material, or Labor-Hour Contracts) (JAN 1986) (DEVIATION) (JUL 1995)
52.246-5	Inspection of Services—Cost-Reimbursement (APR 1984)
*52.246-12	Inspection of Construction (AUG 1996)
52.246-25	Limitation of Liability—Services (FEB 1997)
52.248-1	Value Engineering (MAR 1989)
52.249-6	Termination (Cost-Reimbursement) (SEP 1996)
52.249-14	Excusable Delays (APR 1984)
52.253-1	Computer Generated Forms (JAN 1991)

## NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
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 (MAR 1997)
1852.227-70	New Technology (Nov 1998)
1852.228-75	Minimum Insurance Coverage (OCT 1988)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.243-71	Shared Savings (MAR 1997)
*1852.243-72	Equitable Adjustments (APR 1998)

\* = Clauses pertain to emergency repairs (Construction) only.

I.2 CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.252-2	Clauses Incorporated by Reference (FEB 1998)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (JUN 1997)
52.215-21	Requirements for Cost and Pricing Data or Information Other Than Cost or Pricing Data – Modifications (OCT 1997)
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 1999)
52.219-23	Notice of Price Adjustment for Small Disadvantaged Business Concerns (OCT 1998) Alternate I (OCT 1998)
52.222-2	Payment for Overtime Premiums (JUL 1990)
52-222-41	Service Contract of 1965, As Amended (MAY 1989)
52.232-25	Prompt Payment (JUN 1997)
52.242-13	Bankruptcy (JUL 1995)
52.242-15	Stop-Work Order (AUG 1989)—Alternate I (APR 1984)
52.244-2	Subcontracts (AUG 1998)—Alternate I (AUG 1988)
52.244-6	Subcontracts for Commercial Items and Commercial Components (OCT 1998)

52.246-11	<b>Higher-Level Contract Quality Requirement (FEB 1999)</b>
52.252-6	Authorized Deviations in Clauses (APR 1984)
1852.204-75	Security Classification Requirements (SEP 1989)
1852.204-76	Security Requirements for Unclassified Automated Information Resources (Sep 1993)
1852.208-81	Restrictions on Printing and Duplicating (AUG 1993)
1852.209-71	Limitation Of Future Contracting (Dec 1988)
1852.215-84	Ombudsman (OCT 1996)
1852.242-70	Technical Direction (Sep 1993)
1852.242-72	Observance of Legal Holidays (AUG 1992) Alternate I (SEP 1989) and Alternate II (SEP 1989)
1852.245-71	Installation-Accountable Government Property (JUN 1998)
1852.245-73	Financial Reporting of NASA Property in the Custody of Contractors (SEP 1996)

### I.3 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 CO will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far/>

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

### I.4 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (FAR 52.203-8) (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

- (1) Cancel the solicitation, if the contract has not yet been awarded or issued; or
- (2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

I.5 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS  
(FAR 52.203-12) (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal

contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian-tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions. (1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or

application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure. (1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties. (1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

**I.6 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (FAR 52.215-21) (OCT 1997)**

(a) Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items.

(A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:



(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

(2) As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

**I.7 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (FAR 52.219-4) (JAN 1999)**

(a) Definition. "HUBZone small business concern," as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

\* Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for--

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this

contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

**I.8 NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS (FAR 52.219-23) (OCT 1998) ALTERNATE I (OCT 1998)**

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

Small disadvantaged business concern means an offeror that represents, as part of its offer, that it is a small business under the size standard applicable to this acquisition; and either—

(1) It has received certification by the Small Business Administration as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B; and

(i) No material change in disadvantaged ownership and control has occurred since its certification;

(ii) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(iii) It is listed, on the date of its representation, on the register of small disadvantaged business concerns maintained by the Small Business Administration;

(2) It has submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted. In this case, in order to receive the benefit of a price evaluation adjustment, an offeror must receive certification as a small disadvantaged business concern by the Small Business Administration prior to contract award; or

(3) Is a joint venture as defined in 13 CFR 124.1002(f).

Historically black college or university means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. For the Department of Defense (DOD), the National Aeronautics and Space Administration (NASA), and the Coast Guard, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institution means an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which, for purposes of this clause, includes a Hispanic-serving institution of higher education as defined in Section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

United States means the United States, its territories and possessions, the Commonwealth of Puerto Rico, the U.S. Trust Territory of the Pacific Islands, and the District of Columbia.

(b) **Evaluation adjustment.** (1) Offers will be evaluated by adding a factor of 10% to the price of all offers, except—

(i) Offers from small disadvantaged business concerns that have not waived the adjustment;

(ii) For DOD, NASA, and Coast Guard acquisitions, otherwise successful offers from historically black colleges or universities or minority institutions;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is equaled or exceeded (see section 25.402 of the Federal Acquisition Regulation (FAR));

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government; and

(v) For DOD acquisitions, otherwise successful offers of qualifying country end products (see sections 225.000-70 and 252.225-7001 of the Defense FAR Supplement).

(2) The factor shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor. The factor may not be applied if using the adjustment would cause the contract award to be made at a price that exceeds the fair market price by more than the factor in paragraph (b)(1) of this clause.

(c) **Waiver of evaluation adjustment.** A small disadvantaged business concern may elect to waive the adjustment, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply to offers that waive the adjustment.

\_\_\_\_ Offeror elects to waive the adjustment.

(d) **Agreements.** (1) A small disadvantaged business concern, that did not waive the adjustment, agrees that in performance of the contract, in the case of a contract for—

(i) Services, except construction, at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern;

(ii) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern;

(iii) General construction, at least 15 percent of the cost of the contract, excluding the cost of materials, will be performed by employees of the concern; or

(iv) Construction by special trade contractors, at least 25 percent of the cost of the contract, excluding the cost of materials, will be performed by employees of the concern.

(2) A small disadvantaged business concern submitting an offer in its own name agrees to furnish in performing this contract only end items manufactured or produced by small business concerns in the United States. This paragraph does not apply in connection with construction or service contracts.

#### I.9 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

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

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

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

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

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

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

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

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

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

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

#### I.10 SERVICE CONTRACT ACT OF 1965, AS AMENDED (FAR 52.222-41) (MAY 1989)

(a) **Definitions.** "Act," as used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

"Contractor," as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

"Service employee," as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) **Applicability.** This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356, as interpreted in Subpart C of 29 CFR Part 4.

(c) **Compensation.** (1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)(i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (i.e., adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c) 2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of

1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) Adjustment of compensation. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) Obligation to furnish fringe benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) Minimum wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) Successor contracts. If this contract succeeds a contract subject to the Act under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) Notification to employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe

benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite. Failure to comply with this requirement is a violation of section 2(a)(4) of the Act and of this contract.

(h) Safe and sanitary working conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:

(i) For each employee subject to the Act-- (A) Name and address and social security number; (B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation; (C) Daily and weekly hours worked by each employee; and (D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(j) Pay periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semi-monthly.

(k) Withholding of payments and termination of contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.

(m) Collective bargaining agreements applicable to service employees. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and

accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) Seniority list. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) Rulings and interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR Part 4.

(p) Contractor's certification. (1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it (nor he or she) nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act. (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under section 5 of the Act. (3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(q) Variations, tolerances, and exemptions involving employment. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Pub. L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the Act for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

(r) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen

employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) Tips. An employee engaged in an occupation in which the employee customarily and regularly receives more than \$30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed \$1.34 per hour beginning January 1, 1981. To use this provision--(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized; (2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received); (3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit; and (4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.

(t) Disputes concerning labor standards. The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### I.11 PROMPT PAYMENT (FAR 52.232-25) (JUN 1997)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer.

Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Due date. (i) Except as indicated in subparagraph (a)(2) and paragraph (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office has received a proper invoice from the Contractor (except as provided in subdivision (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed by the Contractor. On a final invoice where the payment amount is subject to contract settlement actions, acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice; provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Certain food products and other payments. (i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are--

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.



(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.

(3) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(3)(i) through (a)(3)(viii) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, edible fats or oils, and food products prepared from edible fats or oils), with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(5) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of the mailing or transmission.)

(iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).

(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.

(v) Shipping and payment terms (e.g., shipment number and date of shipment, prompt payment discount terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) Any other information or documentation required by the contract (such as evidence of shipment).

(ix) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(4) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.

(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(5) **Computing penalty amount.** The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(3) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance shall be deemed to have occurred constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivered the supplies or performed the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils).

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(6) **Prompt payment discounts.** An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated as described in subparagraph (a)(5) of this clause on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(7) **Additional interest penalty.** (i) A penalty amount, calculated in accordance with subdivision (a)(7)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice

amount is paid, and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
- (3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

- (1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or
- (2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty except--

- (1) The additional penalty shall not exceed \$5,000;
- (2) The additional penalty shall never be less than \$25; and
- (3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(5)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(7)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments--(1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the [insert day as prescribed by Agency head; if not prescribed, insert 30th day] day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Fast payment procedure due dates. If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

I.12 BANKRUPTCY (FAR 52.242-13) (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

I.13 STOP-WORK ORDER (FAR 52.242-15) (AUG 1989) ALTERNATE I (APR 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either -

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if -

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

I.14 SUBCONTRACTS (FAR 52.244-2) (AUG 1998)

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

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

\_\_\_\_\_ N/A \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

- (vii) A negotiation memorandum reflecting--
  - (A) The principal elements of the subcontract price negotiations;
  - (B) The most significant considerations controlling establishment of initial or revised prices;

- (C) The reason cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

- (1) Of the acceptability of any subcontract terms or conditions;
  - (2) Of the allowability of any cost under this contract; or
  - (3) To relieve the Contractor of any responsibility for performing this contract.
- (h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.
- (k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

\_\_\_\_ N/A \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**I.15 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS**  
**(FAR 52.244-6) (OCT 1998)**

- (a) Definitions.  
 "Commercial item," as used in this clause, has the meaning contained in the clause at 52.202-1 Definitions.  
 "Subcontract," as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.
- (b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.
- (c) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:
- (1) 52.222-26, Equal Opportunity (E.O. 11246);
  - (2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));
  - (3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and
  - (4) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).
- (d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

**I.16 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (FAR 52.246-11) (FEB 1999)**

The Contractor shall comply with the higher-level quality standard selected below.

<u>Title</u>	<u>Number</u>	<u>Date Tailoring</u>
ISO	9001	1994

NOTE: The above is applicable within nine months of the effective date of the contract.

**I.17 AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)**

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any NASA/FAR Supplement (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

**I.18 SECURITY CLASSIFICATION REQUIREMENTS (NASA 1852.204-75) (SEP 1989)**

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of SECRET. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Exhibit A.

**I.19 SECURITY REQUIREMENTS FOR UNCLASSIFIED AUTOMATED INFORMATION RESOURCES (NASA 1852.204-76) (SEP 1993)**

- (a) In addition to complying with any functional and technical security requirements set forth in the schedule and the clauses of this contract, the Contractor shall initiate personnel screening checks and obtain user responsibility agreements, as required by this clause, for each Contractor employee requiring unescorted or unsupervised physical access or electronic access to the following limited or controlled areas, systems, programs and data:

The servers and databases associated with the Configuration Management On-Line System and the Computerized Maintenance Management System.

(1) The Contractor shall submit a personnel security questionnaire (NASA Form 531, Name Check Request, for National Agency Check (NAC) investigations 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 installation Security Officer for each Contractor employee who requires access. The required forms may be obtained from the installation security office. Employees may have finger-prints taken at the NASA Contract Badge and Pass Office, located at 1 Langley Boulevard (Building No. 1228), only between the hours of 6:30 a.m. and 4:30 p.m., Monday through Friday, or at any police department.

(i) Several months may be required for completion of complex personnel screening investigations. Background screening may not be required for employees with recent or current Federal Government investigations.

(ii) When employee access is necessary prior to completion of personnel screening, each Contractor employee requiring access may be considered for escorted access. The installation Security Officer will establish the eligibility of proposed escorts.

(2) The Contractor shall ensure that each Contractor employee requiring access executes any user responsibility agreements required by the Government prior to access. The Contractor shall provide signed copies of the agreements to the installation Security Officer for inclusion in the employee's security file. Unauthorized access is a violation of law and punishable under the provisions of 18 U.S.C. 1029, 18 U.S.C. 4030 and other applicable statutes.

(3) The Contractor shall notify the installation AIS Manager no later than the end of the day of the termination for cause of an authorized employee's access. The Contractor shall notify the COTR no later than 10 days after an authorized employee no longer requires access for any other type of termination. Verbal notifications shall be confirmed in writing within 30 days.

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

I.20 RESTRICTIONS ON PRINTING AND DUPLICATING (NASA 1852.208-81) (AUG 1993)

- (a) The Contractor shall reproduce any documentation required by this contract in accordance with the provisions of the Government Printing and Binding Regulations, No. 26, S. Pub 101-9, U.S. Government Printing Office, Washington DC, 20402, published by the Joint Committee on Printing, U.S. Congress.
- (b) The Contractor shall not perform, or procure from any commercial source, any printing in connection with the performance of work under this contract. The term "printing" includes the processes of composition, platemaking, presswork, silk screen processes, binding, microform, and the end items of such processes and equipment.
- (c) "Duplicating/copying" is not considered to be printing. It is material produced by duplicating equipment employing the lithographic process and automatic copy-processing or copier-duplicating machines employing electrostatic, thermal, or other copying processes not requiring the use of negatives or metal plates. The Contractor is authorized to duplicate production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 units in the aggregate of multiple pages. Such plates may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280mm), one side only, and one color ink.
- (d) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the Contractor to respond to the terms of the contract).
- (e) Costs associated with printing or duplicating/copying in excess of the limits set forth above are unallowable without prior written approval of the Contracting Officer. If the Contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating/copying, it immediately shall provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with the provisions of the Government Printing and Binding Regulations and NFS 18-8.802.
- (f) The Contractor shall include in each subcontract which may involve a requirement for any printing and/or any duplicating/copying in excess of the limits specified in Paragraph (c) of this clause, a provision substantially the same as this clause, including this Paragraph (f).

I.21 LIMITATION OF FUTURE CONTRACTING (NASA 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 all prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest.
- (b) The nature of this conflict is that the Contractor and/or a subcontractor will perform inspections of pressure and structural systems and, if necessary, prepare specifications for repairs to the system(s). The Contractor and any subcontractor performing inspections and/or preparing repair specifications shall be ineligible to perform the work described in the specifications as a prime or first-tier subcontractor.
- (c) The restrictions upon future contracting are as follows:
- (1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, 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 contract.
  - (2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as such data remains 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.

I.22 OMBUDSMAN (NASA 1852.215-84) (OCT 1996)

An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and Contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the Contracting Officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Contracting Officer for resolution. If resolution cannot be made by the Contracting Officer, interested parties may contact the installation ombudsman, Belinda Adams, direct inquiries to Sandra S. Ray at (757) 864-2428. Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Deputy Administrator for Procurement, Thomas S. Luedtke, at 202-358-2090. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

I.23 TECHNICAL DIRECTION (NASA 1852.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer's Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 18-42.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

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

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;
- (3) In any manner causes an increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

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

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

- (1) Rescinded in its entirety; or
- (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract and that the Contractor should proceed promptly its performance.

(e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a

failure to agree upon the contract action to be taken with respect to the instruction or direction shall be subject to the Disputes clause of this contract.

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

I.24 OBSERVANCE OF LEGAL HOLIDAYS (NASA 18-52.242-72) (AUG 1992)  
ALTERNATE I (SEP 1989) AND ALTERNATE II (SEP 1989)

(a) The on-site Government personnel observe the following holidays:

- New Year's Day
- Labor Day
- Martin Luther King Jr.'s Birthday
- Columbus Day
- President's Day
- Veterans Day
- Memorial Day
- Thanksgiving Day
- Independence Day
- Christmas Day

Any other day designated by Federal statute, Executive Order, or the President's proclamation.

(b) When any holiday falls on a Saturday, the preceding Friday is observed. When any holiday falls on a Sunday, the following Monday is observed. Observance of such days by Government personnel shall not by itself be cause for an additional period of performance or entitlement of compensation except as set forth within the contract.

(c) On-site personnel assigned to this contract shall not be granted access to the installation during the holidays in paragraph (a) above, except as follows: the Contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer or authorized representative. If the Contractor's on-site personnel work during a holiday other than those in paragraph (a) above, no form of holiday or other premium compensation shall be reimbursed as either a direct or indirect cost. However, this does not preclude reimbursement for authorized overtime work that would have been overtime regardless of the status of the day as a holiday.

(d) The Contractor shall place identical requirements, including this paragraph, in all subcontracts that require performance of work on-site, unless otherwise instructed by the Contracting Officer.

(e) When the NASA installation grants administrative leave to its Government employees (e.g., as a result of inclement weather, potentially hazardous conditions, or other special circumstances), Contractor personnel working on-site should also be dismissed. However, the contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer or authorized representative.

(f) Whenever administrative leave is granted to Contractor personnel pursuant to paragraph (e) above, it shall be without loss to the Contractor. The cost of salaries and wages to the Contractor for the period of any such excused absence shall be a reimbursable item of cost under this contract for employees in accordance with the Contractor's established accounting policy.

I.25 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY(NASA 1852.245-71) (JUL 1997)

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

title to, the property, and the contractor assumes the following user responsibilities: [Insert contractor user responsibilities].

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

(b)(1) The official accountable recordkeeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area;

(iii) The contractor shall establish a record of the property as required by FAR 45.5 and 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the contractor. The contractor is accountable for all contractor-acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, the contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.

I.26 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS  
(NASA 1852.245-73) (SEP 1996)

(a) The Contractor shall submit annually a NASA Form 1018, NASA Property in the Custody of Contractors, in accordance with 18-45.505-14, the instructions on the form, and subpart 1845-71. Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(b) If administration of this contract has been delegated to the Department of Defense, the original of NASA Form 1018 shall be submitted to the NASA, LaRC Financial Management Officer, Mail Stop 175 and three copies shall be sent concurrently through the DOD Property Administrator to the address below. If the contract is administered by NASA, the original of NF 1018 shall be submitted to the LaRC Financial Management Office and three copies shall be sent concurrently and directly to the following office:

ATTN: INDUSTRIAL PROPERTY OFFICE  
NASA LANGLEY RESEARCH CENTER  
MAIL STOP 377  
HAMPTON VA 23681-0001

(c) The annual reporting period shall be from October 1 of each year to September 30 of the following year. The report shall be submitted by October 31. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 31. The Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$25,000 or 5

percent of the amount of the contract, whichever is less, has been set-aside. If the Contractor fails to submit annual NF 1018 reports when due, such reserve shall be withheld until the Contracting Officer has determined that the required reports have been received by the Government. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report is required within 30 days after disposition of all property subject to reporting when the contract performance period is complete.

**PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS****Section J - List of Attachments**

Exhibit A	Contract Security Classification Specification, DD Form 254	2 pages
Exhibit B	Register of Wage Determination and Fringe Benefits, July 29, 1998	9 pages
Exhibit C	Contract Documentation Requirements	6 pages
Exhibit D	Subcontracting Plan	7 pages
Exhibit E	High Risk Research Facility Configuration Management Program Facilities	2 pages
Exhibit F	Laboratory Risk Evaluation Program Facilities	4 pages
Exhibit G	Recertification Systems	3 pages
Exhibit H	Facilities in the Computerized Maintenance Management System (CMMS) Listed by LaRC Zone Numbers	4 pages
Exhibit I	Incentive Fee Plan	11 pages
Exhibit J	Y2K Guideline and Compliance Verification Forms	2 pages
Exhibit K	Asbestos Configuration Management Facilities	3 pages

**EXHIBIT A**

<b>DEPARTMENT OF DEFENSE</b> <b>CONTRACT SECURITY CLASSIFICATION SPECIFICATION</b> <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>				<b>1. CLEARANCE AND SAFEGUARDING</b> A. Facility Clearance Required <p align="center"><b>SECRET</b></p> B. Level Of Safeguarding Required <p align="center"><b>NONE</b></p>	
<b>2. THIS SPECIFICATION IS FOR: (X and complete as applicable)</b>			<b>3. THIS SPECIFICATION IS: (X and complete as applicable)</b>		
A	PRIME CONTRACT NUMBER	X	A. ORIGINAL (Complete Date In All Cases)		Date (YYMMDD) 090107
B	SUBCONTRACT NUMBER		B. REVISED (Supersedes all previous specs)	Revision No	Date (YYMMDD)
C	SOLICITATION OR OTHER NUMBER	Due Date (YYMMDD)	C. FINAL (Complete Item 5 in All Cases)		Date (YYMMDD)
N	1-122-AFA.2249	090630			
<b>4. IS THIS A FOLLOW-ON CONTRACT?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under <u>N A</u> (Preceding Contract Number) is transferred to this follow-on contract					
<b>5. IS THIS A FINAL DD FORM 254?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's request dated _____ retention of the classified material is authorized for the period _____					
<b>6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)</b>					
A. Name, Address, And Zip Code		B. CAGE Code	C. Cognizant Security Office (Name, Address, And Zip Code)		
TBD		TBD	DEFENSE SECURITY SERVICE DIRECTOR OF INDUSTRIAL SECURITY 2461 EISENHOWER AVENUE ALEXANDRIA VA 22331-1211		
<b>7. SUBCONTRACTOR</b>					
A. Name, Address, And Zip Code		B. CAGE Code	C. Cognizant Security Office (Name, Address, And Zip Code)		
<b>8. ACTUAL PERFORMANCE</b>					
A. Location		B. CAGE Code	C. Cognizant Security Office (Name, Address, And Zip Code)		
NASA LANGLEY RESEARCH CENTER HAMPTON, VA 23681-2199					
<b>9. GENERAL IDENTIFICATION OF THIS PROCUREMENT</b> CONFIGURATION MANAGEMENT AND HIGH PRESSURE SYSTEM RECERTIFICATION SERVICES.					
<b>10. CONTRACTOR WILL REQUIRE ACCESS TO:</b>			<b>11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:</b>		
A	Communications Security (Comsec) Information	YES NO	A	Have Access To Classified Information Only At Another Contractor's Facility Or A Government Activity	YES NO
B	Restricted Data	<input type="checkbox"/> <input checked="" type="checkbox"/>	B	Receive Classified Documents Only	<input type="checkbox"/> <input checked="" type="checkbox"/>
C	Critical Nuclear Weapon Design Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	C	Receive And Generate Classified Material	<input type="checkbox"/> <input checked="" type="checkbox"/>
D	Formerly Restricted Data	<input type="checkbox"/> <input checked="" type="checkbox"/>	D	Fabricate, Modify, Or Store Classified Hardware	<input type="checkbox"/> <input checked="" type="checkbox"/>
E	Intelligence Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	E	Perform Services Only	<input checked="" type="checkbox"/> <input type="checkbox"/>
	(1) Sensitive Compartmented Information (Sci)	<input type="checkbox"/> <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 type="checkbox"/> <input checked="" type="checkbox"/>
	(2) Non-Sci	<input type="checkbox"/> <input checked="" type="checkbox"/>	G	Be Authorized To Use The Services Of Defense Technical Information Center (DtIc) Or Other Secondary Distribution Center	<input type="checkbox"/> <input checked="" type="checkbox"/>
F	Special Access Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	H	Require A Comsec Account	<input type="checkbox"/> <input checked="" type="checkbox"/>
G	Nato Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	I	Have Tempest Requirements	<input type="checkbox"/> <input checked="" type="checkbox"/>
H	Foreign Government Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	J	Have Operations Security (Opsec) Requirements	<input checked="" type="checkbox"/> <input type="checkbox"/>
I	Limited Dissemination Information	<input type="checkbox"/> <input checked="" type="checkbox"/>	K	Be Authorized To Use The Defense Courier Service	<input type="checkbox"/> <input checked="" type="checkbox"/>
J	For Official Use Only Information	<input checked="" type="checkbox"/> <input type="checkbox"/>	L	Other (Specify)	<input type="checkbox"/> <input checked="" type="checkbox"/>
K	Other (Specify)	<input type="checkbox"/> <input checked="" type="checkbox"/>			

**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*)

NO PUBLIC RELEASE WILL BE AUTHORIZED.

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)\* for review.  
 \*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

**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 CLASSIFIED WORK ON THIS CONTRACT WILL BE PERFORMED AT GOVERNMENT FACILITIES WHERE CLASSIFICATION GUIDANCE AND SAFEGUARDING REQUIREMENTS WILL BE PROVIDED AS NECESSARY.

**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	b TITLE	c TELEPHONE (Include Area Code)
STEVEN D. WARREN	INDUSTRIAL SECURITY SPECIALIST	(757) 864-7754

d ADDRESS (Include Zip Code)

NASA LANGLEY RESEARCH CENTER  
 100 NASA ROAD, MS 450  
 HAMPTON, VA 23681-2199

**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

e SIGNATURE

EXHIBIT B

94-2544 VA, NORFOLK

08/04/98

\*\*\*FOR OFFICIAL USE ONLY BY FEDERAL AGENCIES PARTICIPATING IN MOU WITH DOL\*\*\*

REGISTER OF WAGE DETERMINATION UNDER  
THE SERVICE CONTRACT ACT

U.S. DEPARTMENT OF LABOR  
EMPLOYMENT STANDARDS ADMINISTRATION  
WAGE AND HOUR DIVISION  
Washington, D.C. 20210

By direction of the Secretary of Labor

Wage Determination No.: 94-2544

Revision No.: 16

Division of Wage Determinations

Date of Last Revision: 07/29/1998

State): North Carolina, Virginia

Areas: North Carolina COUNTIES OF Camden, Chowan, Currituck, Gates,  
Pasquotank, Perquimans  
Virginia COUNTIES OF Gloucester, Isle of Wight, James City, Mathews,  
Southampton, Surry, York, Chesapeake, Hampton, Newport News, Norfolk  
Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg

\*\* Fringe Benefits Required For All Occupations Included In  
This Wage Determination Follow The Occupational Listing \*\*

OCCUPATION CODE AND TITLE

MINIMUM HOURLY WAGE

Administrative Support and Clerical Occupations:

01011 Accounting Clerk I	\$ 6.75
01012 Accounting Clerk II	\$ 8.52
01013 Accounting Clerk III	\$ 10.60
01014 Accounting Clerk IV	\$ 11.50
01030 Court Reporter	\$ 10.81
01050 Dispatcher, Motor Vehicle	\$ 9.23
01060 Document Preparation Clerk	\$ 9.29
01070 Messenger (Courier)	\$ 7.34
01090 Duplicating Machine Operator	\$ 9.29
01110 Film/Tape Librarian	\$ 9.28
01115 General Clerk I	\$ 7.34
01116 General Clerk II	\$ 9.03
01117 General Clerk III	\$ 11.23
01118 General Clerk IV	\$ 12.55
01120 Housing Referral Assistant	\$ 11.98
01131 Key Entry Operator I	\$ 7.78
01132 Key Entry Operator II	\$ 9.79
01191 Order Clerk I	\$ 7.40
01192 Order Clerk II	\$ 9.68
01261 Personnel Assistant (Employment) I	\$ 8.85
01262 Personnel Assistant (Employment) II	\$ 10.23
01263 Personnel Assistant (Employment) III	\$ 10.80
01264 Personnel Assistant (Employment) IV	\$ 12.38
01270 Production Control Clerk	\$ 11.98



01290 Rental Clerk	\$ 9.28
01300 Scheduler, Maintenance	\$ 9.28
01311 Secretary I	\$ 9.28
01312 Secretary II	\$ 10.80
01313 Secretary III	\$ 12.38
01314 Secretary IV	\$ 14.46
01315 Secretary V	\$ 15.18
01320 Service Order Dispatcher	\$ 9.28
01341 Stenographer I	\$ 8.78
01342 Stenographer II	\$ 9.86
01400 Supply Technician	\$ 11.50
01420 Survey Worker (Interviewer)	\$ 10.80
01460 Switchboard Operator-Receptionist	\$ 8.08

01510 Test Examiner	\$ 10.80
01520 Test Proctor	\$ 10.80
01531 Travel Clerk I	\$ 7.25
01532 Travel Clerk II	\$ 7.74
01533 Travel Clerk III	\$ 8.32
01611 Word Processor I	\$ 10.00
01612 Word Processor II	\$ 11.27
01613 Word Processor III	\$ 12.62

Automatic Data Processing Occupations:

03010 Computer Data Librarian	\$ 8.26
03041 Computer Operator I	\$ 9.25
03042 Computer Operator II	\$ 10.70
03043 Computer Operator III	\$ 13.25
03044 Computer Operator IV	\$ 15.34
03045 Computer Operator V	\$ 16.31
03071 Computer Programmer I 1/	\$ 13.38
03072 Computer Programmer II 1/	\$ 15.15
03073 Computer Programmer III 1/	\$ 18.05
03074 Computer Programmer IV 1/	\$ 21.52
03101 Computer Systems Analyst I 1/	\$ 17.62
03102 Computer Systems Analyst II 1/	\$ 20.28
03103 Computer Systems Analyst III 1/	\$ 24.98
03160 Peripheral Equipment Operator	\$ 8.26

Automotive Service Occupations:

05005 Automobile Body Repairer, Fiberglass	\$ 16.22
05010 Automotive Glass Installer	\$ 14.79
05040 Automotive Worker	\$ 14.79
05070 Electrician, Automotive	\$ 15.49
05100 Mobile Equipment Servicer	\$ 13.37
05130 Motor Equipment Metal Mechanic	\$ 16.22
05160 Motor Equipment Metal Worker	\$ 14.79
05190 Motor Vehicle Mechanic	\$ 16.22
05220 Motor Vehicle Mechanic Helper	\$ 12.61
05250 Motor Vehicle Upholstery Worker	\$ 14.07
05280 Motor Vehicle Wrecker	\$ 14.79
05310 Painter, Automotive	\$ 15.49

05340 Radiator Repair Specialist	\$ 14.07
05370 Tire Repairer	\$ 13.37
05400 Transmission Repair Specialist	\$ 16.22

Food Preparation and Service Occupations:

07010 Baker	\$ 8.68
07041 Cook I	\$ 7.85
07042 Cook II	\$ 8.68
07070 Dishwasher	\$ 6.05
07100 Food Service Worker (Cafeteria Worker)	\$ 6.05
07130 Meat Cutter	\$ 8.68
07250 Waiter/Waitress	\$ 6.58

Furniture Maintenance and Repair Occupations:

09010 Electrostatic Spray Painter	\$ 15.49
09040 Furniture Handler	\$ 11.21
09070 Furniture Refinisher	\$ 15.49
09100 Furniture Refinisher Helper	\$ 12.61
09110 Furniture Repairer, Minor	\$ 14.07
09130 Upholsterer	\$ 15.49

General Service and Support Occupations:

11030 Cleaner, Vehicles	\$ 6.05
11060 Elevator Operator	\$ 6.05
11090 Gardener	\$ 7.75
11121 Housekeeping Aide I	\$ 5.93
11122 Housekeeping Aide II	\$ 6.49
11150 Janitor	\$ 6.05
11210 Laborer, Grounds Maintenance	\$ 6.58
11240 Maid or Houseman	\$ 5.52
11270 Pest Controller	\$ 8.25
11300 Refuse Collector	\$ 6.05
11330 Tractor Operator	\$ 7.38
11360 Window Cleaner	\$ 6.58

Health Occupations:

12020 Dental Assistant	\$ 10.26
12040 Emergency Medical Technician/Paramedic Ambulance Driver	\$ 10.26
12071 Licensed Practical Nurse I	\$ 8.17
12072 Licensed Practical Nurse II	\$ 9.17
12073 Licensed Practical Nurse III	\$ 10.26
12100 Medical Assistant	\$ 9.17
12130 Medical Laboratory Technician	\$ 9.17
12160 Medical Record Clerk	\$ 9.17
12190 Medical Record Technician	\$ 12.71
12221 Nursing Assistant I	\$ 6.66
12222 Nursing Assistant II	\$ 7.49
12223 Nursing Assistant III	\$ 8.17
12224 Nursing Assistant IV	\$ 9.17
12250 Pharmacy Technician	\$ 11.44

12280 Phlebotomist	\$ 9.17
12311 Registered Nurse I	\$ 12.71
12312 Registered Nurse II	\$ 15.55
12313 Registered Nurse II, Specialist	\$ 15.55
12314 Registered Nurse III	\$ 18.82
12315 Registered Nurse III, Anesthetist	\$ 18.82
12316 Registered Nurse IV	\$ 22.55

Information and Arts Occupations:

13002 Audiovisual Librarian	\$ 11.96
13011 Exhibits Specialist I	\$ 15.02
13012 Exhibits Specialist II	\$ 18.25
13013 Exhibits Specialist III	\$ 20.27
13041 Illustrator I	\$ 15.02
13042 Illustrator II	\$ 18.25
13043 Illustrator III	\$ 20.27
13047 Librarian	\$ 13.75
13050 Library Technician	\$ 11.02
13071 Photographer I	\$ 11.33
13072 Photographer II	\$ 15.02
13073 Photographer III	\$ 18.25
13074 Photographer IV	\$ 20.27
13075 Photographer V	\$ 24.53

Laundry, Drycleaning, Pressing and Related Occups:

15010 Assembler	\$ 5.79
15030 Counter Attendant	\$ 5.79
15040 Dry Cleaner	\$ 6.94
15070 Finisher, Flatwork, Machine	\$ 5.79
15090 Presser, Hand	\$ 5.79
15100 Presser, Machine, Drycleaning	\$ 5.79
15130 Presser, Machine, Shirts	\$ 5.79
15160 Presser, Machine, Wearing Apparel, Laundry	\$ 5.79
15190 Sewing Machine Operator	\$ 7.39
15220 Tailor	\$ 7.86
15250 Washer, Machine	\$ 6.19

Machine Tool Operation and Repair Occupations:

19010 Machine-Tool Operator (Toolroom)	\$ 15.49
19040 Tool and Die Maker	\$ 17.84

Materials Handling and Packing Occupations:

21010 Fuel Distribution System Operator	\$ 13.37
21020 Material Coordinator	\$ 12.19
21030 Material Expediter	\$ 12.19
21040 Material Handling Laborer	\$ 7.44
21050 Order Filler	\$ 8.46
21071 Forklift Operator	\$ 9.05
21080 Production Line Worker (Food Processing)	\$ 10.54

21100 Shipping/Receiving Clerk	\$ 8.85
21130 Shipping Packer	\$ 8.85
21140 Store Worker I	\$ 8.40
21150 Stock Clerk (Shelf Stocker, Store Worker II)	\$ 10.22
21210 Tools and Parts Attendant	\$ 10.95
21400 Warehouse Specialist	\$ 10.54

**Mechanics and Maintenance and Repair Occupations:**

23010 Aircraft Mechanic	\$ 16.22
23040 Aircraft Mechanic Helper	\$ 12.61
23050 Aircraft Quality Control Inspector	\$ 16.94
23060 Aircraft Servicer	\$ 14.07
23070 Aircraft Worker	\$ 14.79
23100 Appliance Mechanic	\$ 15.49
23120 Bicycle Repairer	\$ 13.37
23125 Cable Splicer	\$ 16.22
23130 Carpenter, Maintenance	\$ 15.49
23140 Carper Layer	\$ 14.79
23160 Electrician, Maintenance	\$ 16.22
23181 Electronics Technician, Maintenance I	\$ 13.99
23182 Electronics Technician, Maintenance II	\$ 14.31
23183 Electronics Technician, Maintenance III	\$ 15.33
23260 Fabric Worker	\$ 14.07
23290 Fire Alarm System Mechanic	\$ 16.22
23310 Fire Extinguisher Repairer	\$ 13.37
23340 Fuel Distribution System Mechanic	\$ 16.22
23370 General Maintenance Worker	\$ 14.79
23400 Heating, Refrigeration and Air-Conditioning Mechanic	\$ 16.22
23430 Heavy Equipment Mechanic	\$ 16.22
23440 Heavy Equipment Operator	\$ 16.22
23460 Instrument Mechanic	\$ 16.22
23470 Laborer	\$ 9.68
23500 Locksmith	\$ 15.49
23530 Machinery Maintenance Mechanic	\$ 16.18
23550 Machinist, Maintenance	\$ 16.22
23580 Maintenance Trades Helper	\$ 12.61
23640 Millwright	\$ 16.22
23700 Office Appliance Repairer	\$ 15.49
23740 Painter, Aircraft	\$ 15.49
23760 Painter, Maintenance	\$ 15.49
23790 Pipefitter, Maintenance	\$ 16.22
23800 Plumber, Maintenance	\$ 15.49
23820 Pneudraulic Systems Mechanic	\$ 16.22
23850 Rigger	\$ 16.22
23870 Scale Mechanic	\$ 14.79
23890 Sheet-Metal Worker, Maintenance	\$ 16.22
23910 Small Engine Mechanic	\$ 14.79
23930 Telecommunications Mechanic I	\$ 16.22
23931 Telecommunications Mechanic II	\$ 16.94
23950 Telephone Lineman	\$ 16.22
23960 Welder, Combination, Maintenance	\$ 16.22
23965 Well Driller	\$ 16.22

<b>23970 Woodcraft Worker</b>	<b>\$ 16.22</b>
23980 Woodworker	\$ 13.37

Personal Needs Occupations:

24570 Child Care Attendant	\$ 6.34
24580 Child Care Center Clerk	\$ 7.91
24600 Chore Aide	\$ 5.15
24630 Homemaker	\$ 8.33

Plant and System Operation Occupations:

25010 Boiler Tender	\$ 16.22
25040 Sewage Plant Operator	\$ 15.49
25070 Stationary Engineer	\$ 16.22
25190 Ventilation Equipment Tender	\$ 12.61
25210 Water Treatment Plant Operator	\$ 15.49

Protective Service Occupations:

27004 Alarm Monitor	\$ 7.21
27006 Corrections Officer	\$ 11.47
27010 Court Security Officer	\$ 11.91
27040 Detention Officer	\$ 11.47
27070 Firefighter	\$ 11.47
27101 Guard I	\$ 6.03
27102 Guard II	\$ 7.21
27130 Police Officer	\$ 14.25

Stevedoring/Longshoremen Occupational Services:

28010 Blocker and Bracer	\$ 12.33
28020 Hatch Tender	\$ 12.33
28030 Line Handler	\$ 12.33
28040 Stevedore I	\$ 11.80
28050 Stevedore II	\$ 12.96

Technical Occupations:

29010 Air Traffic Control Specialist, Center 2/	\$ 24.47
29011 Air Traffic Control Specialist, Station 2/	\$ 16.87
29012 Air Traffic Control Specialist, Terminal 2/	\$ 18.59
29023 Archeological Technician I	\$ 11.43
29024 Archeological Technician II	\$ 12.85
29025 Archeological Technician III	\$ 15.87
29030 Cartographic Technician	\$ 15.87
29035 Computer Based Training (CBT) Specialist/Instructor	\$ 17.62
29040 Civil Engineering Technician	\$ 15.87
29061 Drafter I	\$ 10.07
29062 Drafter II	\$ 11.33
29063 Drafter III	\$ 14.24
29064 Drafter IV	\$ 17.30
29081 Engineering Technician I	\$ 11.50

29082 Engineering Technician-II	\$ 12.30
29083 Engineering Technician III	\$ 15.15
29084 Engineering Technician IV	\$ 18.35
29085 Engineering Technician V	\$ 21.43
29086 Engineering Technician VI	\$ 26.48
29090 Environmental Technician	\$ 15.87
29100 Flight Simulator/Instructor (Pilot)	\$ 20.28
29150 Graphic Artist	\$ 17.62
29160 Instructor	\$ 15.23
29210 Laboratory Technician	\$ 11.83
29240 Mathematical Technician	\$ 15.87
29361 Paralegal/Legal Assistant I	\$ 10.80
29362 Paralegal/Legal Assistant II	\$ 13.12
29363 Paralegal/Legal Assistant III	\$ 16.05
29364 Paralegal/Legal Assistant IV	\$ 19.42
29390 Photooptics Technician	\$ 15.87
29480 Technical Writer	\$ 15.02
29491 Unexploded Ordnance Technician I	\$ 15.55
29492 Unexploded Ordnance Technician II	\$ 18.82
29493 Unexploded Ordnance Technician III	\$ 22.85
29494 Unexploded Safety Escort	\$ 15.55
29495 Unexploded Sweep Personnel	\$ 15.55
29620 Weather Observer, Senior 3/	\$ 12.80
29621 Weather Observer, Combined Upper Air & Surface Programs 3/	\$ 11.83
29622 Weather Observer, Upper Air 3/	\$ 11.83

Transportation/Mobile Equipment Operation Occupys:

31030 Bus Driver	\$ 9.42
31260 Parking and Lot Attendant	\$ 6.98
31290 Shuttle Bus Driver	\$ 9.01
31300 Taxi Driver	\$ 8.50
31361 Truckdriver, Light Truck	\$ 9.01
31362 Truckdriver, Medium Truck	\$ 9.42
31363 Truckdriver, Heavy Truck	\$ 10.50
31364 Truckdriver, Tractor-Trailer	\$ 10.50

Miscellaneous Occupations:

99020 Animal Caretaker	\$ 7.00
99030 Cashier	\$ 5.93
99041 Carnival Equipment Operator	\$ 7.38
99042 Carnival Equipment Repairer	\$ 7.75
99043 Carnival Worker	\$ 6.05
99050 Desk Clerk	\$ 7.00
99095 Embalmer,	\$ 17.63
99300 Lifeguard	\$ 5.36
99310 Mortician	\$ 17.63
99350 Park Attendant (Aide)	\$ 6.73
99400 Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	\$ 6.01
99500 Recreation Specialist	\$ 13.04
99510 Recycling Worker	\$ 7.41
99610 Sales Clerk	\$ 5.36
99620 School Crossing Guard (Crosswalk Attendant)	\$ 6.05

99630 Sports Official	\$ 5.36
99658 Survey Party Chief (Chief of Party)	\$ 7.85
99659 Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	\$ 7.50
99660 Surveying Aide	\$ 5.15
99690 Swimming Pool Operator	\$ 8.68
99720 Vending Machine Attendant	\$ 7.41
99730 Vending Machine Repairer	\$ 8.68
99740 Vending Machine Repairer Helper	\$ 7.41

\*\* Fringe Benefits Required For All Occupations Included In  
This Wage Determination \*\*

**HEALTH & WELFARE:** Life, accident, and health insurance plans, sick leave, pension plans, civic and personal leave, severance pay, and savings and thrift plans. Minimum employer contributions costing an average of \$2.56 per hour computed on the basis of all hours worked by service employees employed on the contract.

**VACATION:** 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 8 years; 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with predecessor contractors in the performance of similar work at the same Federal facility. (See 29 CFR 4.173)

**HOLIDAYS:** Minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

1/Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See 29 CFR 4.156)

2/APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3/WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employee (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

\*\* UNIFORM ALLOWANCE \*\*

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform

cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$4.25 per week (or \$.85 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**\*\* NOTES APPLYING TO THIS WAGE DETERMINATION \*\***

Source of Occupational Titles and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Second Supplement, dated August 1995, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE  
{Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)}

When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U S Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).



4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

## Exhibit C – Contract Documentation Requirements

### I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Financial Management Reports--The Contractor shall comply with the Section I clause of this contract 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. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.
2. Columns 7.b. and d. shall be completed using the approved time-phased financial baseline plan.
3. Columns 8.a. and b. shall be completed using estimates (forecasts) for the succeeding two months.
4. Minimum reporting categories:
  - Direct Labor Hours
  - Direct Labor Cost
  - Labor Overhead
  - Fringe Benefits
  - Subcontract Costs
  - Other Direct Costs
  - G&A
  - Total Cost
  - Incentive Fee
  - Total CPIF

It is anticipated these categories would be included in a cumulative 533M with the Configuration Management, Computerized Management Maintenance System and Recertification, areas also reported separately.

5. Each 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.

B. Quarterly Financial Management Report--The Contractor shall submit a quarterly financial report detailed by categories specified in I.A.4. above on NASA Form 533Q at times and in accordance with the instructions contained on the reverse side of the form. The initial 533Q shall be submitted within 10 operating days after award of the contract.

C. Financial Baseline Plan--Within 10 calendar days after the effective date of the contract, a time-phased financial baseline plan, detailing by month how you plan to incur costs for the period, shall be submitted for the first two 12-month intervals of the total five year contract period. Financial baseline plans for each of the remaining 12-month intervals shall be submitted within 10 days of the anniversary of the effective date of this contract. This plan shall include the periods by the cost categories specified in Paragraph A.4 above including specific breakdown for Configuration Management, CMMS and Recertification areas. The total estimated cost reflected in the baseline plans must equal the contract value for the total contract period.

The Financial Baseline Plan will be revised each time a contract modification is executed which increases or decreases the contract estimated cost for a reason other than an overrun. The Financial Baseline Plan shall not be revised to include overrun costs.

D. Safety and Health Plan--Within 30 calendar days after the effective date of the contract, the Contractor shall submit a detailed safety and health plan showing how the Contractor intends to protect the life, health, and well being of NASA and Contractor employees as well as property and equipment. This plan, as approved by the Contracting Officer, should contain, as a minimum the following:

1. Points of Contact and Responsibility--Organizational flow chart and description of responsibilities of each employee in your organization for safety.

2. Employee Safety Training, Certification and Programs--Detailed information on type of training required, parties responsible for certification, and outline of applicable regulations. Detail company programs which emphasize personal safety and motivate employees to be safety conscious.

3. LaRC Safety Policies/Procedures--Recognition of applicable LaRC safety policies and procedures such as Langley Procedures and Guidelines LAPG 1710.10, Safety Clearance Procedures (Redtag).

4. Accident Investigation and Reporting--Procedures for investigating and reporting accidents/incidents including immediate notification to the NASA LaRC Safety Manager of all injuries and damage to equipment or facilities.

5. Hazardous Operations--

(a) Description of hazardous operations involved in contract performance.

(b) Plans for apprising employees of all hazards to which they may be exposed.

(c) Proper conditions and precautions for safe use and exposure to hazardous operations. Include recognition of LAPG 1710.12, Potentially Hazardous Materials.

6. People with Disabilities--In accordance with the Americans with Disabilities Act, the plans should specify that prior to assigning a person with disabilities to this contract, the Contractor shall contact the Disability Program Manager at (804) 864-7718.

7. Other Safety Considerations--Any other safety considerations unique to your operation.

E. Configuration Management Master Documents--The Contractor shall change the facility baseline list and its documents in accordance with NASA Langley Procedures and Guidelines LAPG 1740-4 Facility Systems Safety Analysis and Configuration Management. Upon completion, the revised document masters will be reviewed and signed by the Government. The contractor shall update CMOL documentation, distribute the new "Working Master" documents (hard copy) to the facility, and return the originals to the LaRC Engineering Drawing files for storage.

F. State-of-the-Art Reports--By January 31<sup>st</sup> and July 31<sup>st</sup> of each year the Contractor shall provide a semi annual report regarding State of the Art changes in the computer industry relating to CMOL equipment.

G. **FSED Design Reviews Action Item Status and Summary**—The Contractor shall submit a monthly report detailing the status of Action Items submitted during FSED Design Reviews by the 5<sup>th</sup> day of each month.

H. **CMOL System Backup Plan**—Within 90 days after the effective date of the contract, the Contractor shall submit a plan for back up of CMOL system.

I. **Recertification Schedules**— Within 30 days after the effective date of the contract, the Contractor shall submit milestone schedules in sufficient detail to allow NASA to monitor progress of the recertification effort. The schedule shall cover the entire contract performance period and shall be updated and submitted for NASA review on a monthly basis. The schedule shall be in the form of a baselined Gantt chart.

J. **Final Recertification Report**—The Contractor shall prepare a final recertification report for each system recertified per the SOW. The Contractor shall submit the original of this report to NASA for approval.

K. **Master Inspection Plan**—Within 60 days after the effective date of the contract the Contractor shall provide a 3-year plan of upcoming Phase III in service inspections, and cost estimates for performing these inspections. The Contractor shall update the plan and cost estimates biannually.

L. **CMMS Disaster Recovery Plan**—Within 30 days after the effective date of the contract, the Contractor shall submit a disaster recovery plan for the CMMS which addresses the approach to ensuring 24-hour a day, 7-day a week operation of the CMMS server and the plan for returning the system to service within 2 hours after a failure of the Government-owned equipment. This plan shall be updated on a quarterly basis for the first two years and semi-annually each year thereafter.

M. **CMMS Project Plan**—Within 90 days after the effective date of the contract, the Contractor shall submit a 3-year project plan. The plan shall be updated on a quarterly basis for the first year and semi-annually thereafter. The plan shall detail the impact of technological advances to the existing CMMS, areas where process changes plus system enhancements will result in a cost reduction in the execution of the maintenance and repair program, hardware and software upgrades, training schedule, spending plan, and schedule or continued support of the system.

N. **CMMS Software Documentation**—The Contractor shall maintain ISO 9001 compliant documentation for CMMS software. This software is defined as being under the "High Control" software class, as specified by LaRC's Software Engineering Process. This documentation shall be submitted to the Government no later than 30 days after acceptance by the Government of each new software module or software modification.

O. **Monthly Progress Report/Meeting**—The Contractor shall submit a monthly progress report summarizing the previous month's activity and shall discuss the contents of this report each month in a progress meeting. This report shall be submitted within 10 operating days following the end of the reporting period. The report shall include the following information:

A summary of the work completed during the past month including a status of the previous month's planned work; planned work for the following month; updates on any significant events which could impact contract performance, i.e.: organizational changes, skill deficiencies and a plan to alleviate these deficiencies or other adverse conditions; delays in receipt of any Government furnished information; customer feedback and a metrics report. In addition, the following financial information is to be included.

- **Financial Review** – The contractor shall report on its actual expenditures versus the established baseline plan. The information reported is supporting information for the Form 533. The report shall

include the cumulative expenditures, the actual expenditures for the current month, the planned expenditures for the current month as was reported during the previous month, the planned expenditures for the next month, and the projected expenditures for the remaining contract period. The report shall include the listed information for the following SOW items:

- 1000.1 - Change Notification Sheet Processing.
- 1000.2 - Change in Laboratory Risk Evaluation Program Processing.
- 1000.3 - Facilitating Annual Configuration Management Meetings for Facilities in the High Risk Research and Laboratory Risk Evaluation Programs.
- 1000.4 - Asbestos Configuration Management Notification Sheet Processing.
- 1000.5 - Scheduling and Processing Changes for Operational Procedure Demonstrations.
- 1000.6 - Maintaining and Improving the Configuration Management On-Line (CMOL) System.
- 1000.7 - Technical Secretary for the Center's Systems Operations Committee, Executive Safety Board, and Facility Systems Engineering Division Formal Design Reviews.
- 1000.8 - Systems Safety Engineering Support Services for Special Projects or Facilities at LaRC.
- 1000.9 - Operate the Document Library located at 8-Foot High Temperature Tunnel (8'HTT), Building 1265.
- 1000.10 - Maintain the configuration management program for flight projects.
- 2000 - Computerized Maintenance Management System (CMMS).
- 3000.1 - Phase I work on high-pressure systems.
- 3000.2 - Phase II work on high pressure systems.
- 3000.3 - Phase III work on high pressure systems

P. Subcontracting Reports--The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts and the Standard Form 295, Summary Subcontractor Report, in accordance with the instructions on the reverse of the forms. In addition to the instructions on the reverse of the SF 295, the Contractor is required to comply with Clause 1852.219-75, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Reporting.

Q. Small Disadvantaged Business (SDB) Participation Report--The Contractor shall submit an SDB Participation Report in accordance with the Section I clause 52.219-25, Small Disadvantaged Business Program -- Disadvantaged Status and Reporting. The Contractor shall report on the participation of SDB concerns using either Optional Form 312, Small Disadvantaged Business Participation Report, or the Contractor's own format providing the same information as the Optional Form 312. This report shall be submitted every 12 months during the contract period.

R. Quality System Documents (ISO 9001) - The Contractor shall submit the following ISO-compliant documents in accordance with H.12 not later than nine months from the effective date of the contract:

Quality System Manual

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.

S. Conformable Wage Rate Agreement--Within 15 operating days after the effective date of the contract, the Contractor shall submit a report confirming conformable wage rate agreement as this subject is addressed in the Section I clause entitled "Service Contract Act of 1965." for those individuals employed by the Contractor who are covered by the Service Contract Act, but are not listed in Exhibit B.

T. Federal Contractor Veterans Employment Report--In compliance with Clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Reports (VETS-100) as required by this clause.

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

V. Virginia and Local Sales Taxes--In accordance with Section H., H.9 you are required to submit a copy of the letter sent to the Virginia Tax Commission and a copy of the subsequent response.

W. Year 2000 Compliance Documentation--In accordance with the clause in Section H, H-10, the Contractor shall provide for the review and approval of the Contracting Officer the documentation that demonstrates Year 2000 compliance. This documentation shall be provided with the deliverable software identified in this contract.

X. 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 NASA 1852.227-10. Further, upon completion of the work under the contract (or subcontract, if any) a final report shall be submitted.

## 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:

National Aeronautics and Space Administration  
Langley Research Center  
Attn: \_\_\_\_\_ Mail Stop \_\_\_\_  
Contract NAS1-  
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--Contract Specialist, Mail Stop 126
- B--Contracting Officer Technical Representative, Mail Stop 429
- C---Cost Accounting, Mail Stop 135
- D--Safety Manager, Mail Stop 429
- E--Industry Relations Office, Mail Stop 144
- F--Programs and Resources Division, Mail Stop 104
- G--According to instructions on form
- H--Small Business Specialist, Mail Stop 144

I--Pressure Systems Manager, Mail Stop 447

J--CMMS Project Manager, Mail Stop 447

K--New Technology Representative, Mail Stop 212

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 and 533Q)	A-1, B-2, C-2, F-1, I-1, J-1
Baseline Plan	A-2, B-1, F-1, I-1, J-1
Safety and Health Plan	A-1, B-1, D-1,
Configuration Management Master Documents	B-1
State of the Art Report	B-1
FSED Design Review Action Item Status and Summary	B-1
CMOL System Backup Plan	B-1
Recertification Schedules	I-1
Final Recertification Report	I-1
Master Inspection Plan	I-1
CMMS Disaster Recovery Plan	J-1
CMMS Project Plan	J-1
CMMS Software Documentation	J-1
Monthly Progress Report	A-1, B-3, I-1, J-1
Conformable Wage Rate Agreement	A-1, B-1, E-1
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, H-1
Summary Subcontractor Report (Standard Form 295)	G
Small Disadvantaged Business (SDB) Participation Report	A-1
Quality Plan	A-1, B-1, D-1, I-1
Federal Contractor Veterans Employment Report (VETS-100)	G

Evidence of Insurance	A-1
Virginia and Local Sales Tax Correspondence	A-1
Year 2000 Compliance Report	A-1, B-1
New Technology Report	A-1, B-1, K-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. 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 D SUBCONTRACTING PLAN**

**EXHIBIT E**  
**HIGH RISK RESEARCH FACILITY CONFIGURATION MANAGEMENT PROGRAM FACILITIES**

EFFORT CODE	BUILDING	FACILITY TITLE
01	BLDG. 1247E	West Area High Pressure Air System
02	BLDG. 1275	20-Inch Mach 6 CF <sub>4</sub> Tunnel
03	BLDG. 1265	8-Foot High Temperature Tunnel
05	BLDG. 1247D	Hypersonic Blowdown Tunnels and 20-Inch Supersonic Wind Tunnel
07	BLDG. 1247B	20-Inch Mach 17 N <sub>2</sub> Tunnel
13	BLDG. 1268A	Visual Motion Simulator
14	BLDG. 1241	Drive Control Facility
16	BLDG. 1251A	31-Inch Mach 10 Tunnel
17	BLDG. 1251A	15-Inch Mach 6 High Temperature Tunnel
18	BLDG. 648	Transonic Dynamics Tunnel
19	BLDG. 1212C	14x22 Foot Subsonic Tunnel
21	BLDG. 1146	16 Ft. Transonic Tunnel
22	BLDG. 1208	Acoustics Research Laboratory
23	BLDG. 1148B	Hypersonic Materials Test Apparatus
24	BLDG. 1251B	Unitary Wind Tunnel
25	BLDG. 1247B	Arc-Heated Scramjet Test Facility
27	BLDG. 1247B	60-Inch Mach 18 Helium Tunnel Helium Recovery System
28	BLDG. 1247B	22-Inch Mach 20 Helium Tunnel
29	BLDG. 1257-1262	Aircraft Landing Dynamics Facility
33	BLDG. 1297	Impact Dynamics Research Facility
34	BLDG. 1242	0.3m Transonic Cryogenic Tunnel
35	BLDG. 1218A	Anechoic Noise Facility
36	BLDG. 1221A	Jet Noise Laboratory
37	BLDG. 1221A	Thermal Acoustic Fatigue Apparatus
*38	BLDG. 582/646	East Area High Pressure Air System
40	BLDG. 582A	Low Turbulence Pressure Tunnel
58	BLDG. 1275	Impact and Projectile Range
61	BLDG. 644	Twelve Foot Low Speed Tunnel
62	BLDG. 645	20-Foot Vertical Spin Tunnel
66	BLDG. 1268A	Differential Maneuvering Simulator
67	BLDG. 1220	General Purpose Simulator
69	BLDG. 1264	7" High Temperature Tunnel
71	BLDG. 1221C	Vitiated Heater, Test Cell #2
75	BLDG. 1256	Combined Loads Test Systems Facility (COLTS)
76	BLDG. 1161	COLTS Cryogenic Pressure Box Facility
80	BLDG. 1221C	Combustion Heated Scramjet Test Facility Test Cell #1
84	BLDG. 1244	Hangar Water Deluge System
85	BLDG. 1232A	Hevi-Duty Brazing Vacuum Furnace (HDBVF)
86	BLDG. 1293B	16-Meter Thermal Vacuum Chamber
89	BLDG. 1267A	BLDG. 1267A Autoclave
91	BLDG. 1238B	Composite Shop Autoclave
92	BLDG. 1247B	22-Inch Mach 20 Helium Tunnel/Helium Recovery System
97	BLDG. 1293A	Space Structures Research Lab.
98	BLDG. 1215	West Area Heating Plant and Steam Distribution
99	BLDG. 1236	National Transonic Facility (NTF)
200	N/A	Emergency Alarm Response System (EARS)
300	N/A	Switching Diagrams

**EXHIBIT F**  
**LABORATORY RISK EVALUATION PROGRAM FACILITIES**

	<b>BLDG #</b>	<b>LABORATORY NAME</b>
1	1148	Instron Test Machine A
2	1148	Instron Test Machine B
3	1148	Instron Test Machine C
4	1148	Instron 25-KIP Test Machine
5	1148	Tinius Olsen, 30-KIP Test Machine
6	1148	50-KIP MTS Test Machine A
7	1148	50-KIP MTS Test Machine B
8	1148	100-KIP MTS Test Machine
9	1148	100-KIP Satec/Tinius Test Machine
10	1148	120-KIP Satec/Tinius Test Machine A
11	1148	120-KIP Satec/Bladwin Test Machine B.
12	1148	300-KIP Satec/Baidwin Test Machine
13	1148	1200-KIP Satec/Southwark Test Machine
14	1148	Abar II High Temperature Vacuum Furnace A
15	1148	Abar III High Temcerature Vacuum Furnace B
16	1148	Super Plastic Forming System
17	1148	Super Plastic Stretch Forming
18	1205	20-KIP Shore Western Hydraulic Fatigue Test System #15
19	1205	50-KIP MTS Hydraulic Test System #16
20	1205	NASA-Fabricated ATB Hydraulic Test System #17
21	1205	100-KIP MTS Hydraulic Fatigue Test System #18
22	1205	50-KIP MTS Hydraulic Fatigue Test System #19
23	1205	300-KIP MTS Hydraulic Fatigue Test System #20
24	1205	400-KIP Western Booneshaft Hydraulic Fatigue Test System #21
25	1205	NASA-Fabricated, Biaxial Hydraulic Fatigue Test System #22
26	1205	20-KIP Shore Western Hydraulic Fatigue Test System #10
27	1205	20-KIP MTS Hydraulic Fatigue Test System #23
28	1205	50-KIP Shore Western Hydraulic Fatigue Test System #12
29	1205	20-KIP MTS Hydraulic Fatigue Test System #24
30	1205	20-KIP MTS Hydraulic Fatigue Test System #25
31	1205	20-KIP Shore Western Hydraulic Fatigue Test System #26
32	1205	100-KIP MTS Hydraulic Fatigue Test System #27
33	1205	Instron Universal Static Fatigue Test Stand #1
34	1205	Harrop Lab Multi-parameter Static Test Stand #1
35	1205	Harrop Lab Multi-parameter Static Test Stand #2
36	1205	Harrop Lab Multi-parameter Static Test Stand #3

	BLDG #	LABORATORY NAME
37	1205	5-KIP Axial/Torsion MTS Test Stand #13
38	1205	20-KIP Axial/Torsion MTS Test Stand #14
39	1205	100-KIP Instron Fatigue Test Stand # 2
40	1205	50-KIP Instron Fatigue Test Stand # 3
41	1205	50-KIP Instron Fatigue Test Stand # 4
42	1205	20-KiP Instron Fatigue Test Stand # 5
43	1205	20-KIP Instron Fatigue Test Stand # 6
44	1205	20-KIP Instron Fatigue Test Stand # 7
45	1205	20-KIP Instron Fatigue Test Stand # 8
46	1205	Satec Creep Tester, Model D Test Stand CS-1
47	1205	Satec Creep Tester, Model D Test Stand CS-2
48	1205	Satec Creep Tester, Model D Test Stand CS-3
49	1205	Satec Creep Tester, Model D Test Stand CS-4
50	1205	Satec Creep Tester, Model D Test Stand CS-5
51	1205	Arcweld Creep Tester, Model D Test Stand CS-6
52	1205	Satec Cyclic Exposure Rig CS-7
53	1205	Satec Creep Tester, Model D Test Stand CS-8
54	1205	Satec Creep Tester, Model D Test Stand CS-9
55	1205	Arcweld Creep Tester, Model D Test Stand CS-10
56	1205	Satec Creep Tester, Model D Test Stand CS-11
57	1205	Arcweld Creep Tester, Model D Test Stand CS-12
58	1205	Satec Creep Tester, Model D Test Stand CS-13
59	1205	Satec Creep Tester, Model D Test Stand CS-14
60	1205	Arcweld Creep Tester, Model D Test Stand CS-15
61	1205	Arcweld Creep Tester, Model D Test Stand CS-16
62	1205	20/50-KIP Instron Fatigue Test Stands LD1 thru LD20
63	1205	Multi-Parameter Test Stand #4
64	1205	Multi-Parameter Test Stand #5
65	1214	Basic Aerodynamics Research Tunnel
66	1221C	Traverse Jet Facility (Checklist)
67	1221C	Mach-4 Blowdown Tunnel (Checklist)
68	1235	Variable Freq. Converter Configuration #1
69	1235	Variable Freq. Converter Configuration #2
70	1235	Variable Freq. Converter Configuration #3
71	1237	200# Vacuum Furnace
72	1237	3-Ft. Centrifuge Furnace
73	1237	6-Ft. Centrifuge Furnace
74	1238A	Dynavac Sputter System #1 and Plasma Therm RF Power Supply

	BLDG #	LABORATORY NAME
75	1238A	Materials Research Corp (MRC) Sputtering System #2
76	1238A	18" NASA Modified Vacuum Chamber #3
77	1238A	30" Vacuum Chamber #4, NASA Fabricated
78	1238A	Scanning Electron Microscope (SEM) #1
79	1247	3-Inch Helium Calibration Facility
80	1247	15" Low-Speed Wind Tunnel
81	1247	20" X 28" Shear Flow Control Tunnel
82	1247	7" x 11" Low-Speed Wind Tunnel
83	1247	2'x 3' Boundary Layer Channel
84	1250	8' X 15' Thermal Vacuum Chamber
85	1250	5' X 5' Thermal Vacuum Chamber
86	1250	6' X 6' Thermal Vacuum Chamber
87	1262	Static Tire Test Stand
88	1262	Diagonal Braking Vehicle
89	1262	Instrumented Tire Test Vehicle
90	1262	Runway Simulator (Shaker Table)
91	1267	MTS, 110-KIP Hydraulic Fatigue Test System
92	1267	MTS 810, 22 KIP Material Test System
93	1267	MTS, 220-KIP With MTS 458 Controller
94	1267	Shore Western, 220 KIP With MTS 458 Controller
95	1267	Shore Western, 220 KIP With MTS 458 Controller
96	1267	Shore Western, 500 KIP With MTS 458 Controller
97	1267	Shore Western, 500 KIP With MTS 458 Controller
98	1267A	Pasadena 50 KIP Hydraulic Press #1
99	1267A	Wabash 30 KIP Hydraulic Press #2
100	1267A	Erie 300 KIP Hydraulic Press #5
101	1267A	Oliver 500 Ton Hydraulic Press #6
102	1267A	Gruenburg High Temperature Oven
103	1267A	Coates Low Temperature Oven #1
104	1267A	Coates Low Temperature Oven #2
105	1267A	Despatch Low Temperature Oven
106	1267A	Heviduty Pit Furnace
107	1267A	Harrop Box Furnace
108	1267A	Lindberg Furnace #1
109	1267A	Lindberg Furnace #2
110	1267A	Lindberg Furnace #3
111	1267A	West Pit Furnace
112	1287	2 X 2 Inch Flow Impedance Laboratory

	<b>BLDG #</b>	<b>LABORATORY NAME</b>
113	1293C	30" X 48" Autoclave System
114	1293C	Tape Prepregging Machine
115	1293C	Robotic Tow Placement Facility
116	1296	Flame Spray and Brazing Facility
117	1297	18-Ft. Shock Test Machine
118	1297	120 KIP Emery/Baldwin Test Machine
119	1297	10 KIP Digital Tinius Olsen Test Machine

**EXHIBIT G – RECERTIFICATION SYSTEMS  
Pressure Systems Requiring Recertification**

<b>Building No.</b>	<b>System ID</b>	<b>System Description</b>	<b>In PSCM</b>
648	15-ZV	Vacuum	Y
	60-Z	600 Psi Heavy Gas	Y
	15-YL	150 Psi Liquid Heavy Gas	Y
	15-Y	150 Psi Heavy Gas	Y
1221	60-W	600 Psi Water	Y
	10-W	1000 Psi Water	N
	25-NT	2500 Psi Nitrogen Transfer	N
	60-N	600 Psi Nitrogen	N
	24-H1	2400 Psi Hydrogen	N
	25-LF	250 Psi Liquid Propane	N
	60-LF	600 Psi Liquid Propane	N
	15-P	1500 Psi Hydraulic	N
	35-S	350 Psi Steam	Y
1221A	60-A3	600 Psi Air	Y
1234	18-A	1800 Psi Air	Y
	18-A1	1800 Psi Air	Y
1247	N/A	20 Inch Supersonic Wind Tunnel	N
	30-A	2800 Psi Air (was 3000)	Y
	60-A1	600 Psi Air	Y
	30-P5	3000 Psi Hydraulic	Y
1247E	5-A	500 Psi Air	Y
1251	N/A	Unitary Wind Tunnel	N
	N/A	Compressors	N
	N/A	150 Psi Spheres	N
	15-V	Vacuum	N
	13-A	1800 Psi Air	N
	30-A	300 Psi Seal Air	N
	15-A	150 Psi Make-up Air	N
	60-P	600 Psi Hydraulic	N
20-P	2000 Psi Lift Hydraulic	N	
1251A	15-A	150 Psi Air	Y
	35-S	350 Psi Steam	Y
1256	-	600 Psi Air	N
	-	3000 Psi Hydraulic	N
1258	60-LN	6000 Psi Liquid Nitrogen	Y
	50-N	5000 Psi Nitrogen	Y
	32-W	3200 Psi Water	N
	50-A	5000 Psi Air	N
1264	30-A	3000 Psi Air	N
	20-P	2000 Psi Hydraulic	N
	75-P	750 Psi Hydraulics	N

**EXHIBIT G – RECERTIFICATION SYSTEMS  
Pressure Systems Requiring Recertification (cont'd)**

<b>Building No.</b>	<b>System ID</b>	<b>System Description</b>	<b>In PSCM</b>
1265	60-A	6000 Psi Air Piping	Y
	60-A1	6000 Psi Air Storage	Y
	60-AB	6000 Psi Air Vessels	Y
	60-F	6000 Psi Methane	Y
	22-X	2250 Psi Liquid Oxygen	N
	60-NT	6000 Psi Nitrogen Transfer	Y
	60-N1	6000 Psi Nitrogen	Y
	60-N2	6001 Psi Nitrogen	Y
	60-N3	6002 Psi Nitrogen	Y
	24-H	2400 Psi Hydrogen	N
	60-W	6000 Psi Water	Y
	30-P1	3000 Psi Hydraulic	N
	30-P2	3000 Psi Hydraulic	N
	30-P3	3000 Psi Hydraulic	Y
	30-P4	3000 Psi Hydraulic	N
	N/A	8 Ft. High Temperature Tunnel	N
60-LN	6000 Psi Liquid Nitrogen	Y	
1267A	25-P	2500 Psi Hydraulic	Y
1272	5-A	500 Psi Air	N
1274	N/A	Nitrogen	N
	N/A	Service Air	N
1275	N/A	Lead Bath Heater	N



**Pressure Systems Requiring 2<sup>nd</sup> Round Recertification**

<b>Building No.</b>	<b>SYSTEM ID</b>	<b>System Description</b>	<b>Recert Due</b>
582	LTPT	Low Turbulence Pressure Tunnel	2005
648	TDT	Transonic Dynamics Tunnel	2002
1146	50-P	500 Psi Louver Hydraulic	2000
	35-A	350 Psi Air	2004
	18-A	1800 Psi Air	2005
	20-P	2000 Psi Strut Hydraulic	2005
1148	N/A	Vacuum Furnace	Now
1160	N/A	6000 Psi Air Cylinders	Now
1204	50-A	500 Psi Air	2001
1208	15-A	150 Psi Air	2004
	30-A	300 Psi Air	2004
	50-A	5000 Psi Air	2004
1212C	50/30/18-A	5000/3000/1800 Psi Air	Now
1221	N/A	Vacuum Sphere	2001
1233	N/A	200 Psi Air Storage Vessel	2001
1238B		Autoclave	Now
1238B		6000 Psi Nitrogen	2000
1242	N/A	1/3 Meter Cryo Tunnel	Now
	30-P	3000 Psi Hydraulic	2005
1244	20-A	200 Psi Air	2005
1247	N/A	Mach 18 Helium Tunnel	Now
1247	N/A	100 Ft. Sphere	2000
	15-JV	Helium Vacuum	2004
	N/A	60 Ft. Vacuum Sphere	2005
1251A	N/A	Sphere, Vacuum, 41'	2002
1258	N/A	3000 Psi Air Vessels	Now
	50-A	5000 Psi Air	Now
	30-A	3000 Psi Air	Now
	N/A	L-Vessel	Now
	30-P	3000 Psi Hydraulic	Now
	N/A	24 Inch Manifold (3000 Psi)	Now
	N/A	Control Valve	Now
1270	27-A	275 Psi Air	2004
1284B	N/A	11430 Psi Air Storage	Now
	15-W	15000 Psi Water	2005
	33-W	33500 Psi Water	2005
	50-N	5000 Psi Nitrogen	2005
	50-A	500 PSI AIR	2005
	50-W	50000 Psi Water	2005

**Exhibit H**  
**Facilities In the Computerized Maintenance Management System**  
**(CMMS) Listed By LaRC Zone Numbers**

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
1192C	582	644	1133B	581	0000T
1192D	582A	644B	1145	642	110
1192E	583	645	1155	650	400T
1200	585	645A	1156	1147	583A
1208	640	647	1163	1154	584
1208A	641	648	1163T	1215	646
1208T	643	1120	1163T1	1223	648T1
1214	1121	1148	1183	1227	720
1218A	1146	1148T	1188	1233	720A
1221	1146C	1148T1	1189	1239	720B
1221A	1212	1148T2	1190	1243	720T
1221B	1212B	1168	1191	1247E	1101
1221C	1212C	1202	1194	1247F	1122
1221D	1234	1205	1194A	1252	1130T
1221T	1235	1220	1196	1253	1130T1
1221T1	1236	1229	1197	1253A	1130T2
1221T2	1236A	1229A	1198	1266	1130T3
1247	1236C	1230B	1199	1273A	1130T4
1247A	1241	1256	1201	1275A	1133A
1247B	1242	1257	1201T	1283D	1145T1
1247C	1242A	1257A	1201T1	1288	1149
1247D	1242B	1258	1203	1288A	1151
1247G	1251	1258A	1204	1290	1152
1247H	1251B	1259	1209	1291	1153
1247J	1251C	1259A	1209T	UTILITY	1157
1247T1	1251D	1259T1	1209T1		1158
1251A	1251E	1260	1209T2		1159
1263		1261	1209T3		1160
1263T		1261A	1209T4		1161
1264		1262	1209T5		1162
1264C		1267	1209T6		1162A
1265		1267B	1209T7		1162T
1265A		1293	1209T8		1164
1265B		1293A	1223A		1165
1265C		1293B	1225		1166
1265D		1293C	1225B		1167
1265E		1293T	1230		1169
1265F		1293T1	1230A		1170

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
1265T		1297	1230T		1171
1265T1		1297A	1230T1		1172
1265T2		1297C	1230T2		1173
1265T3		1297D	1230T3		1174
1265T4		1297E	1230T4		1175
1265T5		1297G	1232A		1176
1274B		1298	1232C		1177
1275		1299	1232T4		1181
1277		1299D	1237		1187
1287		1299E	1237A		1192
1295		1299F	1237B		1192T
1295A			1237C		1192T1
			1238		1195
			1238A		1195A
			1238B		1195B
			1241T		1195C
			1267A		1202A
			1268		1206
			1268A		1206T
			1268B		1206T1
			1268C		1207
			1270		1211
			1270A		1213
			1270B		1216
			1270C		1216T1
			1270T		1218
			1270T1		1219
			1271		1222
			1272		1222A
			1272T		1222B
			1274		1224T
			1278		1224T1
			1278T		1224T2
			1278T1		1224T3
			1279		1224T4
			1279T		1224T5
			1279T1		1226
			1283		1228
			1283B		1229B
			1284B		1229T1
			1285		1231

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
			1286		1231A
			1289		1231B
			1292		1232
			1292A		1232B
			1292B		1232T
			1294		1232T1
			1296		1237T
					1237T1
					1273T2
					1273T3
					1273T4
					1273T5
					1240
					1244
					1244A
					1244B
					1244C
					1244D
					1244T
					1244T3
					1244T4
					1244T5
					1245
					1246
					1248
					1248T
					1248T1
					1249
					1250
					1250A
					1250D
					1250T
					1250T1
					1250T2
					1250T3
					1250T4
					1254
					1255
					1256T
					1256T1
					1256T2

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
					1256T3
					1259T
					1259T2
					1273
					1273T1
					1276
					1281
					1284
					1284A
					1284C
					1284D
					1297B
					1298T
					1298T1
					1298T2
					1298T3
					1299T
					1299T1
					1299T2
					1299T3
					1299T4
					1299T5
					1299T6
					1310
					1312

## Exhibit I

### INCENTIVE FEE PLAN

This plan will be effective for the term of the Contract. At the end of the one-year period of performance, the contractor's performance will be evaluated and an incentive fee determination shall be issued by the Government. After the first incentive fee determination has been completed, this plan will then be evaluated to determine whether it has met its intended objectives. The Government will consider any comments offered by the Contractor to help it evaluate the effectiveness of this plan. All relevant data will be used to assess the plan, and to revise or modify the plan, if necessary. The existing plan, or a revised version of the existing plan, will then be effective for the remainder of the Contract period of performance. No further modifications will be made unless determined to be necessary by the Government.

Services to be procured under this contract are divided into three areas: SOW line items in the 1000 area are for configuration management support (CM); SOW line items in the 2000 area are for computerized maintenance management support (CMMS); and SOW line items in the 3000 area are for pressure systems recertification support (RECERT). The Contractor will be required to meet the SOW technical objectives and provide associated deliverables. The minimum acceptable performance standards and the exceeds minimum acceptable performance standards criteria for each area are delineated below. At the end of the rating period, the Contractor shall submit a report to the Contracting Officer for review and approval. The report shall document justification to support the Contractor's successful completion of the line items in the Performance Standards.

The fee earned will be determined by the Contractor's performance on Technical Objectives and Cost and will be the total of a Minimum Performance Incentive Fee and an Exceeds Minimum Performance Incentive Bonus Fee. Accomplishing the minimum acceptable performance standards will earn an amount up to 75% of the maximum available fee. Accomplishing the exceeds minimum acceptable performance standards will earn a bonus fee amount up to 25% of the maximum available fee. The Contractor may invoice fee monthly in accordance with G.4, "Incentive Fee Invoices and Payment." Adjustments to the incentive fee will be made at the end of each yearly rating period.

The Contractor will be required to track and report certain data that will be used in the determination of the total fee to be earned during each performance period of this contract. The required data is as follows:

- 1000 – Configuration Management
  - Maintain sufficient records to track and report the Contractor's performance for items delineated below in the "minimum acceptable" and "exceeds minimum acceptable" performance criteria for SOW sections 1000 (Configuration Management).
  - Deliver a Government supplied survey form to the Facility Safety Head (FSH) at the completion of each Change Notification Sheet (CNS).
- 2000 - Computerized Maintenance Management Support
  - Maintain sufficient records to track and report items delineated in the "minimum acceptable" and "exceeds minimum acceptable" performance criteria under the SOW section 2000 (Computerized Maintenance Management System) performance standards below.

- 3000 - Pressure Systems Recertification Support
- Maintain sufficient records to track and report items delineated in the "minimum acceptable" and "exceeds minimum acceptable" performance criteria under the SOW section 3000 (Pressure Systems Recertification Support) performance standards below.

The "Minimum Acceptable Performance Standards" and the "Exceeds Minimum Acceptable Performance Standards" criteria defined herein shall be used to calculate the incentive fee earned. Each line item in the criteria has been assigned a number of available points. The actual earned fee will be the sum of all points earned divided by 100 and multiplied by the negotiated maximum available fee. The summary table that follows will be used to tabulate the number of points earned and the amount of earned fee.

**Technical objectives:**

**MINIMUM ACCEPTABLE PERFORMANCE STANDARDS (TOM<sub>xx</sub>):**

- TOM<sub>1</sub> Achieve an average CNS Survey Form score of 3.5. The number of points that may be earned for this line item is 10. Points earned are computed as follows:
- [(Average Score) ÷ 3.5] [10] = 0 to 10 points maximum
- TOM<sub>2</sub> Publish a memorandum announcing tentative dates by January 20 of each year for the annual configuration meetings for each of the facilities in the High Risk Configuration Management program and the Laboratory Risk Evaluation program, schedule meetings, generate meeting packages, and attend scheduled meetings. One (1) point will be earned if this line item is accomplished.
- TOM<sub>3</sub> Publish a memorandum announcing tentative procedure demonstration dates by January 20 each year, schedule demonstrations, and participate in demonstrations by the scheduled due date. One (1) point will be earned if this line item is accomplished.
- TOM<sub>4</sub> Draft copy with fewer than 5 Contractor errors or omissions of a) SOC minutes to Chairman of SOC within 8 working days of a meeting; b) ESB minutes to Vice-Chairman of ESB within 10 working days of a meeting; c) formal design review minutes to Chairman of review panel within 10 working days of meeting. One (1) point will be earned if this line item is accomplished.
- TOM<sub>5</sub> Maintain the hours expended processing CNS packages to within ± 10% of the Contractors estimate. The number of points that may be earned for this line item is 4. Points earned are computed as follows:
- If actual hours are greater than ± 20%, 0 points are earned.
  - If actual hours are between ± 20%, 2 points are earned.
  - If actual hours are between ± 10%, 4 points are earned.
- TOM<sub>6</sub> Once per year demonstrate the ability to swap from the Governments primary Configuration Management On-Line (CMOL) system to the Contractor's back-up system within 4 hours. One (1) point will be earned if this line item is accomplished.
- TOM<sub>7</sub> Perform daily back-ups of CMOL system databases and documents. Two (2) points will be earned if this line item is accomplished.

- TOM<sub>8</sub> By January 31<sup>st</sup> and July 31 of each year, deliver the semi-annual status report regarding state-of-the-art changes taking place in the computer industry relative to CMOL equipment. Two (2) points will be earned if this line item is accomplished.
- TOM<sub>9</sub> Support the CMMS including the completion of all system modifications, enhancements, and upgrades without impacting service during normal business hours, providing a secure system free from known vulnerabilities, providing CMMS technical support to users, and proposing system enhancements to improve overall productivity. Seven (7) points will be earned if this line item is accomplished.
- TOM<sub>10</sub> Completion of CMMS controlled documents within 30 days after acceptance by the Government of each software module or modification. Presentation of three-year project plan on a quarterly basis during the first two years and semi-annually each year thereafter. All other documents and presentations delivered within 5% of original agreed upon baseline schedule. Two (2) points will be earned if this line item is accomplished.
- TOM<sub>11</sub> CMMS Help Desk response shall not exceed 1 hour for emergencies and 4 business hours for all other calls. Issues should be resolved in 1 business day for emergencies and 3 business days for all other calls. Four (4) points will be earned if this line item is accomplished.
- TOM<sub>12</sub> CMMS enhancements delivered fully functional within 10% of baseline schedule presented at Preliminary Design Review. Three (3) points will be earned if this line item is accomplished.
- TOM<sub>13</sub> Submit complete and accurate pressure system documents and reports for the RECERT program. One (1) point will be earned if this line item is accomplished.
- TOM<sub>14</sub> Complete all objectives and milestones for the RECERT program without exceeding the baseline recertification schedule (as defined in the Contract Documentation Requirements section) by 5%. Six (6) points will be earned if this line item is accomplished.
- TOM<sub>15</sub> Provide engineering analysis to validate the cost effectiveness of the required RECERT pressure system inservice inspection plans. Two (2) points will be earned if this line item is accepted.
- TOM<sub>16</sub> Provide and maintain an updated Master Inspection Plan for the RECERT program in accordance with Exhibit C, Contract Documentation Requirements. Two (2) points will be earned if this line item is accomplished.
- TOM<sub>17</sub> Define and develop procedures for the integration of new pressure systems and modifications to pressure systems into the RECERT program. Two (2) points will be earned if this line item is accomplished.
- TOM<sub>18</sub> Preserve the integrity of the PSCM data. Two (2) points will be earned if this line item is accomplished.

**Exceeds Minimum Acceptable Performance Standards (TOE<sub>xx</sub>):**

- TOE<sub>1</sub> Achieve an average score on the CNS Survey Form greater than 3.5. The number of bonus points that may be earned for this line item is 6. Points earned are computed as follows:



[(Average Score – 3.5) ÷ 1.5] [6] = 0 to 6 points maximum

- TOE<sub>2</sub> Draft copy of with fewer than 5 Contractor errors or omissions a) SOC minutes to Chairman of SOC within 5 working days of a meeting; b) ESB minutes to Vice-Chairman of ESB within 7 working days of a meeting; c) formal design review minutes to Chairman of review panel within 7 working days of meeting. One (1) bonus point will be earned if this line item is accomplished.
- TOE<sub>3</sub> Maintain the hours expended processing CNS packages to within +/- 5% of the Contractors estimate. Four (4) bonus points will be earned if this line item is accomplished.
- TOE<sub>4</sub> Fully meets minimums as stated in Technical Objectives TOM<sub>9</sub> above; **AND**,
- The CMMS has no unscheduled down time. One (1) bonus point will be earned if this line item is accomplished.
  - Identify process changes, system enhancements, and user training to reduce quality assurance finds by 20%. A find is defined as an instance where data has been incorrectly entered into the CMMS database. Two (2) bonus points will be earned if this line item is accomplished.
  - CMMS training, documentation, and technical support shall result in a total number of opened calls to the CMMS Help Desk each month that is less than 20% of the user base. One (1) bonus point will be earned if this line item is accomplished.
  - Software Problem Requests not directly attributed to the software provider shall not exceed 3 per quarter. One (1) bonus point will be earned if this line item is accomplished.
- TOE<sub>5</sub> CMMS enhancements result in a Return on Investment (ROI) of 2.0 or greater. ROI is defined as the ratio of the reduction of unproductive schedule in the maintenance and repair program at Langley to the hours invested in developing the new capabilities and processes. One (1) bonus point will be earned if this line item is accomplished.
- TOE<sub>6</sub> The Contractor achieves the integration of all pressure systems into the PSCM program and the completion of all Phase I and Phase II activities (not including repairs) within the contract base period. One (1) point will be earned if this line item is accomplished.
- TOE<sub>7</sub> The Contractor develops and maintains an integrated, electronic recertification management information system (MIS) that includes technical, cost and schedule aspects of the recertification program and provides sharing of information with the other major elements of the SOW. Two (2) points will be earned if this line item is accomplished.

Cost: -

MINIMUM ACCEPTABLE PERFORMANCE STANDARDS (COM<sub>xx</sub>):

- COM<sub>1</sub> A complete and accurate NASA Form 533M, Monthly Financial Report and Monthly Progress Report received in accordance with the contract documentation requirements and attendance/participation at the required monthly meeting. Ten (10) points will be earned if this line item is accomplished.

- COM<sub>2</sub> Cost delivery is defined as actual incurred cost which is less than or equal to the total estimated cost of the contract for the performance period. One (1) point will be earned if this line item is accomplished.
- COM<sub>3</sub> Deliver all CMMS software documentation within 5% of agreed upon baseline cost estimate. Two (2) points will be earned if this line item is accomplished.
- COM<sub>4</sub> Deliver all CMMS enhancements fully functional within 10% of agreed upon baseline cost estimate. Three (3) points will be earned if this line item is accomplished.
- COM<sub>5</sub> Completes all objectives and milestones for the RECERT program with no cost increase beyond the baseline cost estimate. Six (6) points will be earned if this line item is accomplished.

**Exceeds Minimum Acceptable Performance Standards (COE<sub>xx</sub>):**

- COE<sub>1</sub> Fully meets minimums as given in COM<sub>3</sub> and COM<sub>4</sub> above;

**AND:**

CMMS enhancements result in a return on investment (ROI) of 2.0 or greater. ROI is defined as the ratio of the current cost of performing the maintenance and repair program at Langley to the cost of developing the new computerized capabilities and processes. One (1) bonus point will be earned if this line item is accomplished.

- COE<sub>2</sub> A Contractor-initiated proposal results in 15% or more yearly savings in the inservice inspection program. Two (2) bonus points will be earned if this line item is accomplished.
- COE<sub>3</sub> A Contractor-initiated (MIS) proposal results in 15% or more yearly savings in MIS costs. Two (2) bonus points will be earned if this line item is accomplished.

**FEE SCHEDULE TABLE**

(PAGE 1 of 2)

<b>Technical objectives: Minimum Acceptable Performance Standards:</b>	
<u>Criteria Line Item</u>	<u>Points Earned</u>
TOM <sub>1</sub> (0 to 10 points)	
TOM <sub>2</sub> (0 or 1 point)	
TOM <sub>3</sub> (0 or 1 point)	
TOM <sub>4</sub> (0 or 1 point)	
TOM <sub>5</sub> (0, 2, or 4 points)	
TOM <sub>6</sub> (0 or 1 point)	
TOM <sub>7</sub> (0 or 2 points)	
TOM <sub>8</sub> (0 or 2 points)	
TOM <sub>9</sub> (0 or 7 points)	
TOM <sub>10</sub> (0 or 2 points)	
TOM <sub>11</sub> (0 or 4 points)	
TOM <sub>12</sub> (0 or 3 points)	
TOM <sub>13</sub> (0 or 1 point)	
TOM <sub>14</sub> (0 or 6 points)	
TOM <sub>15</sub> (0 or 2 points)	
TOM <sub>16</sub> (0 or 2 points)	
TOM <sub>17</sub> (0 or 2 points)	
TOM <sub>18</sub> (0 or 2 points)	
TOM <sub>Total</sub> (0 or 53 points)	

<b>Technical objectives: Exceeds Minimum Acceptable Performance Standards:</b>	
<u>Criteria Line Item</u>	<u>Points Earned</u>
TOE <sub>1</sub> (0 to 6 points)	
TOE <sub>2</sub> (0 or 1 point)	
TOE <sub>3</sub> (0 or 4 points)	
TOE <sub>4</sub> (0 or 5 points)	
TOE <sub>5</sub> (0 or 1 point)	
TOE <sub>6</sub> (0 or 1 point)	
TOE <sub>7</sub> (0 or 2 points)	
TOE <sub>Total</sub> (0 to 20 points)	

FEE SCHEDULE TABLE

(PAGE 2 of 2)

<b>Cost: Minimum Acceptable Performance Standards:</b>	
Criteria Line Item	Points Earned
COM <sub>1</sub> (0 or 10 points)	
COM <sub>2</sub> (0 or 1 point)	
COM <sub>3</sub> (0 or 2 points)	
COM <sub>3</sub> (0 or 3 points)	
COM <sub>5</sub> (0 or 6 points)	
COM <sub>Total</sub> (0 to 22 points)	

<b>Cost: Exceeds Minimum Acceptable Performance Standards:</b>	
Criteria Line Item	Points Earned
COE <sub>1</sub> (0 or 1 point)	
COE <sub>2</sub> (0 or 2 points)	
COE <sub>3</sub> (0 or 2 points)	
COE <sub>Total</sub> (0 to 5 points)	

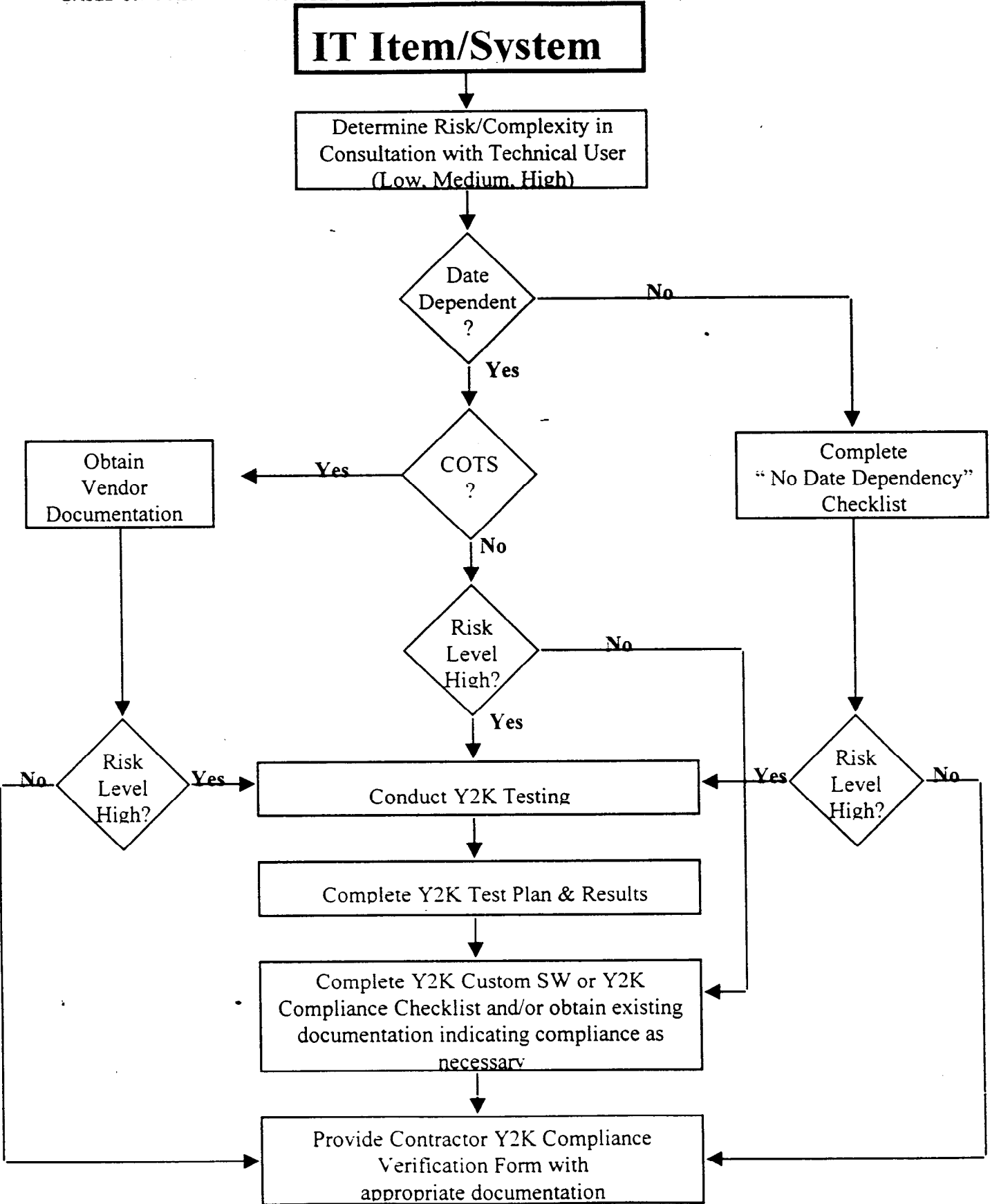
**Total Fee Earned =**

$[(TOM_{Total} + TOE_{Total} + COM_{Total} + COE_{Total}) \div (100)] \times [\text{Negotiated Maximum Available Fee}]$

$[(\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}) \div (100)] \times [\underline{\hspace{1cm}}] = \underline{\hspace{1cm}}$
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Exhibit J  
NASA LaRC Y2K Guideline for  
Documentation and Testing Requirements

BASED ON "NASA YEAR 2000 AGENCY TEST AND CERTIFICATION GUIDELINES AND REQUIREMENTS"



**Exhibit J**  
**Contractor Y2K Compliance Verification Form**  
*NASA Langley Research Center*

**IT Item Name/System:** \_\_\_\_\_ **Risk/Complexity Level** \_\_\_\_\_  
**Brief Description:** \_\_\_\_\_ **(High, Medium, Low):** \_\_\_\_\_

**Facility/Lab (if applicable):** \_\_\_\_\_ **Organization:** \_\_\_\_\_

**Documentation** (check the applicable attachments) *(Refer to the "NASA Year 2000 Agency Test and Certification Guidelines and Requirements" and the "NASA LaRC Y2K Guideline for Documentation and Testing Requirements" for guidance.)*

- "No Date Dependency" Checklist
- Vendor Documentation for COTS Products (Software, Hardware, Firmware)  
Specify: \_\_\_\_\_
- Y2K Test Plan
- Y2K Test Results
- Y2K Custom Software Compliance Checklist
- Y2K Compliance Checklist
- Other existing documentation indicating compliance, e.g. system documentation  
Specify: \_\_\_\_\_

**Comments:**

I certify the IT Item/System identified has been assessed for Y2K compliance using the NASA and Langley Research Center Year 2000 test and certification guidelines and requirements as guidance and that the IT Item/System is compliant as reflected in the attachments.

**Contractor Company Name:** \_\_\_\_\_

**Contractor Official:** \_\_\_\_\_ *Typed Name and Signature* \_\_\_\_\_ *Date*

**Concurrence:**

NASA COTR/Technical Monitor

\_\_\_\_\_ *Typed Name and Signature* \_\_\_\_\_ *Date*

EXHIBIT K

ASBESTOS CONFIGURATION MANAGEMENT FACILITIES

FACILITY	FACILITY TITLE
582	300 PSI Compressor Station
582A	Low Turbulence Pressure Tunnel
583	26-Inch & 6 X 28-Inch Transonic Tunnels
583A	East Area Rough Storage
584	Langley Air Force Office Building
640	8-Foot Transonic Pressure Tunnel
641	8-Foot TPT Office Building
643	30 X 60-Foot Tunnel
644	12-Foot Low-Speed Tunnel
645	20-Foot Vertical Spin Tunnel
645A	Spin Research Office Facility
646	East Area Compressor Station/Engineering Tech Lab
647	Helicopter Hover Facility
648	Transonic Dynamics Tunnel
720	Hydrodynamics Research Facility
720A	East Area Storage Facility
720B	Flight Dynamics Drop Model Facility
1120	Space Environment Effects Laboratory
1133B	PSCN Earth Station
1146	16-Foot Transonic Tunnel
1146A	16-Foot Transonic Tunnel, Boundary Layer Compressor Bldg.
1146B	16-Foot Transonic Tunnel
1146C	16-Foot Transonic Tunnel Pump House/Cooling Tower
1148	Structures and Materials Research Laboratory
1149	Technical Utilization Office and Medical Center
1151	Space Science Support Office
1152	Media Services Center/HSR Program Office
1154	Steam/Hot Water Exchange & Pump House
1155	Photographic Laboratory
1156	Emergency Equipment Storage
1157	Electrical Storage Area
1158	Pyrotechnics/Explosives Storage Building
1159	Pyrotechnics/System Environmental Test Facility
1160	Potentially Hazardous Test Control Facility
1192	Financial Management Building
1192C	Computational Fluid Dynamics Laboratory/ICASE Building
1192D	Computational Fluid Dynamics Laboratory
1194	Technical Library
1195A	Acquisitions and Office of Chief Counsel
1199	Plant Support & Vehicle Maintenance
1200	Advanced Technology Research Laboratory
1201	Communications Systems Building
1202	Flight Electronics Laboratory
1203	General Research Facility
1204	Test and Development Support Facility
1205	Materials Research Laboratory
1206	Shipping, Receiving and Stores Issue Building
FACILITY	FACILITY TITLE

1208	Acoustic Research Lab
1209	Facilities and Systems Engineering Building
1212	Subsonic Tunnels Offices/13-Magnetic Suspension Lab
1212B	High Speed 7 X 10 Foot Tunnel
1212C	14 X 22 Foot Subsonic Tunnel
1213	Cafeteria
1215	Central Heating and Steam Generation Plant
1218	Conference Center
1218A	Anechoic Noise Facility
1219	Langley Research Center Headquarters
1220	Information Systems Research Facility
1221	Hypersonic Propulsion Facility
1221A	High Intensity Noise Research Facility
1221B	Operations Support Shops
1221BS	Basement, Hypersonic Propulsion Facility
1221C	Hypersonic Propulsion Facilities
1221D	Combustion-Heated Scramjet Test Facility (Test Cell 1)
1222	H.J.E. Reid Conference Center
1225	Advanced Machining Development Laboratory
1228	Main Gate House/Badge & Pass Office
1229	Structural Mechanics & Dynamics Lab
1229A	Hazardous Materials Metallurgical Laboratory
1230	Instrument Research Laboratory
1231A	Langley Skywatchers Observatory
1232	Space Technology Laboratory
1232A	Aerospace Controls Research Laboratory/Metals Technology Development Laboratory
1232B	Afge Union Office
1234	Jet Exit Test Facility
1235	Frequency Converter Facility
1236	National Transonic Facility
1236A	National Transonic Facility Mechanical Room
1237A	Foundry
1237B	Balance Calibration Laboratory
1237C	Glass Shop
1238	Electronics Technology Laboratory
1238A	Microelectronics Development Laboratory
1241	Drive Control Facility
1242/1242A	0.3-Meter Transonic Cryogenic Tunnel/Cryo LN2 Tank #1
1244	Building 1244 Complex
1244D	Hangar Support Annex
1247A	Hypersonic Facilities Complex
1247B	Hypersonic Facilities Complex
1247C	HSAD Lab Cooling Tower
1247D	Hypersonic Facilities Complex
1247E	Compressor Station
1247G	Support Operations Office
1247H	2X3 Low Speed Boundary Layer Channel
1248	NASA Fire Station
1249	Environmentally Controlled Storage Building
1250	Applications Programs Laboratories and Atmospheric Sciences Facility
<b>FACILITY</b>	<b>FACILITY TITLE</b>



1251	Unitary Plan Wind Tunnel & Research Offices
1251A	31-Inch Mach 10 Tunnel
1256	Combined Loads Testing Facility
1256A	Combined Loads Test Systems Facility
1258	ALDF Control Room Building
1259A	Refrigeration Facility
1262	Aircraft Landing Dynamics Office/Shop
1263	7-Inch High Temperature DAS Building
1264	7-Inch High Temperature Pilot Tunnel
1265	8-Foot High Temperature Tunnel Complex
1267	Thermal Structures Laboratory
1267A	Materials Processing & Development Section
1267B	High Temperature Materials Lab/Cooling Water System
1268	Central Scientific Computing Laboratory
1268A	Flight Simulation Laboratory
1270	Printed Circuit & Encapsulation Lab
1270B	Composite Storage Building
1271	Engineering Support Lab No. 2
1272	Engineering Support Lab No. 3
1273-	Lidar Laboratory
1274	Planetary Entry Radiation Lab
1275	20-Inch M6 CF4 Tunnel
1276	Lidar Research Lab Storage
1283	Engineering and Fabrication Laboratories
1284A	Air Conditioning Shop/Storage
1284B	Component Verification Facility
1284C	Cloud Chemistry Laboratory
1286	Ground Maintenance Repair Shop
1287	Flow Impedance Test Lab
1292	Building Trades Shop
1293A	Space Structures Research Lab
1293B	Structural Dynamics Research Laboratory
1294	Engineering Support Laboratory No. 1
1295	60-Foot Vacuum Sphere Shop
1296	Materials Processing and Development Section/Ceramic Spray Shop
1297	Impact Dynamics Research Facility
1297A	Impact Dynamics Research Facility
1298	Institute for Computer Applications in Science and Engineering (ICASE)
1299	Flight Electronics Laboratory/ Vehicle Antenna Test Facility/ Electromagnetics Research Laboratory
1312	Langley Air Force Base Liaison Office