

CONTRACT NAS1-98108

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

- Section B.2 and B.3, Estimated Cost and Fixed Fee, page 2;
- Section H.5, Estimated Cost and Fixed Fee, page 21;
- Exhibit D, The Subcontracting Plan.

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 financial information could cause substantial competitive harm to the contractor by providing its competitors insight into the company's costing practices and management approaches. Furthermore, disclosure would discourage other companies from participating in future competitive procurements, thereby impairing the Government's ability to obtain complete and accurate cost 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 CFG 350)

RATING **DO - C9** PAGE OF PAGE(S) **1 61**

CONTRACT NO. AS1-98108	3. SOLICITATION NO. 1-062-DAE.1132	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED 12/18/97	6. REQUISITION/PURCHASE NO. DAE.1132
7. ISSUED BY National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-0001		8. ADDRESS OFFER TO (if other than Item 7) NASA, Langley Research Center 9A Langley Boulevard, Building 1195B, Room 125 Hampton, VA 23681-0001		

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

SOLICITATION

9. Sealed offers in original and 10 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 Building 1195B, Room 125 until 4:00 PM local time January 20, 1998. 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: Stanley W. Ward	A. NAME	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (757) 864-2476
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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 _____ 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)	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	40 CALENDAR DAYS
	%	%	NET %	%
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

15A. NAME AND ADDRESS OF OFFEROR Calspan Corporation P.O. Box 400 Buffalo, NY 14225	CODE 92325 FACILITY DUNS: 00448-2378	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Thomas M. Pleban Director, Contracts & Procurement
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15B. TELEPHONE NO. (Include area code) (716) 632-7500	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.	17. SIGNATURE 	18. OFFER DATE 31 Mar 98
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED SEE SECTION C EFFECTIVE 5/1/98	20. AMOUNT SEE B.2.	21. ACCOUNTING AND APPROPRIATION DAE.1132, \$875,000 (partial)
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) 25.
24. ADMINISTERED BY (if other than item 7) ROSEMARY C. FROELICH	CODE	25. PAYMENT WILL BE MADE BY Financial Management Office Langley Research Center, MS 175 Hampton, VA 23681-0001
26. NAME OF CONTRACTING OFFICER (Type or print) ROSEMARY C. FROELICH	27. UNITED STATES OF AMERICA 	28. AWARD DATE 4-9-98

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

126/Contract Files

PART I - THE SCHEDULE**SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS****B.1 SUPPLIES AN/DOR SERVICES TO BE FURNISHED (LaRC 52.211-90) (AUG 1997)**

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

B.2 ESTIMATED COST AND FIXED FEE (NASA 1852.216-74) (DEC 1991)

The estimated cost of this contract is [REDACTED] exclusive of the fixed fee of [REDACTED]. The total estimated cost and fixed fee is \$2,684,032.

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 \$ [REDACTED]. This allotment is for cost only and covers the following estimated period of performance: 5/1/98 - 9/15/98.

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

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT**C.1 STATEMENT OF WORK - NATIONAL TRANSONIC FACILITY OPERATIONS SUPPORT (NTFOS)****0. OVERVIEW OF REQUIREMENTS**

The Contractor shall provide support for the operation of the National Transonic Facility (NTF) Wind Tunnel, primarily located at Building 1236 at NASA's Langley Research Center (LaRC). The Contractor will be located on-site for this effort. This effort includes a) tasks associated with specific wind tunnel research tests, b) routine tasks in support of the facility and its related systems, and c) supporting improvements in the NTF processes and in the facility itself. In the following Performance Work Statement, these three main areas of support are classified as:

A. Wind Tunnel Test Initiated Tasks**B. Facility Infrastructure Tasks****C. Special Projects (SP)**

The above lettering system of **A**, **B**, and **C** is used consistently throughout the Work Statement. **Tasks A and B** are self sustaining and on-going. **Task C** efforts will be initiated or approved (if Contractor initiated) by the Government in writing before that work is to be initiated. Historically, approximately 60 percent of the total effort falls under A, approximately 20 percent falls under B, and approximately 20 percent falls under C.

All Special Projects, and other specialized support efforts, will be initiated by Task Orders, which become Task/Test Requests (TTRs) when assigned by the COTR and accepted by the

Contractor. (See G.4.) Any TTR will detail whether it represents an **A, B, or C** task as defined in Section 0., directly above. Task Order/TTRs are to be tracked by the Contractor through task completion.

1. OPERATIONS

A. **Wind Tunnel Test Initiated Tasks**

- 1.1. The Contractor shall perform the work required on standardized checklists controlled by the Langley Handbook (LHB) 1740.4 configuration management system to accomplish pre-operation and post-operation tasks. These checklists include, but are not limited to, the LN2 supply system, the main drive system and auxiliaries, cooling water, high-pressure air and steam, and the hydraulic systems.
- 1.2. The Contractor shall operate the Model Preparation Area (MPA) cryogenic chamber, monitor the system and test article, and shutdown the system as required in accordance with Integrated Operating Procedure (IOP) IOP-108. The operator shall be qualified in accordance with Facility Operator Certification Document and certified by the Facility Safety Head. The National Transonic Facility (NTF) has three Model Preparation Areas (MPAs) utilized to perform pretest installation, checkout, and calibration of test models and associated components. One of these areas, commonly known as MPA #3, is unique from the other two bays (MPA #1 & MPA #2). MPA #3 has the system capability to thermally cycle a test model throughout a temperature range of -320°F to +150°F utilizing a portable cryogenic chamber enclosure. The operation of this cryogenic chamber requires operators to be at the control panel over a two shift period. Typically, on the second shift, the cryogenic chamber is beginning the process of being conditioned or warmed after the checkout activities performed on the first shift.
- 1.3. The Contractor shall operate and maintain the Liquid Nitrogen (LN2) Off-Loading & Storage for the facility's nitrogen tanks in accordance with Standard Operating Procedures (SOP)-01A and SOP-01C, including but not limited to the 900K gallon tank, the 250K gallon tank, the 6K gallon dewar, and the 3K gallon dewar. This includes the piping, pumping, and valving systems. This effort shall include timely responses to requests for filling the 50 gallon dewars with LN2 as required by the MPA operator. The Contractor shall coordinate the delivery of LN2 to the facility with the LN2 supplier, PRAXAIR. PRAXAIR is a Government Contractor, and the Government is responsible for maintaining that contractual relationship. PRAXAIR's LN2 Supply Line is connected to the NTF by a transfer line from their facility located nearby at 3201 North Armstead Ave., Hampton, Virginia. PRAXAIR is responsible for the transfer line up to valve 3500L & 3677N (Facility Drawing LD-1006193 & LE-944286). The Contractor shall be responsible for the LN2 system downstream from valve 3500L & 3677N.
- 1.4. The Contractor shall support two shift operation (7:00am-11:45pm) of the NTF, 5 days a week, with provisions for non-scheduled work (long shifts, additional shifts) as requested by the Contracting Officer Technical Representative (COTR). The NTF historically can meet the scheduled program requirements within a normal work week; however, there are times when additional effort is required outside the normal 2 shifts or on weekends in order to meet critical program goals and milestones. This estimated effort is typically an additional 8 work-hours per month. The Contractor will receive notification of non-scheduled work at least 2 shifts in advance by the Facility Manager or the COTR. The Contractor shall

operate the systems identified in IOP-24-1, IOP-100, IOP-101A-J, IOP-102A-C, IOP-103A, IOP-104A, IOP106A-D, IOP-107A, with qualified, certified operators.

- 1.5. All IOP operations shall be performed in accordance with the NTF's Standard Operating Procedures (SOPs) and their associated check lists (reference the IOPs for the specific SOPs). These SOPs are maintained in the NTF library. The contract personnel must be certified as operators by NASA. The certifications required are defined in accordance with the NTF Facility Resume. To be certified, an operator must review and understand the applicable safety documentation, establish working knowledge of the associated hardware in the respective area of responsibility, and be capable of following written operation procedures/checklists for proper tunnel operations. The Facility Safety Head will certify contract personnel via letter to the COTR and Contractor's on-site manger. The following systems shall be operated by the Contractor:

- 1.5.1. Process Controls -- The Contractor shall operate the following subsystems (SOP-04, SOP-05, SOP-08, SOP-10, SOP-10B):

- 1.5.1.1. Reynolds Number Control System
- 1.5.1.2. Pressure Control System
- 1.5.1.3. Temperature Control System
- 1.5.1.4. GN2 Vent System
- 1.5.1.5. LN2 Flow Control System
- 1.5.1.6. LN2 Supply System
- 1.5.1.7. LN2 Storage System
- 1.5.1.8. LN2 Transfer (800 ton tank)
- 1.5.1.9. LN2 Transfer (3000 ton tank)
- 1.5.1.10. Cooling Tower
- 1.5.1.11. Cooling Coil
- 1.5.1.12. High Pressure Air System
- 1.5.1.13. Miscellaneous Hydraulics System
- 1.5.1.14. Vent Stack Valves, Fans, and Burners

- 1.5.2. Drive/Mach System -- The Contractor shall operate the following subsystems (SOP-07, SOP-12A-H):

- 1.5.2.1. Drive Controls System
- 1.5.2.2. Mach Number Control System
- 1.5.2.3. Inlet Guide Vane Control System
- 1.5.2.4. Inlet Guide Vane Hydraulics System
- 1.5.2.5. In addition to operating the above systems, the Contractor shall communicate with the Langley Power Dispatcher in order to arrange for the necessary electrical power for the test and for visual observation of the model of instability and potential failure (via closed circuit television) during testing.

- 1.5.3. Model/Data System -- The Contractor shall operate the following subsystems (SOP-09A-C, SOP-13):

- 1.5.3.1. Pitch System
- 1.5.3.2. Roll System
- 1.5.3.3. Tunnel Parameter Control System
- 1.5.3.4. Research Data Acquisition
- 1.5.3.5. Pitch Hydraulics System
- 1.5.3.6. Balance Cooling/Heating System
- 1.5.3.7. Test Section Movable System

- 1.6. The Contractor shall perform tunnel post test inspections per IOP-106B. The Contractor shall report anomalies of inspection to the Facility Safety Head in writing within 4 hours of procedure completion.
- 1.7. The Contractor's on-site manager and the personnel assigned to the test program, shall maintain active participation in meetings including, but not limited to, daily shift, pre-test, post test, and weekly operations meetings. The purpose of these meetings is to assure that the required coordination, integration and communication of the various activities occur in a timely and systematic manner.

B. Facility Infrastructure Tasks

The Contractor shall operate, maintain, calibrate, periodically test, and troubleshoot false alarms for the O₂ monitoring systems located at Building 1236 (NTF), Building 1236A through 1236D, Building 1242 (the adjoining 0.3 Meter TCT), Building 1235 (Variable Frequency), and Building 1241 (Drive Control) in accordance with the procedures set forth in SOP-18A. Calibrations of the O₂ monitoring systems are mandated by the LaRC Metrology Office and shall be performed according to schedule (see *Attachment 7*) and shall be reported to the Metrology office. These systems have components located throughout the facilities, including central, portable, and stand-alone sensors. The reliability of the O₂ monitoring systems is critical for the safety of the personnel located at the NTF.

C. SP Initiated Tasks

The Contractor is responsible for generating new checklists and procedures for system modifications, new equipment, and continuous process improvements.

2. MAINTENANCE

A. Wind Tunnel Test Initiated Tasks

The Contractor shall be knowledgeable of the systems and procedures for the checklists, IOPs, and SOPs listed in section 1.0 above, and shall provide alternative actions, i.e. repairs and/or adjustments, within 15 minutes of a discovered problem. During a Wind Tunnel Test, the Contractor shall troubleshoot and replace inoperable components or perform on-site repairs to minimize tunnel unscheduled downtime as anomalies occur. The NASA Facility Manager will prioritize the repairs and have the final authority for initiating the repairs/adjustments.

B. Facility Infrastructure Tasks

- 2.1. The Contractor shall maintain the following areas in proper condition/neatness in order to facilitate effective operations: the control room, the main drive room, the basements in the area of the high-pressure air reducing station and the hydraulic systems, the second floor on the far side of the tunnel, the LN₂ tank and transfer areas, and Building 1236A, 1236B, and 1236D.

- 2.2. Preventative Maintenance - The Contractor shall perform preventative maintenance on the following systems: main drive motor, high-pressure hydraulic systems, cooling water pumps and heat exchangers, high-pressure air and steam distribution systems, standby diesel generator, liquid nitrogen supply and distribution systems, and the related controls and protective devices. The Contractor shall maintain all auxiliaries up to the last joint before bearing on the main drive motors (not to include electric drive motor and breaker maintenance). These controls and protective devices include, but are not limited to, flow meters, pressure switches, temperature switches, and level indicators. The schedule for Preventative Maintenance is defined by the facility and/or the FSSD maintenance printouts and is driven by procedures, such as Preventative Maintenance Procedures Maintenance Inspection Procedures, and Maintenance Operations Procedures. The Contractor shall complete all scheduled preventative maintenance by the required date specified in the PM, PMP, MIP, or MOP procedures or as specified by TTR from the Facility manager with exceptions for deferrals authorized by the COTR and/or the Facility Manager.
- 2.3. Procurement of Parts - The Contractor shall identify, specify, store, and maintain adequate spare parts for all systems in the area of responsibility, including but not limited to plant systems and instrumentation. The Contractor shall generate the list of required spare parts in conjunction with the Facility Manager. These spare parts will be procured by NASA in accordance with Government procurement procedures. The Contractor shall provide information for Government Purchase Requests (PRs) as requested by the Government to replace consumed inventory as part of the inventory maintenance task requirement. The Contractor shall provide information for Government PRs within 5 days after such a request. The Contractor shall conduct market surveys for best-value acquisitions, make price comparisons, and provide a tracking process for purchases. The Facility Manager will be the interface between the Contractor and the NASA Acquisition Division for the procurement of spare parts. The Contractor shall provide receipt/inspection for all parts (ADP equipment, instruments, calibration equipment, etc.) shall be processed through the NASA Equipment Management System (NEMS) procedure.
- 2.4. Card Key System - The Contractor shall operate and maintain the Card Key system (software and hardware) which shall allow access to the facility and controls designated safety zones within the facility during operations. The Contractor shall provide a safety briefing for all personnel prior to issuing a Card Key. The Contractor shall make all Card Key updates within 24 hours of receipt of work orders from Facility Safety Head. A Card Key distribution list shall be kept current at all times by the Contractor.

3. INSTRUMENT SUPPORT

A. **Wind Tunnel Test Initiated Tasks**

- 3.1. The Contractor shall install, configure, calibrate, operate, modify, maintain, and verify research, tunnel, and Model Preparation Areas (MPA) related instrumentation systems on a per test basis, as defined by test plan and test process. This support includes the devices utilized for scientific measurements of research, tunnel processes, pre-test, and post-test processes performed in the three MPAs. These instrumentation systems include, but are not limited to: Electronically Scanned Pressure (ESP) System, pressure, temperature, balance, Angle of Attack (AOA), Mach number, ground current, video, Temperature Sensitive Paint system, Pressure Sensitive Paint system, and special

instrumentation. The Contractor shall ensure daily status of these instrumentation systems in accordance with established standard checklists, IOPs and SOPs listed in Paragraph 1.5. The Contractor shall have the tunnel instrumentation systems (Research and Process, and MPA) fully operational at the time of facility test operations.

- 3.2. The Contractor shall configure and operate the Balance Dynamic Display Unit (BDDU) and the Critical Point Analyzer (CPA) as outlined in IOP-107A. The Contractor shall provide the configuration data to the Facility Safety Head 2 work days prior to the start of model installation in the test section. The Facility Safety Head will provide authorization to the Contractor to proceed with the set-up.

B. Facility Infrastructure Tasks

The Contractor shall provide technical support, input, feedback, and coordination to ensure orderly implementation, integration, and operation of the facility instrumentation systems. The Contractor shall troubleshoot and replace/repair inoperable components or instruments in order to minimize tunnel unscheduled downtime. Modifications and maintenance of the instruments shall not adversely impact the Wind Tunnel operating schedule. The NASA Facility Manager will prioritize the repairs.

4. **INSTRUMENTATION CALIBRATION**

B. Facility Infrastructure Tasks

The Contractor shall perform routine checks on the operation and the accuracy of the facility instrumentation and re-calibrate as required without impacting tunnel daily operations. The Contractor shall maintain the calibration records to ensure that 100% of the facility measurement devices are maintained within the calibration sticker time frame and have current calibration documentation. The Contractor shall update the calibration records within three days of the performance of the calibration or of the receipt of a calibrated instrument (if the instrument was calibrated by a LaRC designated calibration Contractor; otherwise, the Contractor shall then notify the NASA Facility Manager of the potential need to have the newly-received instrument calibrated).

5. **DATA ACQUISITION**

A. Wind Tunnel Test Initiated Tasks

- 5.1. The Contractor shall provide research instrumentation/data acquisition set-up (configuration) files for data acquisition and on-line reduction as defined in Administrative Instruction Procedure (AIP)-29, including the model information sheet and data channel definition sheets. The Contractor shall have the Setup (configuration) files ready within one (1) shift after receiving instructions from the Facility Manager or Test Engineer (*see Attachment 11*). The Contractor shall work with the NASA test engineer, research engineer, data quality engineer, and customer to define and check test information. The Contractor shall make configuration changes to the data system within 30 minutes of the request by the NASA test engineer, or within a greater time as specified by the NASA test engineer.
- 5.2. The Contractor shall provide process instrumentation/data acquisition setup (configuration) files consistent with the documented tunnel and instrumentation configuration. The Contractor shall have the Setup (configuration) files ready within one (1) shift after receiving instructions from the Facility manager or Test Engineer. The Contractor shall work with the NASA test engineer, the data quality engineer, and FSSD personnel to define and verify the tunnel information.

The Contractor shall make configuration changes to the data system within 30 minutes of the request by the NASA test engineer, or within a greater time as specified by the NASA test engineer.

- 5.3. The Contractor shall provide on-line troubleshooting and corrective action of the software during tunnel operation.
- 5.4. The Contractor shall provide instrumentation/data acquisition setup (configuration) files and perform the data reduction, generate reports, and format the data for transmittal to the research customer. The NASA test engineer, research engineer, and data quality engineer will provide standard NTF transmittal formats that will be used by the Contractor 10 days before the test.
- 5.5. The Contractor shall provide Data Systems Engineering (DSE) support in the control room at all times during the following tunnel operations:
 - Instrumentation checkout (leak checks, functional checks);
 - Instrumentation calibrations;
 - Model weight tares;
 - Warm-up and cool-down of tunnel;
 - Wind-on tunnel operation.
- 5.6. The DSE support shall include these functions:
 - 5.6.1. Perform the configuration of the NTF's data system during the above test operations.
 - 5.6.2. Perform the configuration and support of the on-line research plotting system.
 - 5.6.3. Perform the off-line data reduction.
 - 5.6.4. Perform the operation and monitoring of the Process Computer System (PCS), monitor and evaluate the alarms and alerts from this system, take corrective action based on the alarm/alert condition, and notify the Facility Safety Head of the condition.
 - 5.6.5. Perform the operation and monitoring of the Balance Dynamic Display Unit (BDDU).
 - 5.6.6. Perform the operation and monitoring of the Balance Critical Point Analyzer (CPA).
 - 5.6.7. Process and track test equipment and test supplies.
- 5.7. During tunnel operations, the Contractor shall respond to problems and/or configuration changes in the instrumentation/data acquisition systems in an efficient and timely manner by analyzing the fault condition, designing a corrective action, and implementing the corrective action. Potential changes include, but are not limited to, NEFF channels, ESP configuration, on-line plot configuration, SAMMI displays, and instrumentation configuration. The timely resolution of anomalies is critical to the successful completion of the test, therefore the Contractor must be prepared to interact with the Test Engineer, Facility Safety Head, Facility Manager, customer, and other tunnel support personnel and implement problem resolutions.
- 5.8. The Contractor shall develop and maintain test documentation utilizing AIP-29. Thorough technical documentation shall be required for configuration

management. This documentation shall be available 1 day prior to model installation. Changes shall be documented within one day.

6. DATA REDUCTION

A. **Wind Tunnel Test Initiated Tasks**

After the data has been acquired from a test, the Contractor shall provide the correct reduced data for a run set in transmittal format for research engineer and/or customer within (1) one hour of receipt of the NASA test engineer supplied data reduction instruction sheet (*Attachment 6*).

At the request of the NASA test engineer and/or data quality engineer, the Contractor shall perform the re-reduction of the test run set to include additional corrections per instruction sheet. The Contractor shall provide a set of final, reduced data in transmittal format on acceptable media such as optical disk, 4mm digital tape, or electronically at the request of the NASA test engineer, research engineer, and/or customer. The preferred mode of data transfer is electronic. The Contractor shall work with NASA personnel to insure data has been reduced, as instructed, and is accurate. The Contractor shall provide correct, final, reduced data that shall be available for the research test engineer and/or customer within three (3) shifts after request has been received.

C. **SP Initiated Tasks**

The Contractor shall provide independent checkpoints on research data when directed by TTR, using the NASA supplied off-line software. The software is available to check tunnel parameters, Euler rotations, temperature compensation, and balance interactions. The Contractor shall implement new independent software, as needed and requested by TTR, to verify and correlate the research data.

7. INFORMATION TECHNOLOGY

A. **Wind Tunnel Test Initiated Tasks**

The Contractor shall provide emergency playback of tunnel/model RCS and PCS data in emergency situations within 5 minutes of the request by the Test Engineer, Facility Manager, or the Facility Safety Head.

B. **Facility Infrastructure Tasks**

- 7.1. The Contractor shall provide to the Facility Manager and the COTR: quarterly financial status reports reflecting the cost of operation, man-hours reports, productivity reports, projects status reports, and procurement items reports in order to monitor the facility operation and productivity.
- 7.2. The Contractor shall operate, upgrade, and maintain the computerized archival and retrieval system for: (A) process data from the PCS, (1) all process data, including tunnel analog data, temperatures from the Temperature Monitoring Scanner (TMS), and data from the three NTF microprocessors and sequencers, (2) software source code, (3) software object code, (4) all process configuration and setup files used during testing, and (5) any test specific process data needed for tunnel safety, productivity, maintenance, and enhancements. Process data shall be archived on 4mm digital tape as file space fills or at the end of the shift; (B) research data from the RCS, (1) all research data, (2) software source code, (3) software object code, (4) all test configuration files, and (5) any test specific information or test specific software, software source code, report processing files, data transmittal definition files, and other test specific information. The Contractor shall retrieve and transmit the data to the test engineer, customer,

Facility Manager or COTR within two (2) hours of the request. The data shall be in a format and file system which can be universally read or translated by common word processing programs, spreadsheet programs, or database programs. Research data shall be archived on optical disk within one (1) shift, following the end of test program.

- 7.3. The Contractor shall maintain existing naming conventions for files as a means of identification. The Contractor shall document and describe any changes and/or updates as specified through the TTR mechanism. The Contractor shall adhere to naming conventions 100% of the time. Naming conventions are used as the tracking device for test research data and are therefore critical in maintaining historical records of tests and configuration control.
- 7.4. The Contractor shall provide, operate, and maintain: (1) a historical database to track all changes to the facility Automated Data Processing (ADP) hardware and software configuration, (2) file level configuration control of archived files and current files, (3) a "run configuration" which will be "frozen" at the beginning of a test program and changed only by authorization of the NASA test engineer or data quality engineer. The Contractor shall follow written configuration control procedures and maintain an operating "run configuration" all the time.
- 7.5. The Contractor shall operate and maintain the TTR database for global system tracking and the Problem Failure Report (PFR). The Contractor shall provide the monthly TTR/PFR summary of activities in a listed and graphical format. The TTR and PFR forms is approved by the Facility Manager. Any updates to the TTR regarding deliverables and/or delivery dates shall be made by the COTR. The Contractor shall provide both historical and current TTR/PFR tracking and filing as part of the facility operation for safety and project management activities. The Contractor shall distribute the TTRs/PFRs identified for distribution and track the open/closed status of each item. The Contractor shall provide Open/Closed status of the TTR/PFR database within 15 minutes of a request for the status report by the Facility Manager, Facility Safety Head, or COTR. The Contractor shall distribute the new TTR/PFRs daily during normal business days. The Contractor shall operate, update, and maintain the TTR/PFR database on a daily basis for 2 shift operation. The Contractor shall have less than five errors or discrepancies on the TTR/PFR database printout and 100% accountability for all TTR/PFR folders.
- 7.6. The Contractor shall operate, update, and maintain the Problem Reporting and Corrective Actions (PRACA). The Contractor shall operate, update, and maintain the PRACA log on a daily basis for 2 shift operations.
- 7.7. The Contractor shall provide facility drawing retrieval, reproduction, and distribution support as requested by the Facility Manager, Facility Safety Head, Test Engineer, or COTR for the facility projects, configuration and facility information. The Contractor shall deliver a copy of a NTF facility drawing within 1 hour of the request by the Facility Manager, Facility Safety Head, Test Engineer, or COTR.
- 7.8. The Contractor shall provide an Emergency Response Team (ERT). All ERT members will meet the LaRC qualifications. The NASA Facility Safety Head will approve the Contractor's planned ERT staffing to ensure that it is staffed with qualified personnel.
- 7.9. The Contractor shall develop, update, and maintain a database of critical items and spares identified in paragraph 2.4.

- 7.10. The Contractor shall operate, update, and maintain a tracking record database of hazardous material storage/waste. The Contractor shall update and maintain the Material Safety Data Sheet (MSDS) records of all items procured at the NTF within 24 hours of material receipt by the Facility.
- 7.11. The Contractor shall provide written data management procedures within 1 month of the beginning of the contract to the Facility Manager, Facility Safety Head, and COTR. The Procedures will be approved by the NTF's Facility Manager. Procedures shall be updated and/or changed by the TTR and completed within the specified time. All Contractor data management activities shall adhere to these procedures 100% of the time.
- 7.12. The Contractor shall maintain an accurate listing of the software codes used by microprocessors. A current listing of the codes are to be kept in control room 100% of the time and updated within 24 hours of any changes.
- 7.13. NTF Technical Library - The Contractor shall operate, update, and maintain the NTF technical records, facility baseline documentation, operating procedures, facility configuration management documents, and user files. The user files shall include, but are not limited to, all correspondence, model and test hardware descriptions, design, structural analyses, quality assurance plans and reports, test plans, data, test logs, and final data reports. These documents shall be kept filed in designated and clearly labeled locations for easy retrieval. The Contractor shall reproduce and distribute updated facility documents and maintain facility work logs. The Contractor shall log items and documents in the system, file, index, and update the items/documents/index within one (1) day of receipt by the Contractor. The Contractor shall retrieve any item in the library within fifteen (15) minutes upon request by the Facility Manager, Facility Safety Head, Test Engineer, or COTR. The Contractor shall maintain 100 percent accountability for items that are checked out by NASA or Contractor personnel. The Contractor shall maintain the library in a neat, orderly appearance.

8. ADP SYSTEMS ADMINISTRATION

A. Wind Tunnel Test Initiated Tasks

The Contractor shall operate and maintain the graphical user interface (currently SAMMI by Kinesix). During tunnel test operations, the SAMMI Graphical User Interface shall be operational and running efficiently and the on-line research graphics system shall be correctly configured per test instructions.

B. Facility Infrastructure Tasks

- 8.1. The Contractor shall maintain hardware and software redundancy for the data reduction procedure so that the NTF shall not be limited to run from a single workstation, i.e., the Contractor shall assure that the computer hardware and software required to perform the data reduction is not limited to one machine.
- 8.2. The Contractor shall provide, implement, and maintain formal written system administration procedures within 1 month of the start of the contract subject for the approval of the Facility Manager. Procedures shall be updated and/or changed and completed within the specified time. All computer system administration activities shall adhere to these procedures 100% of the time. The Contractor systems administration duties shall not interfere with wind tunnel scheduled operations. The tunnel's computer systems shall be completely operational 100% of the time during wind tunnel operations. The Contractor shall: update and maintain the current version of operating systems on all

computers (with the exception of HP3), to be updated at a time so as not to interfere with tunnel operations; maintain the NTF local network at all times so as to minimize traffic and optimize throughput of information; maintain file systems on all computers; maintain user accounts as needed by contract personnel and as requested by the Facility Manager, Facility Safety Head or COTR; provide a written schedule for periodic backup of all computers and perform these backups per schedule so as not to interfere with tunnel operations; provide on-line system troubleshooting; implement any new versions of third party software; provide, implement, and maintain system security both global and internal; work with NASA personnel to insure proper security of data at the NTF, including and customer's proprietary data; and make necessary changes to operating system configuration to implement/change data system hardware.

- 8.3. The Contractor shall perform the system administration duties for the entire operational data system LAN. These duties include, but are not limited to, intimate working knowledge of UNIX operating systems, C programming language ability, network communications and protocols ability, device drivers knowledge, file systems knowledge, and the WINDOWS environment knowledge. These duties also include a working knowledge of the third party software packages currently being used at the NTF - SAMMI, and SL-Graphical Modeling System. The computer systems to be included are RCS (Modcomp), PCS (Modcomp), MPA (Modcomp), all display and development workstations (SUN), file server currently referred to as "Columbiad" (SUN), and the file server commonly referred to as "HP3" (HP9000-835).
- 8.4. The Contractor shall operate, update, and maintain under configuration control the software library which includes a development and a run-time library. The Contractor shall maintain the source and object codes for each of these libraries and the current operating system and associated job control shell scripts.
- 8.5. The Contractor shall operate, update, and maintain the system administration of facility electronic drawings including proper filing, backup, retrieval, and maintaining a current database of facility drawing listings according to systems. The Contractor shall update the electronic drawing database within 1 day after changes are submitted.
- 8.6. The Contractor shall provide test specific software as required by the Wind Tunnel Test. This test specific software is typically a modification of the baseline code.

9. **ADP SOFTWARE**

A. Wind Tunnel Test Initiated Tasks

The Contractor shall operate, upgrade, and maintain the on-line research graphics system to include software maintenance and upgrades, test set-up, and historical test database using current third party software (GL-Graphical Modeling System). All software maintenance, enhancements, and test specific software/hardware will be prescribed by the Government. The Contractor shall implement software changes by instruction and authority of the approved Change Notification Sheet (CNS) which will be provided. The Contractor shall complete the changes within four (4) hours of scheduled implementation.

B. Facility Infrastructure Tasks

- 9.1. The Contractor shall upgrade, and maintain software modifications to support the following activities: Testing, Instrument changes, Research Devices, Calibrations. All software modifications shall be prescribed by the TTR. The

Contractor shall implement software changes by instruction and authority of the approved TTR which will be provided.

- 9.2. The Contractor shall operate, upgrade, and maintain software support for the following control systems: 1) The Tunnel Process Control (TPC) system which consists of three microprocessors utilizing an Intel Multibus architecture with a variety of independent processor controls boards. The first microprocessor, Micro A, is responsible for control of the Tunnel's Mach number, temperature, and pressure. The second microprocessor, Micro B, is responsible for tunnel safety, including model protection. The third microprocessor, Micro C, is responsible for fan speed, model pitch, and model roll control. 2) The Temperature Monitoring System (TMS) which provides a computer interface between the tunnel temperature sensors and the PCS. The TMS microcomputer collects temperature data from five remote data acquisition systems, converts the data to temperatures, and formats the information into one report which is sent to the PCS. Heater Process Controller, PC based, is also part of this system. This combined system reports and automatically controls the amount of heat applied to the tunnel mechanical actuators during cryogenic operation. The PCS is a troubleshooting tool used to analyze MPC system problems and is capable of modeling the tunnel's automated process. There is also a Schlumberger data logger, monitoring 22 channels of data. The Video System (VS) consists of approximately 16 remote cameras located in the test section for the purpose of surveillance and flow visualization data recording. The VS also requires process control of associated camera purge lines and heaters utilized to condition the cameras in the harsh tunnel environment.
- 9.3. The Contractor shall maintain all three control systems so that the systems are 100% operational for each scheduled test or as directed by the Facility manager. The Contractor shall implement software changes by instruction and authority of the approved Change Notification Sheet (CNS) which will be provided. The Contractor shall complete the changes within four (4) hours of scheduled implementation.

C. SP Initiated Tasks

The Contractor shall provide, update, and maintain ADP software and software enhancements. All software maintenance, enhancements, and test specific hardware will be initiated by TTR and shall be completed by the date specified on the TTR. The Contractor shall implement software changes by instruction and authority of the approved Change Notification Sheet (CNS), if associated with paragraph 9.2, which will be attached to the TTR. The Contractor shall make software enhancements to increase productivity, improve data quality, enhance data presentation, and implement third party software and/or interfaces. All software modifications shall be prescribed by the TTR. The Contractor shall complete the changes within four (4) hours of scheduled implementation.

10. NETWORK ADMINISTRATION

A. Wind Tunnel Test Initiated Tasks

- 10.1. The Contractor shall operate, upgrade, and maintain the network communications between the PCS (ModComp), the RCS (ModComp), the various display terminals (Sun workstations), and network peripherals. During tunnel operations, the Contractor shall maintain all such network communications and interfaces so that they will be up and functioning properly at least 98% of the time.
- 10.2. The Contractor shall operate and maintain the interface to the video system, the on-line research graphics system, and any other systems as defined by "pre-test"

requirements. During tunnel operations, the Contractor shall maintain all network communications and interfaces to the video system, on-line graphics system, wall-interference system, or other systems must be up and functioning properly 98% of the time.

11. ENGINEERING SERVICES

SP Initiated Tasks

- 11.1. The Contractor shall review associated model documentation to assure compliance with LHB 1710.15, "Wind Tunnel Model Systems Criteria" and, as needed, perform detailed level 3 analysis (loads, stress, fatigue, fracture mechanics, deformation, vibration, divergence, and thermal) of models, stings, and other model related systems and support hardware entering the facility for testing. The Contractor shall identify computer codes necessary to perform the required analysis. Utilizing drawings and model stress analysis, 2 weeks prior to the start of model installation in the test section, the Contractor shall provide an independent, third party review of models, stings, and other model related systems and support hardware; documenting discrepancies; and recommending approaches for waiver.
- 11.2. The Contractor shall provide inputs for model protection systems as directed by the facility standard operating procedures.
- 11.3. The Contractor shall provide project management support for specific projects including cryogenic systems that require (design, furnish, install) specifications as defined by the TTR. The project management activities shall include, but not be limited to, project planning and scheduling, design and design review reporting, procurement, fabrication, installation, and documentation. In addition, these activities may require specifications on requested task, procurement support and tracking of fabricated items, and their associated material travelers.
- 11.4. The Design/Documentation support includes design activities as requested by the TTR to provide sketches and graphics, as well as updating current drawings. Drawings shall be updated and distributed, as well as maintained in accordance with established configuration management program policy (LHB 1740.4). The Contractor shall provide design drawings in support of the TTR requests related to facility modifications, upgrades, and repairs. The Contractor shall provide AutoCad sketches 24 hours after receiving the request. The Contractor shall deliver drawing updates (in AutoCad format) as described by date specified on the TTR.

12. SAFETY

A. Wind Tunnel Test Initiated Tasks

The Contractor shall provide trained emergency team members for model accesses/changes while utilizing Self - Contained Breathing Units (SCBUs). This will consist of minimum teams, on station at the near-side and far-side of the access housings, which are trained to implement the appropriate Integrated Operation Procedures (IOPs) for that function. The Contractor team shall be on station at least 95% of the time, and communicating with the NASA Access Team Group Leader within 3 minutes of the request.

B. Facility Infrastructure Tasks

- 12.1. The Contractor shall train and maintain fully staffed emergency teams to respond to LN2/GN2 spills and alarms. This will include securing the area of responsibility and assisting fire and/or medical personnel as needed. Minimum qualifications and/or certifications for the emergency team members will include successful training in the facility SCBU and Cardiopulmonary Resuscitation (CPR). When the alarm sounds, the Contractor shall have a minimum team on station and communicating with the Facility Safety Head or the emergency team Group Leader within no more than 2 minutes. Quick response to an emergency is essential.
- 12.2. The Contractor shall maintain and coordinate two Satellite industrial waste disposal areas at the facility. The Contractor's responsibility shall be to assist the Facility Safety Head to monitor and coordinate with the LaRC waste disposal activity for removal of both the hazardous and non-hazardous waste.

13. CONFIGURATION CONTROL**B. Facility Infrastructure Tasks**

- 13.1. The Contractor shall submit redline drawings for proposed changes to the PCS. The Contractor shall maintain 100% configuration control of the wiring from the microprocessors to the first terminal block junction commonly known as the "KJ Boards".
- 13.2. The Contractor shall assist the Facility Safety Head in maintaining the facility "Working Master" drawings, procedures, and checklists as defined in the LHB 1740.4. The Contractor shall format procedures within 3 working days after receiving the redlined, updated master copies.

14. STORAGE/INVENTORY**B. Facility Infrastructure Tasks**

- 14.1. The Contractor shall be responsible for the organization and inventory of items stored in the NTF's two storage buildings (60x40 ft. and 50x50 ft.).
- 14.2. The Contractor shall maintain an inventory of all models, support hardware (including stings adapters, etc.), balances, facility equipment, etc. Stored Records shall be kept showing the location and responsible individual for this equipment. These records shall document equipment status (in use, loaned out, sent out for repair or modification), equipment condition, and the equipment's availability for use.
- 14.3. The Contractor shall control and maintain the tool crib area for the NTF. The Contractor shall be responsible for the stocking of consumables for the facility.
- 14.4. The Contractor shall be responsible for the shipping and receiving function for the NTF. This shall include packaging for shipment, documentation, and delivery within the facility of received (single point of contact) items. Examples of items to be shipped in and/or out include models, balances, tools, etc.
- 14.5. receiving the redlined, updated master copies.

15. **ADDITIONAL REQUIREMENTS**

The Contractor shall perform the following:

PWS Work Category	Process Improvements, Procedural Changes, or Performance Enhancements
A. Wind Tunnel Test Initiated Tasks	<ul style="list-style-type: none"> • Cross Training • Vary Settling Time Delay • Process Control Improvements
B. Facility Infrastructure Tasks	<ul style="list-style-type: none"> • 100% Data Systems Availability, Procedural Changes • Expand TTR Database Capability • On-line Software Changes • Automatic Backup System • Cross Training • Process Control Improvements

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 Langley Research Center.

SECTION F - DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE (LaRC 52.211-91) (AUG 1997)

The period of performance of this contract shall be 14 months, from May 1, 1998 through June 30, 1999.

F.2 PLACE OF DELIVERY (LaRC 52.211-92) (OCT 1992)

Delivery shall be f.o.b. destination:

National Aeronautics and Space Administration
Langley Research Center
5 West Taylor Street (Building 1236)
Hampton, VA 23681-0001

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

The place(s) of performance shall be NASA, Langley Research Center, Hampton, Virginia.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997)

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

<u>Title</u>	<u>Office Code</u>	<u>Address (including zip code)</u>
New Technology Representative	212	NASA, Langley Research Center Hampton, VA 23681-0001
Patent Representative	212	NASA, Langley Research Center Hampton, VA 23681-0001

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

G.2 INVOICES AND PAYMENTS (LaRC 52.232-96) (OCT 1992)

A. General--Invoices shall be addressed as shown in Block 25 on 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. Payments of fixed fee shall be made in monthly installments based upon the percentage of completion of work as determined by the Contracting Officer.

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 126, who may be reached by telephone at (757) 864-7765.

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 ORDERING PROCEDURES

A. Task Orders

All work which is either a Special Project, or other specialized support effort, will be issued by either the Contracting Officer, or the Contracting Officer's Technical Representative (hereinafter referred to as the COTR), via a written Task Order. Task Orders will be accomplished in two phases. The first phase will involve a planning Task Order to determine preliminary requirements, staffing requirements, preliminary top level design, schedule, proposed costs, and other factors. The output of the planning Task Order will be a project proposal. The second phase will be the actual implementation Task Order for the designing, furnishing, installing, maintaining or performance of the product or services. Once a Task Order has been issued by the COTR and accepted by the Contractor, the document, once signed by both parties, becomes a Task/Test Request (TTR), and is used by both the Contractor and the Government to track the Task through completion.

Work of this type will be initiated on a Task Order Form, which will be prepared by the COTR. The form will then be submitted to the Contractor for preparation of a project proposal. During development of the Task Order, the Government and the Contractor will discuss the following: task requirements, top level design, Contractor's proposal to accomplish the task, and required schedule. The Contractor's project proposal shall address these factors and shall be completed by the Contractor within a schedule agreed to by the COTR and Contractor and submitted to the COTR for review.

After the customer and COTR review and approve the project proposal, a signature page for the Task Order proposal will be submitted to the COTR for approval and signature, and assignment of a tracking number; after this takes place, the document has become a TTR, and shall be so tracked and reported regarding progress related thereto. The TTR will identify the work to be performed, performance metrics, the location of the work, a delivery schedule, and a cost limitation. The Contractor shall acknowledge receipt and acceptance of each Task Order within three working days after receipt. If the Contractor cannot comply with a Task Order requirement, the Contractor shall so indicate in the receipt acknowledgment, and shall note the changes required for acceptance, prior to completing the steps leading to the Task Order's being accepted, signed, and becoming a TTR. Any differences must be resolved between the parties and the order modified to reflect the agreement. Any required modifications to the executed TTR during the performance period will approved through the same process described above, except that a separate planning Task Order will not be required.

The Task Order/TTR will be furnished to the Contractor, who shall retain one copy, and one copy shall be returned to the COTR upon completion of the work specified therein, containing, as applicable, actual completion dates and/or delivery dates, actual man-hours expended, actual material and labor costs incurred, and any remarks which the Contractor may wish to make with respect to his performance thereunder.

B. Contract Scope

If any work issued is considered by the Contractor to be outside the scope of this contract, or if the Contractor has reason to believe that he will exceed the scope of his contractual obligation (e.g. contract funding, contract estimated cost) in the performance thereof, the Contractor shall immediately notify the COTR in writing. and shall not perform any work pending resolution by the COTR.

G.5 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NASA 1852.245-77) (JUL 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this 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) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.
- (b) General- and special-purpose equipment, including office furniture.
 - (1) Equipment to be made available includes all tools, hardware, etc., other than those required by the Contractor for purely internal administrative purposes, as required to perform this effort. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location.
 - (2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.
 - (3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.
- (c) Supplies from stores stock.
- (d) Safety and fire protection for Contractor personnel and facilities.
- (e) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.
- (f) Cafeteria privileges for Contractor employees during normal operating hours.
- (g) Building maintenance for facilities occupied by Contractor personnel.
- (h) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)

Except for data contained on pages _____, 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 20 Jan 98, upon which this contract is based.

H.2 KEY PERSONNEL AND FACILITIES (NASA 1852.235-71) (MAR 1989)

- (a) The personnel and/or facilities listed below (or specified in the Contract Schedule) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.
- (b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.
- (c) The list of personnel and/or facilities (shown below or as specified in the Contract Schedule) may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

H.3 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 26 months.

H.4 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>OPM Title</u>	<u>Grade/Wage</u>
Plant Systems, Shift Leader	Lead Electrical Technician	GS-0802-11 (\$17.97)
Plant Systems Technician	Engineering Technician	GS-0802-09 (\$14.85)
Plant Systems Electrician	Electrical Engineering Technician	GS-0802-09 (\$14.85)
Plant Systems Electrician	Engineering Technician	GS-0802-08 (\$13.45)
Software Data Systems Operator	Computer Assistant	GS-0335-05 (\$9.80)
Instrumentation Technician, Group Leader	Lead Electronic Eng. Tech	GS-0856-12 (\$21.54)
Instrumentation Technician	Electronic Eng. Tech	GS-0856-08 (\$13.45)
Drafter	Engineering Draftsmen	GS-0818-07 (\$12.14)
File Clerk	Mail and File Clerk	GS-0305-05 (\$9.80)
Engineering Technician - Facility Operations	Engineering Technician	GS-0802-10 (\$16.36)

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.5 OPTIONS

A. Priced Options/Extended Term

Pursuant to the Section I 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 4 additional periods of 3 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>	<u>Fourth Option Period</u>
Period of Performance (Ref. F.1)	3 months	3 months	3 months	3 months
Estimated Cost (Ref. B.2)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fixed Fee (Ref. B.2)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

H.6 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.7 SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS (LaRC 52.204-91) (AUG 1997)

Prior to reporting to Langley Research Center (LaRC) to perform under a contract or grant, each Foreign National shall have approval for access to LaRC facilities from NASA Headquarters, International Relations Division (Code IR). A copy of the access authorization request shall be provided to the LaRC Chief of Security. Additionally, an investigation by the Government shall be completed on each Foreign National contractor prior to reporting to LaRC to perform under a contract or grant. A properly executed "Name Check Request" (NASA Form 531) and a completed "applicant" fingerprint card shall be submitted to the LaRC Security Office, Mail Stop 182, for each Foreign National contractor at least 75 days prior to the estimated entry on duty date. The NF 531 and fingerprint card may be obtained from the LaRC Security Office. If the access approval is obtained from NASA Headquarters prior to completion of the investigation, and the Contracting Officer requires a Foreign National to work on LaRC, an escort request may be considered by the LaRC Chief of Security.

H.8 OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES
(LaRC 52.211-104) (MAR 1992)

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.

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.9 INCORPORATION OF SECTION K OF THE PROPOSAL BY REFERENCE (LaRC 52.215-107)
(MAR 1989)

Pursuant to FAR 15.406-1(b), the completed Section K of the proposal dated 20 Jan 98 is hereby incorporated herein by reference.

H.10 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.11 LIMITED EXCLUSIVE RIGHTS

A. In order to protect valuable technical data from unauthorized or inadvertent transfer, the availability of certain technical data produced under this contract shall be limited to distribution only within the United States to designated entities, with the approval of NASA. Protection will be provided under a special data rights clause affording the Contractor limited exclusive rights, "Rights in Data - Limited Exclusive Rights," set forth below.

B. The technical data to be protected will be specifically identified in Paragraph "C" below. Although some data may be identified at the time of negotiation of the contract, it is anticipated that other data warranting protection will be identified during the performance of the contract.

C. The parties do hereby agree that the following data should be provided special protection in accordance with the provision and the clause entitled "Rights in Data - Limited Exclusive Rights."

TBD

D. In addition, NASA will require executive summaries conveying accomplishments of this contract which can be published with unrestricted availability. Accordingly; if the data is subject to the special protection, the Contractor will provide an executive summary containing form, fit, and function data relating to the work performed when providing reports as specified in Section J, Exhibit C.

RIGHTS IN DATA - LIMITED EXCLUSIVE RIGHTS (JAN 1992)

(a) Definitions.

"Computer software," as used in this clause, means computer programs, computer data bases, and documentation thereof.

"Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data," as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

"Limited exclusive rights," as used in this clause, means the rights of the Government and others acting on its behalf to use, duplicate, and disclose for Government purposes, the rights of the Contractor to use, duplicate, and disclose for its purposes within the United States, and the rights of other entities designated or approved by the Government to use and duplicate (but not to further disclose) for their purposes within the United States, provided that in all instances the data are made subject to disclosure restrictions that protect and preserve its limited exclusive rights.

"Limited exclusive rights data," as used in this clause, means technical data (including system studies and computer source programs and code) first produced in the performance of this contract that have been specifically identified in this contract (either at the time of contract or subsequently by amendment) as subject to limited exclusive rights, provided such data are not generally known, or such data have not without obligation as to its confidentiality been made available to others by the Contractor or are not already available to the Government. The limited exclusive rights of the Government, the Contractor, and other entities regarding the disclosure and use of such data are as set forth in subparagraph (g)(4) of this clause.

"Limited rights," as used in this clause, means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of subparagraph (g)(2) if included in this clause.

"Limited rights data," as used in this clause, means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged.

"Restricted computer software," as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software; including minor modifications of such computer software.

"Restricted rights," as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of subparagraph (g)(3) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

"Technical data," as used in this clause, means data (other than computer software) which are of a scientific or technical nature. "Unlimited rights," as used in this clause, means the right of the Government 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.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in -

(i) Data first produced in the performance of this contract unless provided otherwise for limited exclusive rights data in accordance with subparagraph (g)(4) of this clause;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data, restricted computer software, or limited exclusive rights data in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right or obligation, as applicable, to -

(i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause or in subparagraph (g)(4) of this clause;

(ii) Protect from unauthorized disclosure and use those data which are limited rights data, restricted computer software, or limited exclusive rights data, to the extent provided in paragraph (g) of this clause;

(iii) Substantiate use of, add or correct limited rights, restricted rights, limited exclusive rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright.

(1) Data first produced in the performance of this contract. Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, publication and use of data.

(1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract,

except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph, in paragraph (g) of this clause or as expressly set forth in this contract.

(2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(3) The Contractor agrees not to establish claim to copyright or publish or release to others any computer software first produced in the performance of this contract other than pursuant to subparagraph (g)(4) of this clause without the Contracting Officer's prior written permission.

(e) Unauthorized marking of data.

(1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraph (g)(2), (g)(3) or (g)(4) of this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard agency subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

(1) Data delivered to the Government without either the limited rights, restricted rights, or limited exclusive rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to

the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor -

- (i) Identifies the data to which the omitted notice is to be applied;
- (ii) Demonstrates that the omission of the notice was inadvertent;
- (iii) Establishes that the use of the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability with respect to the

disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also (i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or (ii) correct any incorrect notices.

(g) Protection of limited rights data, restricted computer software, and limited exclusive rights data.

(1) When data other than that listed in subdivisions (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government are to be treated as limited rights data and not restricted computer software.

(2) [Reserved]

(3) [Reserved]

(4) (i) Notwithstanding any other provisions of this clause, the contract may specify or NASA may require by written request that any data first produced in the performance of this contract be delivered to NASA or furnished to others in accordance with (iii)(a) below, and if so specified or required, the contractor shall affix the following "Limited Exclusive Rights Notice" to data that are identified in this contract as limited exclusive rights data prior to delivery to the Government or prior to release to others by the Contractor:

LIMITED EXCLUSIVE RIGHTS NOTICE

These data are subject to limited exclusive rights under Government Contract No. ____ (and subcontract ____, if appropriate). These data may be: used, duplicated, and disclosed by or on behalf of the Government for Government purposes; used, duplicated, and disclosed by or on behalf of the Contractor for its purposes within the United States; and used and duplicated (but not further disclosed) by other recipients that have been designated or approved by NASA as participants in the program of which this contract is a part for their purposes within the United States, with the express limitation that any release or disclosure for any of the foregoing purposes are to be made subject to disclosure conditions that protect and preserve its limited exclusive rights. These limited exclusive rights shall be effective until _____ (insert a date certain). No other disclosure and use of these data is authorized without the written permission of _____ (insert name of contractor or subcontractor). This Notice shall be marked on any reproduction of these data, in whole or in part.

(End of Notice)

(ii) The Contractor is to place the Limited Exclusive Rights Notice on limited exclusive rights data as soon as practicable after the data is reduced to some tangible, recorded form as

defined by the term "data" in this clause, but in any event no later than the earlier of either the date of delivery to NASA if delivery is requested, or of release of the data to others outside of the Contractor's organizational element producing the data. The "date certain" to be inserted in the Notice, indicating the period of limited exclusive rights, shall be 5 years from the date the Notice is placed on the data, unless otherwise agreed to and stated with respect to any item, component, process, or computer software specifically identified in this contract.

(iii) The Contractor agrees:

(a) to make limited exclusive rights data available to any other entity designated or approved by NASA as a participant in the program of which this contract is a part, either as specifically designated in this contract or as subsequently approved and directed in writing by NASA;

(b) obtain written affirmation that any entity receiving limited exclusive rights data pursuant to (a) above will abide by the use, duplication, and disclosure prohibitions of the Limited Exclusive Rights Notice; and

(c) not to authorize any disclosure and use of limited exclusive rights data than as set forth in the Limited Exclusive Rights Notice without the concurrence of NASA.

(h) Subcontracting.

(1) The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

(i) Relationship to patents.

(1) Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(2) Nothing in this clause shall restrict the rights of the contractor under the New Technology clause of this contract.

H.12 COMMERCIAL COMPUTER SOFTWARE AND SYSTEMS

The Contractor warrants that the items or services acquired under this contract are required to include accurate processing of the date and date-related data including, but not limited to, calculating, comparing, sequencing, and the manipulation of data with dates prior to, through, and beyond January 1, 2000. This capability must be included in all hardware and software products delivered under this contract, or used to perform services under this contract, individually and in combination, and shall be transparent to the user. Hardware and software products provided under this contract, and used to perform services under this contract, shall individually, and in combination, be able to successfully transition into the Year 2000 with the correct system date, including leap year calculations, without human intervention. Such products shall also provide correct results when moving forward and backward in time across the Year 2000 and subsequent years.

H.13 SHARED SAVINGS (NASA 1852.243-71) (MAR 1997)

(a) The Contractor is entitled, under the provisions of this clause, to share in cost savings resulting from the implementation of cost reduction projects which are presented to the Government in the form of Cost Reduction Proposals (CRP) and approved by the Contracting Officer. These cost reduction projects may require changes to the terms, conditions or statement of work of this contract. Any cost reduction projects must not change the essential function of any products to be delivered or the essential purpose of services to be provided under the contract.

(b) Definitions:

(1) Cost savings, as contemplated by this clause mean savings that result from instituting changes to the covered contract, as identified in an approved Cost Reduction Proposal.

(2) Cost Reduction Proposal - For the purposes of this clause, a Cost Reduction Proposal means a proposal that recommends alternatives to the established procedures and/or organizational support of a contract or group of contracts. These alternatives must result in a net reduction of contract

cost and price to NASA. The proposal will include technical and cost information sufficient to enable the Contracting Officer to evaluate the CRP and approve or disapprove it.

(3) Covered contract - As used in this provision, covered contract means the contract, including unexercised options but excluding future contracts, whether contemplated or not, against which the CRP is submitted.

(4) Contractor implementation costs - As used in this provision, Contractor implementation costs, or "implementation costs", shall mean those costs which the Contractor incurs on covered contracts specifically in developing, preparing, submitting, and negotiating a CRP, as well as those costs the Contractor will incur on covered contracts to make any structural or organizational changes in order to implement an approved CRP.

(5) Government costs - As used in this provision, the term Government costs means internal costs of NASA, or any other Government agency, which result directly from development and implementation of the CRP. These may include, but are not limited to, costs associated with the administration of the contract or with such contractually related functions such as testing, operations, maintenance and logistics support. These costs also include costs associated with other Agency contracts (including changes in contract price or cost and fee) that may be affected as a result of the implementation of a CRP. They do not include the normal administrative costs of reviewing and processing the Cost Reduction Proposal.

(c) General. The Contractor will develop, prepare and submit CRP's with supporting information as detailed in paragraph (e) of this clause, to the Contracting Officer. The CRP will describe the proposed cost reduction activity in sufficient detail to enable the Contracting Officer to evaluate it and to approve or disapprove it. The Contractor shall share in any net cost savings realized from approved and implemented CRPs in accordance with the terms of this clause. The Contractor's actual percentage share of the cost savings shall be a matter for negotiation with the Contracting Officer, but shall not, in any event, exceed 50 percent of the total cost savings recognized by the Contracting Officer. The Contractor may propose changes in other activities that impact performance on its contract, including Government and other Contractor operations, if such changes will optimize cost savings. A Contractor shall not be entitled to share, however, in any cost savings that are internal to the Government, or which result from changes made to any contracts to which it is not a party even if those changes were proposed as a part of its CRP. Early communication between the Contractor and Government is encouraged. The communication may be in the form of a concept paper or preliminary proposal. The Government is not committed to accepting any proposal as a result of these early discussions.

(d) Computation of cost savings. The cost savings to be shared between the Government and the Contractor will be computed by the Contracting Officer by comparing a current estimate to complete (ETC) for the covered contract, as structured before implementation of the proposed CRP, to a revised ETC which takes into account the implementation of that CRP. The cost savings to be shared shall be reduced by any cost overrun, whether experienced or projected, that is identified on the covered contract before implementation of the CRP. Although a CRP may result in cost savings that extend far into the future, the period in which the Contractor may share in those savings will be limited to no more than five years. Implementation costs of the Contractor must be considered and specifically identified in the revised ETC. The Contracting Officer shall offset Contractor cost savings by any increased costs (whether implementing or recurring) to the Government when computing the total cost savings to be shared. The Contractor shall not be entitled, under the provisions of this clause, to share in any cost reductions to the contract that are the result of changes stemming from any action other than an approved CRP. However, this clause does not limit recovery of any such reimbursements that are allowed as a result of other contract provisions.

(e) Supporting Information. As a minimum, the Contractor shall provide the following supporting information with each CRP:

(1) Identification of the current contract requirements or established procedures and/or organizational support which are proposed to be changed.

(2) A description of the difference between the current process or procedure and the proposed change. This description shall address how proposed changes will meet NASA requirements and discuss the advantages and disadvantages of the existing practice and the proposed changes.

(3) A list of contract requirements which must be revised, if any, if the CRP is approved, along with proposed revisions. Any changes to NASA or delegated contract management processes should also be addressed.

(4) Detailed cost estimates which reflect the implementation costs of the CRP.

(5) An updated ETC for the covered contract, unchanged, and a revised ETC for the covered contract which reflects changes resulting from implementing the CRP. If the CRP proposes changes to only a limited number of elements of the contract, the ETCs need only address those portions of the contract that have been impacted. Each ETC shall depict the level of costs incurred or to be incurred by year, or to the level of detail required by the Contracting Officer. If other CRPs have been proposed or approved on a contract, the impact of these CRPs must be addressed in the computation of the cost savings to ensure that the cost savings identified are attributable only to the CRP under consideration in the instant case.

(6) Identification of any other previous submissions of the CRP, including the dates submitted, the agencies and contracts involved, and the disposition of those submittals.

(f) Administration.

(1) The Contractor shall submit proposed CRPs to the Contracting Officer who shall be responsible for the review, evaluation and approval. Normally, CRP's should not be entertained for the first year of performance to allow the Contracting Officer to assess performance against the basic requirements. If a cost reduction project impacts more than a single contract, the Contractor may, upon concurrence of the Contracting Officers responsible for the affected contracts, submit a single CRP which addresses fully the cost savings projected on all affected contracts that contain this Shared Savings Clause. In the case of multiple contracts affected, responsibility for the review and approval of the CRP will be a matter to be decided by the affected Contracting Officers.

(2) Within 60 days of receipt, the Contracting Officer shall complete an initial evaluation of any proposed cost reduction plan to determine its feasibility. Failure of the Contracting Officer to provide a response within 60 days shall not be construed as approval of the CRP. The Government shall promptly notify the Contractor of the results of its initial evaluation and indicate what, if any, further action will be taken. If the Government determines that the proposed CRP has merit, it will open discussions with the Contractor to establish the cost savings to be recognized, the Contractor's share of the cost savings, and a payment schedule. The Contractor shall continue to perform in accordance with the terms and conditions of the existing contract until a contract modification is executed by the Contracting Officer. The modification shall constitute approval of the CRP and shall incorporate the changes identified by the CRP, adjust the contract cost and/or price, establish the Contractor's share of cost savings, and incorporate the agreed to payment schedule.

(3) The Contractor will receive payment by submitting invoices to the Contracting Officer for approval. The amount and timing of individual payments will be made in accordance with the schedule to be established with the Contracting Officer. Notwithstanding the overall savings recognized by the Contracting Officer as a result of an approved CRP, payment of any portion of the Contractor's share of savings shall not be made until NASA begins to realize a net cost savings on the contract (i.e., implementation, startup and other increased costs resulting from the change have been offset by cumulative cost savings). Savings associated with unexercised options will not be paid unless and until the contract options are exercised. It shall be the responsibility of the Contractor to provide such justification as the Contracting Officer deems necessary to substantiate that cost savings are being achieved.

(4) Any future activity, including a merger or acquisition undertaken by the Contractor (or to which the Contractor becomes an involved party), which has the effect of reducing or reversing the cost savings realized from an approved CRP for which the Contractor has received payment may be cause for recomputing the net cost savings associated with any approved CRP. The Government reserves the right to make an adjustment to the Contractor's share of cost savings and to receive a refund of moneys paid if necessary. Such adjustment shall not be made without notifying the Contractor in advance of the intended action and affording the Contractor an opportunity for discussion.

(g) Limitations. Contract requirements that are imposed by statute shall not be targeted for cost reduction exercises. The Contractor is precluded from receiving reimbursements under both this clause and other incentive provisions of the contract, if any, for the same cost reductions.

- (h) Disapproval of, or failure to approve, any proposed cost reduction proposal shall not be considered a dispute subject to remedies under the Disputes clause.
- (i) Cost savings paid to the Contractor in accordance with the provisions of this clause do not constitute profit or fee within the limitations imposed by 10 U.S.C. 2306(d) and 41 U.S.C. 254(b).

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE:

NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby 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 Subcontractor Sales to the Government (JUL 1995)
52.203-7	Anti-Kickback Procedures (JUL 1995)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (JUN 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)
52.211-15	Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	Audit and Records--Negotiation (AUG 1996)
52.215-23	Price Reduction for Defective Cost or Pricing Data—Modifications (OCT 1995)
52.215-25	Subcontractor Cost or Pricing Data—Modifications (OCT 1995)
52.215-26	Integrity of Unit Prices (FEB 1997)
52.215-27	Termination of Defined Benefit Pension Plans (MAR 1996)
52.215-33	Order of Precedence (JAN 1986)
52.215-39	Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions (MAR 1996)
52.215-40	Notification of Ownership Changes (FEB 1995)
52.215-42	Requirements For Cost or Pricing Data or Information Other Than Cost or Pricing Data - Modifications (JAN 1997)
52.216-7	Allowable Cost and Payment (MAR 1997)
52.216-8	Fixed Fee (MAR 1997)
52.219-8	Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns (OCT 1995)
52.219-9	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan (AUG 1996) Alternate II (MAR 1996)
52.219-16	Liquidated Damages--Subcontracting Plan (OCT 1995)
52.222-1	Notice to the Government of Labor Disputes (FEB 1997)
52.222-2	Payment for Overtime Premiums (JUL 1990)
52.222-3	Convict Labor (AUG 1996)

52.222-4	Contract Work Hours and Safety Standards Act--Overtime Compensation (JUL 1995)
52.222-26	Equal Opportunity (APR 1984)
52.222-28	Equal Opportunity Preaward Clearance of Subcontracts (APR 1984)
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans (APR 1984)
52.222-36	Affirmative Action for Handicapped Workers (APR 1984)
52.222-37	Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era (JAN 1988)
52.222-41	Service Contract Act of 1965, As Amended (MAY 1989)
52.223-2	Clean Air and Water (APR 1984)
52.223-3	Hazardous Material Identification and Material Safety Data (JAN 1997)
52.223-5	Pollution Prevention and Right-To-Know Information (MAR 1997)
52.223-6	Drug-Free Workplace (JAN 1997)
52.223-10	Waste Reduction Program (MAY 1995)
52.223-14	Toxic Chemical Release Reporting (OCT 1996)
52.225-3	Buy American Act--Supplies (JAN 1994)
52.225-11	Restrictions on Certain Foreign Purchases (OCT 1996)
52.225-19	European Union Sanctions for Services (JAN 1996)
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)--Alternate II (JUN 1987)--as modified by NASA FAR Supplement 1852.227-14
52.227-17	Rights in Data--Special Works (JUN 1987)--as modified by NASA FAR Supplement 1852.227-15
52.227-19	Commercial Computer Software--Restricted Rights (JUN 1987)-- as modified by NASA FAR Supplement 1852.227-19
52.228-7	Insurance--Liability to Third Persons (MAR 1996)
52.230-2	Cost Accounting Standards (APR 1996)
52.230-3	Disclosure and Consistency of Cost Accounting Practices (APR 1996)
52.230-6	Administration of Cost Accounting Standards (APR 1996)
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)
52.232-25	Prompt Payment (MAY 1997)
52.232-33	Mandatory Information for Electronic Funds Transfer Payment (AUG 1996)
52.233-1	Disputes (OCT 1995)--Alternate I (DEC 1991)
52.233-3	Protest After Award (AUG 1996)--Alternate I (JUN 1985)
52.237-2	Protection of Government Buildings, Equipment and Vegetation (APR 1984)
52.237-3	Continuity of Services (JAN 1991)
52.239-1	Privacy or Security Safeguards (AUG 1996)
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)
52.242-13	Bankruptcy (JUL 1995)
52.242-15	Stop-Work Order (AUG 1989)--Alternate I (APR 1984)
52.243-2	Changes--Cost-Reimbursement (AUG 1987)--Alternate II (APR 1984)
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts) (FEB 1997)--Alternate I (AUG 1996)
52.244-5	Competition in Subcontracting (DEC 1996)
52.244-6	Subcontracts for Commercial Items and Commercial Components (OCT 1995)
52.245-1	Property Records (APR 1984)

52.245-5	Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts) (JAN 1986)(DEVIATION) (JUL 1995)
52.246-3	Inspection of Supplies--Cost-Reimbursement (APR 1984)
52.246-5	Inspection of Services--Cost-Reimbursement (APR 1984)
52.246-25	Limitation of Liability--Services (FEB 1997)
52.247-67	Submission of Commercial Transportation Bills to General Services Administration for Audit (FEB 1995)
52.248-1	Value Engineering (MAR 1989)
52.249-6	Termination (Cost-Reimbursement) (SEP 1996)
52.249-14	Excusable Delays (APR 1984)
52.251-1	Government Supply Sources (APR 1984)
52.252-6	Authorized Deviations in Clauses (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>
1852.204-75	Security Classification Requirements (SEP 1989)
1852.216-75	Payment of Fixed Fee (DEC 1988)
1852.216-89	Assignment and Release Forms (JUL 1997)
1852.219-74	Use of Rural Area Small Businesses (SEP 1990)
1852.219-76	NASA 8 Percent Goal (JUL 1997)
1852.223-70	Safety and Health (MAR 1997)
1852.227-70	New Technology (JUL 1995)
1852.228-75	Minimum Insurance Coverage (OCT 1988)
1852.237-70	Emergency Evacuation Procedures (DEC 1988)
1852.242-70	Technical Direction (SEP 1993)
1852.242-72	Observance of Legal Holidays (AUG 1992)--Alternate I (SEP 1989)
1852.242-72	Observance of Legal Holidays (AUG 1992)--Alternate II (SEP 1989)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.245-70	Contractor Requests for Government-Owned Equipment (JUL 1997)

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 (JUN 1988)
52.215-42	Requirements for Cost and Pricing Data or Information Other Than Cost or Pricing Data - Modifications (JAN 1997)
52.217-8	Option to Extend Services (AUG 1989)
1852.204-76	Security Requirements for Unclassified Automated Information Resources (SEP 1993)
1852.209-71	Limitation of Future Contracting (DEC 1988)
1852.215-84	Ombudsman (OCT 1996)
1852.245-71	Installation-Accountable Government Property (JUL 1997)

I.3 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I.4 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA - MODIFICATIONS (FAR 52.215-42) (JAN 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 15.804-2(a)(1) 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) Information relative to an exception granted for prior or repetitive acquisitions.
- (ii) Catalog price information as follows:

(A) Attach a copy of or identify 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 this proposal is being made.

(B) Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, and reseller.

(C) Additionally, for each catalog item that exceeds N/A (extended value not unit price), provide evidence of substantial sales to the general public. This may include sales order, contract, shipment, invoice, actual recorded sales or other records that are verifiable. In addition, if the basis of the price proposal is sales of essentially the same commercial item by affiliates, other manufacturers or vendors, those sales may be included. The offeror shall explain the basis of each offered price and its relationship to the established catalog price. When substantial general public sales have also been made at prices other than catalog or price list prices, the offeror shall indicate how the proposed price relates to the price of such recent sales in quantities similar to the proposed quantities.

(iii) Market price information. Include the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. The nature of the market should be described. The supply or service being purchased should be the same as or similar to the market price supply or service. Data supporting substantial sales to the general public is also required.

(iv) 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.

- (v) 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, catalog or market prices of commercial items, or prices set by law or regulation; 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 may provide information on prices at which the same item or similar items have been sold in the commercial market.

(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. 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.

(3) By submitting information to qualify for an exception, an offeror is not representing that this is the only exception that may apply.

(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 on Standard Form (SF) 1411, Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

(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 15.804-4.

I.5 OPTION TO EXTEND SERVICES (FAR 52.217-8) (AUG 1989)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed that set forth in the contract. The Contracting Officer may exercise the option by written notice to the Contractor within the period specified in the Schedule.

I.6 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:

NTF Facility

(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. 1030 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.7 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 the potential to have access to proprietary technology or data under this contract, which, should the Contractor be engaged in similar work independent of this contract, could result in an unauthorized transfer of technology or data.
- (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.8 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.9 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: safeguarding, tracking, and maintaining within the requirements of the Statement of Work, this property. 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.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF EXHIBITS AND ATTACHMENTS

- Exhibit A Contract Security Classification Specification, DD Form 254, 2 pages
- Exhibit B Register of Wage Determination and Fringe Benefits, July 2 1997, 10 pages
- Exhibit C Contract Documentation Requirements, 5 pages
- Exhibit D Subcontracting Plan, 16 January 1998, 8 pages

<p>DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i></p>				<p>1. CLEARANCE AND SAFEGUARDING</p> <p>A. Facility Clearance Required SECRET</p> <p>B. Level Of Safeguarding Required NONE</p>																																																																																																																	
<p>2. THIS SPECIFICATION IS FOR: (X and complete as applicable)</p>			<p>3. THIS SPECIFICATION IS: (X and complete as applicable)</p>																																																																																																																		
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B. SUBCONTRACT NUMBER			B. REVISED (Supersedes all previous specs)	Revision No.	Date (YYMMDD)																																																																																																																
C. SOLICITATION OR OTHER NUMBER RFP 1-062-DAE.1132		Due Date (YYMMDD) 97/12/12	C. FINAL (Complete Item 5 In All Cases)		Date (YYMMDD)																																																																																																																
<p>4. IS THIS A FOLLOW-ON CONTRACT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.</p>																																																																																																																					
<p>5. IS THIS A FINAL DD FORM 254? <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 _____</p>																																																																																																																					
<p>6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)</p>																																																																																																																					
A. Name, Address, And Zip Code CALSPAN CORPORATION 4455 GENESEE STREET/P.O. BOX 400 BUFFALO, NY 14225		B. Cage Code 92325	C. Cognizant Security Office (Name, Address, And Zip Code) DIS/DIRECTOR OF INDUSTRIAL SECURITY 495 SUMMER STREET BOSTON, MA 02210-2192																																																																																																																		
<p>7. SUBCONTRACTOR</p>																																																																																																																					
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<p>9. GENERAL IDENTIFICATION OF THIS PROCUREMENT NATIONAL TRANSONIC FACILITY OPERATIONS SUPPORT</p>																																																																																																																					
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12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release

Direct Through (Specify)

**“NASA LANGLEY RESEARCH CENTER, M/S 267, HAMPTON, VA 23681-0001”
ATTN: GEORGE BOYLES**

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 APPLICABLE CLASSIFICATION GUIDANCE WILL BE PROVIDED TO THE CONTRACTOR UNDER SEPARATE COVER:

THE CONTRACTOR MAY BE INVOLVED WITH ONGOING RESEARCH AND DEVELOPMENT PROGRAMS THAT WILL REQUIRE INDIVIDUALS, DESIGNATED BY GOVERNMENT, TO HAVE A SECRET CLEARANCE.

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

a. TYPED NAME OF CERTIFYING OFFICIAL Sam A. Harvey		b. TITLE Program Security Team Leader	c. TELEPHONE (Include Area Code) (757) 864-6507
d. ADDRESS (Include Zip Code) NASA LANGLEY RESEARCH CENTER M/S 182 HAMPTON, VA 23681-0001		17. REQUIRED DISTRIBUTION	
e. SIGNATURE		<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 type="checkbox"/>	F. Others As Necessary

EXHIBIT B

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, D.C. 20210
Wage Determination No.: 94-2544
Revision No.: 14
Date of Last Revision: 07/02/1997

William W. Gross Division of
Director Wage Determinations

State(s): North Carolina, Virginia

Area: NORTH CAROLINA COUNTIES OF CAMDEN, CHOWAN, CURRITUCK, GATES,
PASQUOTANK, PERQUIMANS.
VIRGINIA COUNTIES OF CHESAPEAKE, GLOUCESTER, HAMPTON, ISLE OF WIGHT,
JAMES CITY, MATHEWS, NEWPORT NEWS, NORFOLK, POQUOSON, PORTSMOUTH,
SOUTHAMPTON, SUFFOLK, SURRY, VIRGINIA BEACH, WILLIAMSBURG, YORK.

** 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:**

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)	\$ 9.01
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	\$ 6.91
01532 Travel Clerk II	\$ 7.63
01533 Travel Clerk III	\$ 8.13
01611 Word Processor I	\$10.00
01612 Word Processor II	\$11.27
01613 Word Processor III	\$12.62

AUTOMATIC DATA PROCESSING:

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:

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:

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:

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 SERVICES AND SUPPORT.

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:

12020 Dental Assistant	\$10.15
12040 Emergency Medical Technician/ Paramedic Ambulance Driver	\$ 9.13
12070 Licensed Practical Nurse I	\$ 8.00
12071 Licensed Practical Nurse II	\$ 8.98
12072 Licensed Practical Nurse III	\$10.05
12100 Medical Assistant	\$ 8.98
12130 Medical Laboratory Technician	\$ 8.98
12160 Medical Record Clerk	\$ 8.98
12190 Medical Record Technician	\$12.45
12221 Nursing Assistant I	\$ 6.52
12222 Nursing Assistant II	\$ 7.33

12223 Nursing Assistant III	\$ 8.00
12224 Nursing Assistant IV	\$ 8.98
12250 Pharmacy Technician	\$11.20
12280 Phlebotomist	\$ 8.98
12311 Registered Nurse I	\$12.45
12312 Registered Nurse II	\$15.23
12313 Registered Nurse II, Specialist	\$15.23
12314 Registered Nurse III	\$18.43
12315 Registered Nurse III, Anesthetist	\$18.43
12316 Registered Nurse IV	\$22.09

INFORMATION AND ARTS:

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, DRY CLEANING, PRESSING:

15010 Assembler	\$ 5.49
15030 Counter Attendant	\$ 5.49
15040 Dry Cleaner	\$ 6.77
15070 Finisher, Flatwork, Machine	\$ 5.49
15090 Presser, Hand	\$ 5.49
15100 Presser, Machine, Dry Cleaning	\$ 5.49
15130 Presser, Machine, Shirts	\$ 5.49
15160 Presser, Machine, Wearing Apparel, Laundry	\$ 5.49
15190 Sewing Machine Operator	\$ 7.22
15220 Tailor	\$ 7.67
15250 Washer, Machine	\$ 5.93

MACHINE TOOL OPERATION AND REPAIR:

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

MATERIALS HANDLING AND PACKING:

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)	\$ 9.92
21210 Tools and Parts Attendant	\$10.95
21400 Warehouse Specialist	\$10.54

MECHANICS AND MAINTENANCE AND REPAIR:

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 Carpet 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
23940 Telecommunications Mechanic II	\$16.94
23950 Telephone Lineman	\$16.22
23960 Welder, Combination, Maintenance	\$16.22

23965 Well Driller	\$16.22
23970 Woodcraft Worker	\$16.22
23980 Woodworker	\$13.37

PERSONAL NEEDS:

24570 Child Care Attendant	\$ 6.34
24580 Child Care Center Clerk	\$ 7.91
24600 Chore Aide	\$ 4.91
24630 Homemaker	\$ 8.33

PLANT AND SYSTEM OPERATION:

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:

27004 Alarm Monitor	\$ 7.21
27006 Corrections Officer	\$11.47
27010 Court Security Officer	\$11.47
27040 Detention Officer	\$11.47
27070 Firefighter	\$11.47
27101 Guard I	\$ 6.03
27102 Guard II	\$ 7.21
27130 Police Officer	\$12.28

STEVEDORING/LONGSHOREMEN SERVICE OCCUPATIONS:

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:

29010 Air Traffic Control 2/Specialist, Center	\$23.96
29011 Air Traffic Control 2/Specialist, Station	\$16.53
29012 Air Traffic Control 2/Specialist, Terminal	\$18.20
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 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 Ordinance Technician I	\$15.23
29492 Unexploded Ordinance Technician II	\$18.43
29493 Unexploded Ordinance Technician III	\$22.09
29494 Unexploded Safety Escort	\$15.23
29495 Unexploded Sweep Personnel	\$15.23
29620 Weather Observer, Senior 3/	\$12.80
29621 Weather Observer, Combined 3/Upper Air and Surface Programs	\$11.83
29622 Weather Observer, Upper Air 3/	\$11.83

TRANSPORTATION/MOBILE EQUIPMENT OPERATION:

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
36364 Truckdriver, Tractor-Trailer	\$10.50

MISCELLANEOUS :

99020 Animal Caretaker	\$ 7.00
99030 Cashier	\$ 5.93
99041 Carnival Equipment Operator	\$ 5.93
99042 Carnival Equipment Repairer	\$ 7.38
99043 Carnival Worker	\$ 7.75
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 / Dark Room Technician)	\$ 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	\$ 7.85
99659 Surveying Technician	\$ 7.50
99660 Surveying Aide	\$ 4.91
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 **APPLICABLE TO WEATHER OBSERVERS ONLY - NIGHT PAY & SUNDAY PAY:** If you work at night as a 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(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), 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. **Monthly Technical Letter Progress Report**--The Contractor shall submit monthly technical letter reports describing progress of the program to date, noting all technical areas in which effort is being directed and indicating the status of work within these areas. Reports shall be in narrative form, brief and informal in content. These reports shall include:

1. A narrative statement of work accomplished during the report period
2. A statement of current and potential problem areas and proposed corrective
action
3. A discussion of work to be performed during the next report period
4. The direct labor-hours and total cost expended during the report period as well as the cumulative direct labor-hours and total cost expended to date for each TTR and the projected direct labor-hours and total cost to be expended to completion of the TTR.

The monthly progress report shall be submitted within 15 days after the end of each calendar monthly report period. A monthly progress report shall not be required for the period in which the final report is due.

B. Monthly Financial Management Report--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, Monthly Contractor Financial Management Report. The form shall be prepared and submitted in accordance with the instructions set forth on the reverse side of the form and NASA Procedures and Guidelines, "NASA Contractor Financial Management Reporting" (NPG 9501.2C) 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 8.a and b shall be completed using estimates (forecasts) for the succeeding two months.
3. Each 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours/dollars and actual hours/dollars for each reporting category.
4. The following categories shall be included in column 6 of this report:
 - a. Direct Labor Hours
 - b. Direct Labor Dollars
 - c. Overhead(s)
 - d. Subcontract
 - e. Material
 - f. Other Direct Cost
 - g. G&A
 - h. Total Estimated Cost
 - i. Fee
 - j. Total Estimated Cost and Fee

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

D. Report of Government-Owned/Contractor Held Property (NASA Form 1018)--The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the Section I clause entitled "Financial Reporting of Government-owned/Contractor-held Property."

E. Financial Baseline Plan--A time-phased financial baseline plan, detailing by month how you plan to incur costs for the period, shall be submitted for the first 14-month interval of the total contract. Financial baseline plan revisions resulting from the exercise of priced option hours shall be submitted 10 days following the effective date of the option being exercised. This plan shall include the periods by the cost categories specified in Paragraph B.4 above. The total estimated cost and level of effort reflected in the baseline plans must equal the contract values 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.

F. 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 Handbook 1710.10, LaRC Red Tag System.

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. Process for initiating changes/corrective actions in response to NASA LaRC Notice of Contractor Violation for unsafe operations, improper equipment, and other activities in noncompliance with construction and environmental regulations.

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 LHB 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.

G. Quarterly Accident/Injury Report--The Contractor shall submit a Quarterly Accident/Injury Report within 10 operating days after the end of each quarter.

H. Collective Bargaining Agreements--The Contractor shall provide the Contracting Officer with copies of any collective bargaining agreements, and amendments thereto, which arise during the course of the contract and which apply to Contractor employees assigned to the contract.

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

In addition to the instructions on the reverse of the SF 295, the Contractor is required to comply with Clause 1852.219-75, Small and Small Disadvantaged Subcontracting Reporting.

Pursuant to the contract clause entitled "Small Business and Small Disadvantaged Subcontracting Plan" (FAR 52.219-9 and 19.704(a)(5)), you are required to submit a letter progress report on a monthly basis. The "Monthly Progress Report for Socioeconomic Goals" shall be limited to the

monthly data only (excluding cumulative data from beginning of Subcontract Plan) as required for Lines 10A, 10B, 10C, 11, and 12 of the Standard Form 294. (See Section J, Exhibit I.) Letter progress reports may be signed by the Contract Administrator or equivalent organizational level, and each report is due by the 10th calendar day of the month following the close of the reporting period.

NOTE: Not applicable to small businesses. The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, Standard Form 295, Summary Subcontractor Report, and in accordance with the instructions on the reverse of the form.

J. Federal Contractor Veterans Employment Report--In compliance with Clause 52.222-37, Employment Reports on Special 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.

K. 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.

L. Virginia and Local Sales Taxes--In accordance with Section H.10, you are required to submit a copy of the letter sent to the Virginia Tax Commission and a copy of the subsequent response.

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: Contracting Officer, Mail Stop 126
Contract NAS1-97162
Hampton, VA 23681-0001

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 267

C--New Technology Representative, Mail Stop 212

D--Cost Accounting, Mail Stop 135

E--Safety Manager, Mail Stop 429

F--Industry Relations Office, Mail Stop 144

G--Programs and Resources Division, Mail Stop 104

H--Patent Counsel, Mail Stop 212

I--Industrial Property Office, Mail Stop 377

J--According to instructions on form

K--Small Business Specialist, Mail Stop 144

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, D-2, G-1
Financial Baseline Plan	A-1, B-2
Safety and Health Plan	A-1, B-1, E-1
Quality Plan	A-2, B-2
Biweekly Manpower Report	B-3
Monthly Progress Report	A-1, B-3
Quarterly Accident/Injury Report	A-1, B-1, E-1
Collective Bargaining Agreement	A-1, B-1, F-1
Report of Government-Owned/Contractor Held Property(NASA Form 1018)	A-1, B-1, I-4
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, K-1
Summary Subcontractor Report (Standard Form 295)	J
Monthly Progress Report for Socioeconomic Goals	A-1, K-1
Federal Contractor Veterans Employment Report (VETS-100)	F-1
Virginia and Local Sales Tax Correspondence	A-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

**Small Business, Small Disadvantaged/Women-Owned Business
Subcontracting Plan**

No. 98-01 Rev 1Date: 31 March 1998

Federal Agency: NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Program: National Transonic Facility Operations Support

Calspan Proposal No. 80-0535

In accordance with U. S. Government policy as defined in the Small Business Act, amended October 1978 (P.L. 95-507) and supplemental Executive Orders, Calspan's Plan for subcontracting to small business, small disadvantaged business, and women-owned business, under the solicitation noted above, is outlined herein.

	Dollars
Total Contract Value	\$5,063,956.00

1. Estimated Planned Subcontracts

a.

	Percentage Goals	Subcontract Dollars
To Small Business	1.98%	\$100,175.00
To Women-Owned Small Business	0.44%	\$22,038.00
To Small Disadvantaged Business *	13.60%	\$688,699.00
TOTAL (Small, Women-Owned and Disadvantaged)	16.01%	\$810,912.00
To Large Business	6.96%	\$352,673.00

* This category also includes Historically Black Colleges and Universities and other Minority Institutions.

b. The principal items or services anticipated to be subcontracted under this plan are as follows:

Description of Item Required including Specs. or Quals.	Anticipated Source	L/S/SDB or WO	Anticipated Cost of Item
Labor Support	Vigyan	SDB	\$618,345.00

- c. To develop the small, small disadvantaged, and women-owned business procurement goals, Calspan has a procedure whereby discussions are held to determine the potential subcontracting opportunities after the first draft of the proposal cost estimate is prepared. Participants vary depending upon the nature of the program, but the Purchasing Manager, the SBLO, Contract Manager and Proposal Engineer are the regular attendees. Discussions were held among the following participants to ensure that proper information is included within the plan:

Michael DiDuro	-	Technical
Thomas Beck	-	Contracts
Doris Collier	-	Pricing
Thomas Beck	-	Subcontracts

Calspan is primarily a research, development, and testing organization that engages in selected special purpose manufacturing, as required to satisfy the contractual requirements of its Customers. As such, our make or buy decisions are addressed on a case by case basis for each requirement as it arises, and are included in the initial discussions described above. Members of Purchasing Management always participate in the make or buy decisions, along with appropriate technical and support staff, as may be necessary.

- d. Calspan has not included any costs related to indirect or overhead purchases obtained from small, small disadvantaged, or women-owned businesses, in this subcontracting plan goals.
- e. Some of the source references utilized:
- The Small Business Administration Procurement Automated Source System.
 - National Minority Business Directory - "Try Us".
 - Department of Defense Small Business Subcontracting Directory, distributed by the Directorate of Small and Disadvantaged Business Utilization, Office of the Secretary of Defense.
 - U.S. Department of Transportation, Office of Small and Disadvantaged Business Utilization.
 - Small Disadvantaged Business Concerns Source bid compiled in-house.
 - DOD Deputy for Small Business, DCMAO, Syracuse.
 - Upstate New York Regional Minority Purchasing Council, Inc., certified listing.
 - Department of Defense listing of Small Business Specialists.

- Small Business Subcontracting Directory of the U.S. Small Business Administration Office of Procurement Assistance.
- Department of Defense funded listing entitled "An Inventory of the Capabilities of the Historically Black Colleges and Universities and Other Minority Institutions (HBCUs/MIs)" prepared by The National Association for Equal Opportunity in Higher Education.
- Commercial Marketing Representative.
- Directory of Women-Owned Businesses.
- Minority Business and Professional Directory (Yellow Pages of Minority and Women-Owned Businesses)

2. The Subcontracting Plan will be administered by:

Primary: Small Business Liaison Officer
4455 Genesee Street, Post Office Box 400, Buffalo, New York 14225

The SBLO duties include keeping top management advised on a monthly basis of the small business subcontracting program, preparation and submittal of the required quarterly and semi-annual reports, conducting reviews with Government representatives and providing liaison and interface with the Purchasing Department on small and disadvantaged sources, procurements, monitoring performance against subcontract plans to evaluate compliance and initiate corrective action when necessary, maintenance of all internal records pertaining to the Small Business Program, and maintenance of contacts with all Government agencies regarding subcontracting activities at Calspan.

Additional duties of the SBLO include, but are not limited to, ensuring that goals are established for each subcontracting plan. The SBLO also reviews each plan to ensure that goals are both realistic and achievable and that all elements of the plan are accurate, complete and current prior to submittal and throughout contract performance. The SBLO also ensures that the composite goals always contain consideration of the capabilities of Historically Black Colleges and Universities and other Minority Institutions. Furthermore, the SBLO represents Calspan at Federal, State and privately organized procurement conferences, workshops and trade fairs conducted locally, regionally and nationally.

3. Efforts

- (A) Calspan has developed a division-wide policy statement signed by the Senior Vice President and General Manager of Calspan which acknowledges the company's contractual commitment to the Small Business Program. Responsibility for compliance rests with managers through the organization who are capable of implementing the policy including program managers, contract administrators, purchasing personnel, and item end users.

- (B) Calspan conducts training relative to SSDAWOB subcontracting requirements training for all personnel involved in the acquisition cycle at least annually. Training is conducted more frequently for purchasing personnel and provides the context to disseminate data relative to actual achievements against subcontracting goals.
- (C) Calspan assists SSDAWOB firms by arranging solicitations, response cycles, quantities, and delivery schedules to encourage SSDAWOB participation in the subcontracting process to an extent consistent with efficient prime contract performance.
- (D) Calspan's Senior Management is apprised of achievements against subcontracting plans as well as the overall status of the Small Business Program at least annually.
- (E) Potential subcontractors are counseled directly on specific acquisitions and generally at Procurement Conferences and/or Trade Fairs in an effort to increase SSDAWOB participation in the subcontracting process.
- (F) Financial and/or technical assistance is provided to Small Business, Small Disadvantaged Business, and Women-Owned Business whenever practical and consistent with efficient Prime Contract performance.
- (G) Calspan maintains an in-house purchasing system, which is approved by the Department of Defense. As a part of this system each buyer has been instructed in the requirements of P.L. 95-507, "Small Business Act," as well as pertinent, additional requirements contained in P.L. 99-661, "National Defense Procurement Act of 1987", P.L. 100-656, "Business Opportunity Development Reform Act of 1988" and P.L. 101-189, "Test Program for Negotiation of Comprehensive Small Business Subcontracting Plan." Further, continuous informal instructions are given to pertinent purchasing personnel for periodic updating on these, and any subsequent public laws enacted which concern procurement activities involving small, small disadvantaged, and women-owned businesses.

4. Flow Down Requirements

Calspan agrees to include the clause in the contract entitled "Utilization of Small Business, Small Disadvantaged, and Women-Owned Concerns" (FAR 52.219-8), in all subcontracts that offer further subcontracting opportunities, and will require all subcontractors (except small business) who receive subcontracts in excess of \$500,000 (\$1,000,000 for construction work) to adopt a plan similar to the plan agreed to by Calspan. Calspan will flow down FAR 52.219-9, Small Business, Small Disadvantaged, and Women-Owned Business Subcontracting Plan and FAR 52.219-10, Incentive Subcontracting Program for Small, Small Disadvantaged, and Women-Owned Business Concerns, where appropriate and as such, administer to the receipt of Standard Forms 294 and 295 from its subcontractors.

5. Reports and Studies

In accordance with FAR 52.219-9, Calspan agrees to submit additional periodic reports and cooperate in any studies or surveys as may be required by a federal agency or the Small Business Administration in order to determine the extent of compliance with the Subcontracting Plan submitted herein. Calspan will submit Standard Form (SF) 294 and 295 in accordance with instructions. In addition, Calspan agrees to ensure that subcontractors develop and submit subcontracting plans similar to the one prepared by Calspan and submit SF 294's and 295's to demonstrate the level of compliance with each plan.

6. Listing of Types of Records Calspan Maintains

- a. Small and disadvantaged business source lists, guides, and other data identifying small, small disadvantaged, and women-owned business vendors.
- b. Organizations contacted for small and disadvantaged business sources.
- c. On a contract-by-contract basis, records on all subcontract solicitations over \$10,000, indicating on each solicitation (i) whether small business was solicited and if not, why not; (ii) whether small disadvantaged business was solicited and if not, why not; (iii) whether women-owned business was solicited and if not, why not; and (iv) reasons for the failure of responding small businesses to receive the subcontract award.
- d. Records to support such efforts as: (i) contacts with disadvantaged and small business trade associations; (ii) contacts with business development organizations and (iii) attendance at small, small disadvantaged and women-owned business procurement conferences and trade fairs.
- e. Records to support internal activities to guide and encourage buyers such as: (i) workshops, seminars, training programs, etc.; and (ii) monitoring activities to evaluate compliance.
- f. On a contract-by-contract basis, records to support award data submitted to the Government to include name, address, and size status of subcontractor.
- g. On a contract-by-contract basis, a computer printout of the dollar amount of all awards made identifying small, small disadvantaged, and women-owned vendors.
- h. Buyers' checkoff sheets indicating number of small, small disadvantaged and women-owned business concerns solicited for each award.
- i. Individual small business subcontract plan files.
- j. Semi-annual individual status reports for each subcontract plan.
- k. Quarterly summary subcontracting reports for each federal agency.

- l. Small Business Administration letters of compliance for each small business subcontract plan.
- m. Utilization of businesses located in Labor Surplus Areas.

In order to implement this plan in the most effective manner, Calspan has taken various positive actions and can demonstrate through prior examples that it is making a good faith effort to comply with the spirit and intent of P.L. 95-507, as well as P.L. 99-661, P.L. 100-180 and P.L. 100-656.

1. Calspan management is kept well informed and fully involved in the company program for utilization of small, small disadvantaged, and women-owned business concerns. At the direction of the General Manager, the SBLO has briefed the approximately forty (40) top managers of Calspan at one of their monthly staff meetings on the requirements of the various Public Laws cited above. Calspan maintains a company policy on Utilization of Small, Small Disadvantaged, and Women-Owned Business Concerns, identified as Procedure 604. (A copy of the procedure is available upon request.)
2. Calspan and its predecessor company participated in the original "volunteer" program of reporting to the Department of Defense and the Small Business Administration since the plan's inception, and currently continues to file the required reports. We have an annual review by Procurement Specialists from both DCMR and the Small Business Administration attesting to our ongoing good-faith compliance with the regulations. Senior Management is kept informed on the program activities through a formal reporting system.
3. All buying personnel are kept informed and support the small, small disadvantaged, and women-owned business firms due to a requirement that every purchase over \$10,000.00 be documented accordingly. Informal meetings, occasional formal briefings and attendance at seminars keep the small business program highly visible.
4. Calspan has frequently offered special assistance to small, small disadvantaged, and women-owned businesses, beyond normal business procedures. Some examples are:
 - a. A unique small business concern has built ten (10) prototype Research Safety Vehicles (RSV) under a Calspan subcontract. Because of their size and limited credit capabilities when compared to the costs involved in the program, Calspan gave special consideration by making advanced payments to assist them in keeping the program moving. Further, our Technical Program Manager, Director of Material Services, Purchasing Manager, Subcontracts Administrator and our Small Business Liaison Officer each made at least one trip (some made several) to this subcontractor's facilities in another city, to provide expertise with various problems inherent in Government contracting since this was their first U. S. Government contract.
 - b. The Calspan Purchasing Manager was clearly instrumental in assisting a local minority woman in establishing a secretarial service and obtaining a U. S.

K.11 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13) (OCT 1996)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

(i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

K.12 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE (FAR 52.227-15) (JUN 1987)


(a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data - General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.

(b) As an aid in determining the Government's need to include any of the aforementioned Alternates in the clause at 52.227-14, Rights in Data - General, the offeror's response to this solicitation shall, to the extent feasible, complete the representation in paragraph (b) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify which of the data qualifies

Business Orientation Seminars which were established to acquaint small businesses in the proper procedures required to obtain work for the Government.

- 5) In 1991 and 1993, Calspan was selected Corporation of the Year by the Upstate New York Regional Minority Purchasing Council.
- 6) In 1993 and 1994, Calspan was named Contractor of the Year for the Western and Central New York Region by the U.S. Department of Defense, for its consistent compliance with the Department of Defense's Small Disadvantaged Business Program.
- 7) In 1994, Calspan was presented "The Award of Distinction" by the Small Business Administration for its efforts in subcontracting with Small Business.
- 8) For 1991 through 1997, Calspan received formal recognition from DCMAO, Syracuse, for surpassing the 5% Goal for Minority Supplier Utilization.

This subcontracting plan was submitted by:

Signature	
Typed Name	Thomas Pleban
Title	Director of Contracts and Procurement
Phone No.	(716) 631-6778
Date Prepared	31 March 1998