

NASA

National Aeronautics and Space Administration

Langley Research Center
Hampton, Virginia 23681-0001

SOLICITATION

1-135-GJE.8762

**REQUIREMENT: ELECTRONICS FABRICATION AND ELECTRONIC
EQUIPMENT SUPPORT**

IMPORTANT NOTICES:

The Government intends to award the contract resulting from this solicitation without discussions (See Section L, L.3 clause entitled Contract Award. FAR 52.215-16(OCT 1995)--Alt 11(OCT1995)). We would like to avoid situations where proposals include substantive exceptions to the proposed contract terms and conditions which might be unacceptable to the Government and therefore preclude award. Therefore, it is requested and strongly recommended that you bring to the Government's attention prior to the proposal due date any exceptions, questions, or additions you have to the proposed contract terms and conditions. This will allow the Government to comment to **all** offerors on the acceptability or nonacceptability of these exceptions (e.g., additions, deletions, changes) prior to proposal receipt. The resolution of any exceptions to terms and conditions prior to proposal receipt will aid the Government in its intention to award without discussions and thus streamline the procurement process. If determined necessary, discussions will be conducted in accordance with NASA FAR Supplement 1815.610

Your attention is directed to Section L, L. 16. Proposal Preparation and Submission - Special instructions, for important information on proposal preparation. Also reference Section M for evaluation information.

This requirement is NOT a small business set-aside; however, the Contracting Officer has established a goal of 8 percent for small disadvantaged business participation (See Section L, L.15).

NOTICE: FOR ADDITIONAL PROCUREMENT OPPORTUNITIES AND OTHER NOTICES, CALL 1-800-PUR-NASA.

SOLICITATION, OFFER AND AWARD

1. THIS CONTRACT IS A RATED ORDER UNDER OPAS (15CFR350)

RATING DO - C9 PAGE OF 1 PAGE(S)

2. CONTRACT NO.

3. SOLICITATION NO.
1-135-GJE.8762

4. TYPE OF SOLICITATION
 SEALED BID (IFB)
 NEGOTIATED (RFP)

5. DATE ISSUED
12/18/97

6. REQUISITION/PURCHASE NO.

REQUISITION
0013

Langley Research Center
Hampton, VA 23681-0001

9A Langley Boulevard, Building 1195B, Room 125
Hampton, VA 23681-0001

10. FOR INFORMATION CALL:

A. NAME

Tracy M. Spruill

B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS)

(757) 864-2538

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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
	%	%	%	%

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	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)

15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN	17. SIGNATURE	18. OFFER DATE

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM
10 U.S.C. 2304(c) () 41 U.S.C. 253(c) ()		

24. ADMINISTERED BY (if other than item 7)	CODE	25. PAYMENT WILL BE MADE BY	CODE
		Financial Management Office Langley Research Center, MS 175 Hampton, VA 23681-0001	

26. NAME OF CONTRACTING OFFICER (Type or print)	27. UNITED STATES OF AMERICA	28. AWARD DATE
	<i>Thomas M. Spruill</i> (Signature of Contracting Officer)	12-18-97

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B. 1 SUPPLIES AND/OR SERVICES TO BE FURNISHED (LaRC 52 211-90)(AUG 1997)

A 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. The Statement of **Work** covers the general requirements for Contract Line Item 4 (CLIN 1), Electronics Fabrication and CLIN 2, Electronic Equipment Support.

B. The requirement identified in CLIN 1 (Tasks 1.1-4) will be ordered through the issuance of individually priced Government authorized **Work** Requests. The following are ~~the~~ applicable labor categories and associated fully burdened fixed hourly rates (exclusive of fee and material costs) for regular time and overtime to be **used in** issuing **Work** Requests. These labor categories and rates will be utilized by the Government to establish cost standards for comparison purposes in calculating the Incentive Fee.

	<u>Fully Burdened Rate Per Hour</u>	<u>Fully Burdened Overtime Rate Per Labor Hour</u>
Engineering Technician II (CLIN 1)		
Engineering Technician I (CLIN 1)		

C. The requirement identified in CLIN 2 will be ongoing and shall begin on the effective date of the contract and continue without interruption through the period of performance of the contract. The CLIN 2 estimated cost identified in Section B.2 will be the cost standard for comparison purposes in calculating the Incentive Fee.

B. 2 ESTIMATED COST AND MAXIMUM INCENTIVE FEE

The estimated cost of this contract is \$____. The incentive fee is \$____. The total estimated cost and maximum incentive fee are \$____.

	<u>Est. Cost</u>	<u>Max. Available Incentive Fee</u>	<u>Total Est. Cost and Max. Incentive Fee</u>
CLIN 1	\$	\$	\$
CLIN 2	\$ _____	\$ _____	\$ _____
Total	\$	\$	\$

6.3 INCENTIVE FEE

The Government shall evaluate the Contractor's performance at three (3) month intervals from the date of contract award in accordance with Attachment B, Surveillance and Cost Plus Incentive Fee Plan, of the contract. The Contractor's reporting requirements for this evaluation are specified therein. The quality, schedule and cost metrics that the Contractor will be measured against in determining earned incentive fee are defined in the Statement of **Work**.

B.4 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 \$____. This allotment is for Electronics Fabrication and Electronic Equipment Support and covers the following estimated period of performance:

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

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT**C.1 STATEMENT OF WORK - ELECTRONICS FABRICATION AND ELECTRONIC EQUIPMENT CONTRACT****Introduction**

This Statement of **Work (SOW)** covers the general requirements for Electronics Fabrication and Electronic Equipment support at the Langley Research Center (LaRC). The majority of the effort shall be performed in a **Contractor-furnished** facility. Some work will be performed at LaRC, primarily in those instances where equipment or other items to be worked on, or with, are located at LaRC, and other sites as designated by work requests. In responding to LaRC work requests, the Contractor must meet strict research schedules. The Contractor shall respond to LaRC emergency requirements in all statement of work areas on a **24 hours, 7 days** a week basis. The Contractor shall respond to LaRC emergency requirements within 1-hour after receiving notification of the request from the Government. "Response" is defined as having personnel working on-site at the NASA LaRC facility. The Contractor shall furnish all personnel, services, materials, equipment, vehicles, and facilities (other than those provided by the Government) necessary and/or incidental to the performance of the functional work areas identified below.

Quality Assurance

1. The Contractor shall utilize a quality assurance program that is in compliance with the requirements of the current version of the International Organization for Standardization's ISO 9002 Standard Series or the American National Standards Institute/American Society for Quality Control's Q9002 Series, or equivalent.
2. In performing the prescribed electronics fabrication services and quality assurance inspections, the Contractor shall comply with the quality provisions set forth in NASA Assurance Standards Publications **NAS/NHB 5300.4** Series (latest version) or NASA approved standard and as specified in work requests. Personnel qualifications and certifications shall be in accordance with the training and certification requirements as set forth by the NASA Assurance Standards Publications.
3. The following summarizes the quality assurance inspection process under CLIN 1, for Tasks 1.1-3 of this Statement of Work. **Additional/special** inspection instructions may be given in individual work requests. The Contractor shall inspect all work prior to delivery to insure compliance with the **NAS/NHB 5300.4** series and/or work request. **A** written inspection report shall be delivered with the completed item on a Quality Assurance Control Card (Form FD-EFDB N-969) along with a Shipping Receipt (Form FD-686). A NASA quality assurance inspector or other authorized NASA **representative** (as designated on work request) will inspect the completed deliverable and either accept or reject the item. Completed **items/repairs** equipment delivered under CLIN 1, Task 1.4 and CLIN 2 will be delivered to the NASA requester for final inspection and acceptance. **All** rejected items will be documented and returned to the Contractor for rework.

CLIN 1.0 ELECTRONICS FABRICATION SUPPORT

The Contractor shall provide technical support to fabricate research-oriented electronics circuitry. This includes circuit assemblies for ground support, aircraft, spaceflight, laboratory, and research test facility instrumentation requirements. Work shall encompass four (4) functional work areas: general, aircraft, and micro electronics fabrication, and special fabrication processes as described herein.

The Contractor shall work from work requests which may include schematics, assembly drawings, sketches, wiring diagrams, and/or written narratives describing the work to be performed along with any special fabrication operations, procedures, and techniques. Electronics fabrication support shall include but not be limited to the following **services** as directed by work requests:

- Layout of parts, wiring, fabrication, installation, functional checkout, and modification of electronics circuitry
- Installation of **parts/components** (including **both** surface **mount** and through hole devices) such as resistors, **capacitors**, coils, transistors, integrated circuits, etc. in printed circuit board assemblies
- Routing and soldering of wires to form circuitry
- Soldering of cable wires to specified terminals to connect circuits and subassemblies
- Machining and painting of miscellaneous hardware such as panels, chassis, and cabinets
- Quality assurance functions including checking continuity of **circuits** using circuit analyzers; performing quality assurance inspection of components, assemblies, and completed instrumentation systems; analyzing problems encountered and documenting all inspections and tests performed; recording of nonconformances, rejections, reworks, and repairs; integrating Government-provided subassembly **drawings/specifications** to form detailed schematic of completed task; and assuring compliance of end items with the NASA Assurance Standards Publications.

1.1 General Electronics Fabrication - The Contractor shall provide electronics fabrication support to produce general electronics circuitry and hardware. Requirements range from fabrication and assembly of printed circuit boards, cable assemblies, wiring harnesses, and electronics chassis; to installation and wiring of complete research test facilities; to fabrication and assembly of electronics hardware components and subsystems for Center aeronautical or aerospace research projects. Approximately 70 percent of the work will be performed in a Contractor-furnished facility; approximately 30 percent of the work will be performed at various LaRC work sites as required.

1.2 Aircraft Electronics Fabrication - The Contractor shall operate a Government-furnished electronics fabrication shop in LaRC's Building 1244 Hangar and shall provide electronics fabrication support to produce aircraft electronics circuitry such as data acquisition instrumentation, telemetry systems, electronic display units, and a variety of ground support equipment for LaRC's flight research aircraft. Work will be performed in LaRC's Building 1244 Hangar and on-board the various research aircraft.

1.3 Microelectronics Fabrication - The Contractor shall provide electronics fabrication support to produce microelectronics circuitry. This includes the performance of technical functions necessary for microelectronic circuit and sensor fabrication such as deposition of materials, photochemical patterning of circuit elements and interconnections, mounting of microminiature components, etc. The specialized microelectronics facilities and equipment necessary for performance of this work are located in LaRC's Building 7238 Microelectronics Laboratory and shall be provided for use by the Contractor.

1.4 Special Fabrication Processes - The Contractor shall perform a variety of special fabrication processes including but not limited to the following:

- Photoplotting, photographing, and processing of printed circuit board electronic artwork data files. The Contractor shall utilize these processes to produce printed circuit board artwork film plots. (In producing the required film plots, the Contractor shall electronically interface with the Government in an automated fashion utilizing compatible standard electronic file formats.)
- Printed circuit board fabrication. (The Government may issue up to ten (10) work requests per contract year for fabrication of printed circuit boards from Government-provided **schematics/artwork**.)
- Graphics-related processes including computerized engraving and vinyl cutting; metal-photo imaging; and graphics artwork layout, screen-printing, decaling, and transfer lettering. The Contractor shall utilize these processes to: fabricate and install miscellaneous **signage** such as **building/room** identification signs, nameplates, tags, and other placards; produce **highly-durable** plaques, plates, and panels; and **label** /identify instrumentation panels, chassis, cabinets, printed circuit boards, etc.
- Coatings application processes including conformal coating, staking, encapsulating and other processes related to the application of protective coatings to printed circuit boards and electronic assemblies.

Approximately 95 percent of the work involving special fabrication processes will be performed in a Contractor-furnished facility; approximately 5 percent of the work will be performed at various LaRC work sites as required.

1.5 Metrics - The Quality and Schedule metrics are applicable to Tasks 1.1-3.

Task 1.4 may be measured against Quality and/or Schedule Metrics on a case-by-case basis and will be noted accordingly on the work request. The cost metric is applicable to all tasks under CLIN 1.

- **Quality** - Conformance with NASA Assurance Standards Publications **NAS/NHB 5300.4 Series** is required. All specifications (assembly drawings, wiring diagrams, sketches, special fabrication procedures and techniques etc.) identified in individual work requests must be met. "Quality Sensitive" represents those work requests that a quality error could impact overall project objective(s) or milestones.
- **Schedule** - A specific completion date will be defined for each work request. Work requests designated with a "Must Hold" represents those work requests that could severely impact overall project objective(s) or milestones if the delivery date is not met. A "Must Hold" work request will be considered late if the article is delivered to the NASA Quality Office or other designated delivery site, or is available for customer pickup after the close of business on the required delivery date.
- **Cost** - The negotiated cost for each work request established utilizing the contract hourly labor rate per labor category will serve as the cost standard.

CLIN 2.0 ELECTRONIC EQUIPMENT SUPPORT

2.1 This requirement is on going and shall begin on the effective date of the contract and continue without interruption through the period of performance of the contract. The Contractor shall provide electronic equipment support to include the installation, repair, maintenance, assembly, modification, setup, operation, and testing of a variety of Government-owned Computer Numerical Control (CNC) and conventional machinery and equipment including but not limited to the equipment listed in Exhibit H. Additionally, the Contractor shall provide annual calibration of selected machine tool equipment including but not limited to the equipment listed in Exhibit H, List 2. The overall electronic equipment effort

supports LaRC's Fabrication Division (FD). The reliable operation of CNC and conventional machinery and equipment is critical to the mission of the FD. The equipment to be serviced are located in three primary FD facilities: Building 1225, Advanced Machining Development Lab; Building 12838, Engineering and Fabrication Lab; and Building 12388, Composite and Models Development Lab. Ninety percent of the tasks are 10 hours or less in duration.

2.2 Metrics

- **Quality—Completion of work without Contractor error. A task completed with a Contractor error is identified as a "Call Back". "Call Backs" are defined as a request to re-repair equipment that after being repaired by the Contractor, has subsequently failed/malfunctioned as a result of an unsatisfactory initial repair by the Contractor.**
- **Schedule—Equipment "Down Time" shall serve as a measure of the timeliness of the Contractor's efforts in effecting repairs. "Down Time" is the period of time a machine is out of service while awaiting/undergoing repairs and shall include the period of time from receipt of repair request to completion of repair and restoration of machine to service.**
- **Cost—The negotiated cost for CLIN 2 (See B.2) broken out on a quarterly basis will serve as the cost standard.**

SECTION E - INSPECTION AND ACCEPTANCE

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

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

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 12 months from the effective date of the contract.

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

Delivery shall be f.o.b. destination:

As specified in work requests.

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

The place(s) of performance shall be at the Contractor's facility, NASA, Langley Research Center, Hampton, Virginia; and other sites as may be designated by work requests.

SECTION G - CONTRACT ADMINISTRATION DATA**G.1 TECHNICAL DIRECTION (NASA 1852.242-70)(SEP1993)**

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

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

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

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

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

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

(e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction shall be subject to the Disputes clause of this contract.

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

**G.2 NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING (NASA 1852.242-73)
(JUL 1997)**

(a) The Contractor shall submit NASA Contractor Financial Management Reports on NASA Forms 533 in accordance with the instructions in NASA Policy Guidance (NPG) 9501.2, NASA Contractor Financial Management Reporting, and on the reverse side of the forms, as supplemented in the Schedule of this contract. The detailed reporting categories to be used, which shall correlate with technical and schedule reporting, shall be set forth in the Schedule. Contractor implementation of reporting requirements under this clause shall include NASA approval of the definitions of the content of each reporting category and give due regard to the Contractor's established financial management information system.

(b) Lower level detail used by the Contractor for its own management purposes to validate information provided to NASA shall be compatible with NASA requirements.

(c) Reports shall be submitted in the number of copies, at the time, and in the manner set forth in the Schedule or as designated in writing by the Contracting Officer. Upon completion and acceptance by NASA of all contract line items, the Contracting Officer may direct the Contractor to submit Form 533

reports on a quarterly basis only, report only when changes in actual cost incur, or suspend reporting altogether.

(d) The Contractor shall ensure that its Form 533 reports include accurate subcontractor cost data, in the proper reporting categories, for the reporting period.

(e) If during the performance of this contract NASA requires a change in the information or reporting requirements specified in the Schedule or as provided for in Paragraph (a) or (c) of this clause, the Contracting Officer shall effect that change in accordance with the Changes clause of this contract.

G.3 SUBMISSION OF VOUCHERS FOR PAYMENT (NASA 1852.216-87) (DEC 1988)

(a) Public vouchers for payment of costs shall include a reference to this contract NAS1-_____, your Taxpayer Identification Number and be forwarded thru:

NASA Langley Research Center
Attn: Financial Management Division, **MS 175**
Hampton, VA 23681-0001

- This is the designated billing office for cost and fee vouchers for purposes of the Prompt Payment clause of this contract. Payments of cost will be made in monthly installments. Cost and fee vouchers are to be submitted separately.

Cost vouchers shall be submitted through the delegated Government Audit Agency identified as follows, with a copy to the delegated Administrative Contracting Officer:

[Insert Address of Government Audit Agency]

- (b) The Contractor shall prepare vouchers as follows:
- attachment. (1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's
- (2) Seven copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment.
- (3) The Contractor shall mark SF 1034A copies 1, 2, 3, 4, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows:
- (i) Copy 1 NASA Contracting Officer;
 - (ii) Copy 2 Auditor;
 - (iii) Copy 3 Contractor
 - (iv) Copy 4 Contract administration office; and

(c) Public vouchers for payment of fee shall be prepared similarly and be forwarded thru [3] to:

NASA Langley Research Center
Attn: Contracting Officer, Mail Stop 126
Hampton, VA 23681-0001

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

G.4 WORK REQUESTS

A. The work to be performed under CLIN1, Electronics Fabrication Support of Section C, Description/ Specifications/Work Statement, will be more specifically directed by means of written Work Requests issued by the Contracting Officer (CO), Contracting Officer's Technical Representative (COTR) or Authorized Government Representative and will contain the following information:

1. Date and Work Request Number
2. Special Designations i.e. **Quality Sensitive, Must Hold**
3. Description of **work**, specifications **and/or end item**
4. Name of NASA originator
5. Quantity
6. Required Schedule
7. Final Cost Estimate
8. Applicable special instructions i.e. Delivery Site, Required Quality Assurance Inspection

B. A complete work package consisting of the items identified in paragraph A above will be submitted to the Contractor for review. The CO, COTR or authorized representative will negotiate any necessary changes with the Contractor. Once mutual agreement is made on the conditions of the work package, an official work request will be issued to the Contractor on a Form FD-EFDB N-1395 or equivalent. The final cost estimate specified in the work request will serve as the cost standard for that work. If, after the Contractor has started the work it becomes necessary for the Government to make technical changes that affect the overall scope of the work request, the cost estimate and/or schedule shall be renegotiated to reflect the change in scope. The renegotiated cost estimate and/or schedule shall become the new standard for that work. The quality, schedule and cost metrics are addressed in the Statement of Work and work requests as applicable. The Contractor shall acknowledge receipt and acceptance of the work request by a signed Acknowledgment/Acceptance form or equivalent and return it to the COTR.

C. The Contractor shall respond within one hour of notification, for emergency requirements. The Contractor shall designate a primary individual point of contact that can be notified of emergency requirements 24 hours per day. The Contractor shall accept verbal orders of emergency services from the COTR or authorized representative. Written directions through a work request, following the above process in Paragraph B, will be provided within 2 working days.

D. The Contractor shall furnish a control and reporting system capable of accurately maintaining data required for the submission of reporting requirements identified in Exhibits A and B of the contract.

G.5 LIST OF GOVERNMENT-FURNISHED PROPERTY (NASA 1852.245-76) (OCT 1988)

For the performance of work under this contract, the Government will make available Government property identified in Exhibit G of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at the Contractor's facility and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245-5 Government Property clause of this contract, the Contractor is accountable for the identified property.

G.6 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.

(b) General- and special-purpose equipment, including office furniture.

(1) Equipment to be made available is listed in Exhibit F. 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.

(4) All equipment necessary to perform in the areas of Aircraft Electronics Fabrication and Microelectron Fabrication.

(c) General (excluding office supplies) and electronic supplies from store stock.

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

(e) Safety and fire protection for Contractor personnel and facilities.

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

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

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

(i) 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.

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

G.7 PROVIDING FACILITIES TO CONTRACTORS (LaRC 52.245-90) (AUG 1997)

A. In accordance with FAR 45.302-1, it is policy of the Government that Contractors shall furnish all facilities required for performing Government contracts. "Facilities" include real property and plant equipment including personal property such as general purpose off-the-shelf equipment, machine

tools, test equipment, furniture and vehicles. "Facilities" do not include material, special test equipment, special tooling or agency-peculiar property.

B. In keeping with the policy set forth in FAR 45.302-1, the Government will not provide NEW "facilities," except as provided for in the Statement of Work.

C. However, the Government will provide EXISTING facilities as listed in G.5 and 6 and Exhibits F and G. Any of these existing facilities that reach the end of their useful life during the contract period, or which are beyond economical repair, shall be replaced by the Contractor, if the facilities are still needed for contract performance.

D. Notwithstanding the "Allowable Cost and Payment" clause of this contract, cost of facilities are not an allowable cost except when charged to this contract in accordance with your approved accounting system.

G.8 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 (9) 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.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 1989)

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

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

<u>Employee Class</u>	<u>Monetary Wage</u>
Engineering Technician II (CLIN 1)	\$14.85
Engineering Technician I (CLIN 1)	\$13.45
Engineering Technician III (CLIN 2)	\$16.36
Engineering Technician II (CLIN 2)	\$14.85

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 14% 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.2 OPTIONS

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 four additional periods of twelve 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)	12 months	12 months	12 months	12 months
Fully Burdened Rate Per Hour (Ref. B.1 .B)				
Engineering Technician II (CLIN 1)	\$	\$	\$	\$
Engineering Technician I (CLIN 1)	\$	\$	\$	\$
Overtime Fully Burdened Rate Per Hour (Ref. B.1.B)				
Engineering Technician II (CLIN 1)	\$	\$	\$	\$
Engineering Technician I (CLIN 1)	\$	\$	\$	\$
Estimated Cost (Ref. B.2)	\$	\$	\$	\$
CLIN 1	\$	\$	\$	\$
CLIN 2	\$	\$	\$	\$
Incentive Fee (Ref. B.2)	\$	\$	\$ —	\$
CLIN 1	\$	\$	\$	\$
CLIN 2	\$	\$	\$	\$

H.3 CONTRACTOR EMPLOYEES 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 (NISPOM) 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 OOD 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.4 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, Office of Space Science and Aeronautics (Code IS). 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.5 WORK SCHEDULE—ON-SITE ONLY (LaRC 52.211-103) (JUL 1991)

In order that the necessary and proper inspection of the Contractor's work may be effectively accomplished, and to assure the availability of required Government interface, the Contractor shall schedule work performance hereunder so as to be compatible with the established workweek and hours of work observed by the Government organization having cognizance over the work being performed, which is 7:00 a.m. to 3:30 p.m., Monday through Friday.

H.6 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.7 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 _____ is hereby incorporated herein by reference.

H.8 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.9 ADVANCE AGREEMENT ON INDIRECT RATE(S) (LaRC 52.231-90) (JUN 1988)

A. Notwithstanding the provisions of the Section I clause entitled "Allowable Cost and Payment," the contractor will be reimbursed at the indirect ceiling rates specified below or the actual rates, whichever are less, for each of the Contractor's fiscal years applicable to this contract. The Contractor's fiscal year is _____. Any costs that are not reimbursed due to the ceilings shall be deemed unallowable costs. These unallowable costs shall not be recovered under this or any other Government contract.

Indirect Cost Pool

Ceilins Percentage

Allocation Base

B. The above rate ceilings are predicated upon the bases listed above and the accounting practices and accounting system in effect on _____. If the Contractor changes its accounting

practices or accounting system in any way, the Contractor will immediately notify the Government. Within 30 days of such change the Contractor shall present to the Contracting Officer information that demonstrates that the change will not impact the allowable cost computed using the above rates or shall submit a proposal for adjustment of the ceilings so that the total costs allowable will not exceed the total costs that would have been allowable had the Contractor not changed its accounting practices or accounting system. In the event that the parties cannot agree on new ceilings using the Contractor's new accounting practices or system and the Contractor does not agree to return to the previous accounting practices and system, the Contracting Officer may equitably adjust the ceilings.

H.10 QUALITY MANAGEMENT SYSTEM REQUIREMENTS (ISO-9000)

No later than 12 months after award of the contract, the Contractor shall be certified by a third-party registrar as compliant with the current version of the International Organization for Standardization's "ISO 9002" Standard Series or the American National Standards Institute/American Society for Quality Control's "Q9002 Series" and associated documentation. The Contractor shall maintain their registration during the contract term.

H.11 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 required by the 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 required by the 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.

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)
52.211-5	Material Requirements (OCT 1997)
52.211-7	Other Than New Material, Residual Inventory, and Former Government Surplus Property (MAY 1995)
52.211-15	Defense Priority and Allocation Requirements (OCT 1997)
52.215-2	Audit and Records—Negotiation (OCT 1997)
52.215-8	Order of Precedence (OCT 1997)
52.215-11	Price Reduction for Defective Cost or Pricing Data—Modifications (OCT 1997)
52.215-13	Subcontractor Cost or Pricing Data—Modifications (OCT 1997)
52.215-14	Integrity of Unit Prices (OCT 1997)
52.215-15	Termination of Defined Benefit Pension Plans (OCT 1997)
52.215-21	Requirements for Cost and Pricing Data or Information Other Than Cost or Pricing Data - Modifications (OCT 1997)
52.216-7	Allowable Cost and Payment (MAR 1997)
52.219-8	Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns (JUN 1997)
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)
52.222-3	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)
52.222-50	Nondisplacement of Qualified Workers (Aug 1997)
52.223-2	Clean Air and Water (APR 1984)
52.223-3	Hazardous Material Identification and Material Safety Data (Jan 1997) Alternate I (Jul 1995)
52.223-5	Pollution Prevention and Right-To-Know Information (MAR 1997)
52.223-6	Drug-Free Workplace (JAN 1997)
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 Sanction 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)
52.227-11	Patent Rights—Retention by the Contractor (Short Form) (JUN 1989)—as modified by NASA FAR Supplement 1852.227-11
52.227-14	Rights in Data—General (JUN 1987)—as modified by NASA FAR Supplement 1852.227-14
52.228-7	Insurance—Liability to Third Persons (MAR 1996)
52.230-2	Cost Accounting Standards (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 (JUN 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)
52.237-10	Identification of Uncompensated Overtime (OCT 1997)
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)
52.245-5	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)
52.248-1	Value Engineering (MAR 1989)
52.249-6	Termination (Cost-Reimbursement) (SEP 1996)
52.249-14	Excusable Delays (APR 1984)
52.25 1-1	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>
1852.208-81	Restrictions on Printing and Duplicating (AUG 1993)
1852.216-89	Assignment and Release Forms (JUL 1997)
1852.219-74	Use of Rural Area Small Businesses (SEP 1990)
1852.219-75	Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Reporting (JUL 1997)
1852.219-76	NASA 8 Percent Goal (JUL 1997)
1852.223-70	Safety and Health (MAR 1997)
1852.223-74	Drug and Alcohol-Free Workforce (MAR 1996)
1852.228-75	Minimum Insurance Coverage (OCT 1988)
1852.237-70	Emergency Evacuation Procedures (DEC 1988)
1852.242-70	Technical Direction (SEP 1993)
1852.242-71	Travel Outside of the United States (DEC 1988)
1852.242-72	Observance of Legal Holidays (AUG 1992) — Alternate I (SEPT 1989) and Alternate II (SEP 1989)
1852.242-73	NASA Contractor Financial Management Reporting (JUL 1997)
1852.243-71	Shared Savings (MAR 1997)
1852.245-70	Contractor Requests for Government-Owned Equipment (JUL 1997)
1852.245-73	Financial Reporting of NASA Property in the Custody of Contractors (SEP 1996)

12 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)
52.217-9	Option to Extend the Term of the Contract (MAR 1989)
52.222-2	Payment for Overtime Premiums (JUL 1990)
1852.204-75	Security Classification Requirements (SEP 1989)
1852.204-76	Security Requirements for Unclassified Automated Information Resources (SEP 1993)
1852.215-84	Ombudsman (OCT 1996)
1852.245-71	Installation-Accountable Government Property (JUL 1997)- Alternate I (MAR 1989)

13 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.

1.4 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 written notice to the Contractor within the current period of performance.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 60 months.

1.5 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

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

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

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

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

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

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

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

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

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

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

1.6 SECURITY CLASSIFICATION REQUIREMENTS (NASA 1852.204-75) (SEP 1989)

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

1.7 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:

Central Scientific Computing Complex (Building 1268)

(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.

1.8 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)
ALTERNATE I (MAR 1989) ~~Error! Bookmark not defined.~~**

(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: User responsibilities in accordance with NASA Handbook NHB 4200.1, NASA Equipment Management Manual. 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.

(3) The contractor shall not utilize the installation's central receiving facility for receipt of Contractor-acquired property. However, the Contractor shall provide listings suitable for establishing accountable records of all such property received, on a quarterly basis, to the Contracting Officer and the Supply and Equipment Management Officer.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

- Exhibit A Contract Documentation Requirements, 6 pages
- Exhibit B Surveillance and Cost Plus Incentive Fee (CPIF) Plan, 5 pages
- Exhibit C Contract Security Classification Specification, DD Form 254, 2 pages
- Exhibit D Register of Wage Determination and Fringe Benefits, July 2, 1997, 10 pages
- Exhibit E Subcontracting Plan, pages
- Exhibit F Installation-Accountable Government Property, 4 pages
- Exhibit G List of Government-Furnished Property, 6 pages
- Exhibit H Computer Numerical Control (CNC) and Conventional Machinery and Equipment, 4 pages
- Exhibit I Monthly Progress Report for Socioeconomic Goals (Sample), 1 page

The following are located after the last section of this solicitation:

- Attachment 1 Standard Form 1448, Contract Pricing Proposal Coversheet, 1 page
- Attachment 2 Bidder's Library Index, 1 page
- Attachment 3 Relevant Experience and Past Performance Evaluation Instructions/Questionnaire, 7 pages
- Attachment 4 Background and Historical Data, 4 pages
- Attachment 5 Estimated Historical Workload and Technical Effort, 3 pages
- Attachment 6 Draft Comments, 10 pages
- Attachment 7 Pre-Solicitation Conference Information

EXHIBIT A - CONTRACT DOCUMENTATION REQUIREMENTS

I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

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

1. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.

2. Columns 7.b. and d. shall be completed using the time-phased financial baseline plan approved as part of the Management and Operations Plan.

3. Columns 8.a. and b. shall be completed using estimates (forecasts) for the succeeding two months.

4. Minimum reporting categories:

tabor Hours

Direct:

CLIN 1

CLIN 2

Direct Overtime

Subtotal Direct

Indirect:

Management

Administrative Support

Total Hours

cost

Direct:

CLIN 1

CLIN 2

Direct Overtime

,Subtotal Direct

Overhead

Indirect:

Management

Administrative Support

Payroll Additives/Taxes

Fringe Benefits

Other

Total Overhead

Overhead Rate

ODC's

Subcontracts

O.T. Premium

Facility

Total

G&A

G&A Rate

Total Cost

Incentive Fee

Total CPIF

5. Each 533M shall include a narrative explanation for variances exceeding 10 percent between planned hours and dollars and actual hours and dollars for each reporting category.

B. Quarterly Financial Management Report—The Contractor shall submit a quarterly financial report detailed by categories specified in A. 4 above on NASA Form 533Q at times and in accordance with

the instructions contained on the reverse side of the form. The initial 533Q shall be submitted within 10 operating days after award of the contract.

C. **Financial Baseline Plan**—A time-phased financial baseline plan, detailing by month how you plan to incur costs for the period, shall be submitted for the first 12-month interval of the total five year contract period. Financial baseline plans for each of the remaining 12-month intervals shall be submitted within 10 days of the anniversary of the effective date of this contract. 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 A.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**.

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

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

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

3. **LaRC Safety Policies/Procedures**—Recognition of applicable LaRC safety policies and procedures such as Langley 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.

E. **Quality Plan**—Within 30 calendar days after the effective date of the contract, the Contractor shall submit a quality plan which addresses how the contract quality requirements will be met. The Plan and subsequent revisions will be reviewed and approved by the Contracting Officer or the designated representative.

F. **Monthly Progress Report**—The Contractor shall submit a monthly progress report summarizing work progress, manpower utilization for assigned work requests, and material expenditures. This report shall be submitted within 10 operating days following the end of the reporting period.

G. **Quarterly Equipment Report**—The Contractor shall submit a Quarterly **Government-furnished Equipment Report** summarizing **maintenance/calibration** performed on the equipment. This report shall be submitted within 10 operating days following the end of the reporting period..

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

I. **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

J. **Property in the Custody of Contractors (NASA FORM 1018)**—The Contractor shall submit the NASA Form 1018 no later than October 31 of each year in accordance with the Section I clause entitled "Financial Reporting of NASA Property in the Custody of Contractors."

K. **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, Small Disadvantaged and Women-Owned Small Business Subcontracting Reporting.

Pursuant to the contract clause entitled "Small Business, Small Disadvantaged and Women-Owned Small Business 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.

L. **Work Request Status Report** - The Contractor shall submit a weekly status report illustrating the actual effort expended against all work requests. The report shall include but is not limited to information such as work requests status (active, hold or complete), cost, hours, description (title) and applicable work tracking numbers (i.e. work request, program, fabrication numbers etc.). Contractor may submit via electronic medium i.e. e-mail or via authorized access to reporting generation system.

M. **Work Request Expenditure Report** - The Contractor shall submit a weekly report identifying the actual effort expended against those work requests designated as applicable to this reporting requirement. The report shall identify the costs and hours expended in comparison to the parameters of the negotiated work request. Cost are to be broken out as labor and supply costs. Supply includes all material, components/parts and equipment which may be required to accomplish the work request. Contractor may submit via electronic medium i.e. e-mail or via authorized access to reporting generation systems.

N. Incentive Fee Report—The Contractor shall submit a Quarterly Incentive Fee Report within 10 operating days after the end of each quarter in accordance with Exhibit B, Surveillance and Cost Plus Incentive Fee (CPIF) Plan.

O. 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-700**) as required by this clause.

P. 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.

Q. Virginia and Local Sales Taxes—In accordance with Section H.8, 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 NASI-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

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-4
Financial Baseline Plan	A-1, B-2
Safety and Health Plan	A-1, B-1, E-1
Quality Plan	A-1, B-1, E-1
Biweekly Manpower Report	B-3
Monthly Progress Report	A-1, 8-3
Quarterly Equipment Report	A-1, 8-3
Quarterly Accident/Injury Report	A-1, B-1, E-1
Collective Bargaining Agreement	A-1, B-1, F-1
Property in the Custody of Contractors (NASA Form 1018)	A-1, B-1, I-4
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1, K-1
Summary Subcontractor Report (Standard Form 295)	J
Monthly Progress Report for Socioeconomic Goals	A-1, K-4
Work Request Status Report	B-1
Work Request Expenditure Report	B-1
Incentive Fee Report	A-1, B-2
Federal Contractor Veterans Employment Report (VETS-100)	F-1
Virginia and Local States 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 B

SURVEILLANCE AND COST PLUS INCENTIVE FEE (CPI F) PLAN

1. Evaluation Criteria

The criteria for determining incentive fee earned for each quarter is defined below. The Contractor shall submit an incentive fee report on a quarterly basis in response to the defined criteria which, will be evaluated by the Contracting Officer (CO) and Contracting Officer's Technical Representative (COTR) and appointed representative(s). The report to be submitted is addressed in Section 3 of this plan. Ratings shall be applied based upon the details provided in Section 2 of this plan.

(a) Quality		50%
	Electronics Fabrication (Tasks 1.1-3)	45%
	Electronic Equipment (CLIN 2.0)	5%
(b) Schedule		30%
	Electronics Fabrication (Tasks 1.1-3)	25%
	Electronic Equipment (CLIN 2.0)	5%
(c) Cost Control		20%
	Electronics Fabrication (CLIN 1.0)	
	Electronic Equipment (CLIN 2.0)	
		100%

2. Performance Measurement

A. Quality/Electronics Fabrication - Forty-five percent of the available incentive fee shall be based upon the number of completed electronics fabrication work requests returned by the customer or the NASA Quality Inspector with errors attributable to the Contractor (reference Table A). An error attributable to the Contractor is work not in compliance with the NASA Assurance Standards Publications NAS/NHB 5300 4 Series and/or work not conforming to assembly drawings, diagrams, etc., and/or specifications provided with work requests. Earned fee shall be reduced by an additional 10 percent for each work request designated as 'Quality Sensitive' that is returned with errors attributable to the Contractor. (All work requests returned with errors attributable to the Contractor shall be reworked.)

TABLE A

Number of Work Requests Returned With Errors Attributable to the Contractor	Percentage of 45 Percent of Available Fee
0	100%
1 - 2	80%
3 - 4	60%
> 4	0%

B. Quality/Electronic Equipment - Five percent of the available incentive fee shall be based upon the number of completed electronic equipment work requests/tasks with errors attributable to the Contractor (reference Table B). The number of "Call Backs" on equipment repairs shall serve as a measure of equipment repair quality.

TABLE B

Number of "Call Backs" for Equipment Repairs	Percentage of 5 Percent of Available Fee
0	100%
1 - 2	80%
3	60%
> 3	0%

C. Schedule/Electronics Fabrication - Twenty-five percent of the available incentive fee shall be based upon the percentage of completed electronics fabrication work requests completed within schedule (reference Table C). The final percentage for earned fee shall be reduced by an additional 10 percent for each missed "Must Hold" delivery date.

TABLE C

% of Work Requests Completed On Time	Percentage of 25 Percent of Available Fee
94 - 97%	80%
90 - 93%	60%
< 90%	0%

D. Schedule/Electronic Equipment - Five percent of the available incentive fee shall be based upon the percentage of completed electronic equipment work requests/tasks completed in a timely manner (reference Table D). In computing the quarterly down time percentage, it is assumed that eight (8) hours of operational time are required each day (excluding weekend days and holidays) for the machines listed in Exhibit H, Equipment List 3. This results in an average total of 500 hours operational time per machine in Exhibit H, Equipment List 3. The equipment down time percentage shall be calculated as follows:

$$\text{Down Time Percentage} = \frac{\text{Total down time (in hours) for all machines listed in Exhibit H, List 3} \times 100}{\text{Number of machines in Exhibit H, List 3} \times 500 \text{ Operation Hours}}$$

Equipment "Down Time" Percentage	Percentage of 5 Percent of Available Fee
0 - 1.5%	100%
1.6 - 2.0%	80%
2.1 - 2.5%	60%
> 2.5%	0%

E. Cost Control - Twenty percent of the available incentive fee shall be based upon the Contractor's ability to control cost under CLIN 1.0 and CLIN 2.0. See Section 3, Step 5F for the calculation of cost. The following Incentive Fee chart (Table E) will be used in determining the appropriate fee per period for cost.

TABLE E

Fee Category	Percentage
Maximum Fee	%
Target Fee	%
Minimum Fee	%

3. Reporting Requirements and Evaluation Frequency

The Contractor shall submit on a quarterly basis to the CO and COTR a fee determination report. The report shall contain a contract number, the current date, report number with the applicable reporting period, and the total fee for the period in accordance with the instructions. The total fee computed will be subjected to Government Surveillance in accordance with Section 4 of this plan. The amount of incentive fee earned shall be based upon the Contractor's performance for work requests completed during the period as measured against the performance metrics specified in the SOW. The quarterly report should appear as follows or in a like format and be completed using the directions below.

(1)	(2)	(3)	(4)	(5)
Work Requests	Quality Metric	Schedule Metric	Target Cost	Total Actual Cost

Step 1 - In Column 1, make a complete listing of the work requests completed during the quarter under CLIN 1.0. While work requests are not issued for CLIN 2.0, identify only those tasks performed during the quarter in which the metric was not met for quality and/or schedule.

Step 2 - In Column 2, applicable work requests under CLIN 1.0 should be annotated with a "QS" if identified as "Quality Sensitive". In addition, indicate if the Contractor has failed to meet the work request quality metric by placing an "X" in the column. Work requests that required rework as a result of not meeting the quality metric will not be fee bearing and identified in Column 4, Target Cost, as \$0. If the Contractor has met the metric then the space should be left blank. Identify for CLIN 2.0 tasks that required a "Call Back" with a "CB".

Step 3 - In Column 3, applicable work requests under CLIN 1.0 should be annotated with a "MH" if identified as "Must Hold". In addition, indicate if the Contractor has failed to meet the work request schedule metric by placing an "X" in the column. If the Contractor has met the schedule then the space should be left blank. Identify for CLIN 2.0 tasks that experienced "Down Time" with a "DT" and the representative down time/hours.

Step 4 - In Column 4, identify the target cost for CLIN 2.0 and for each completed work request under CLIN 1.0. The target cost for CLIN 2.0 is the estimated cost identified in Section B.2 of the contract schedule broken out on a quarterly basis. The target cost for each work request under CLIN 1.0 is the negotiated work request amount (reference Section G.5, Work Requests). As stated above, any work requests that were reworked as a result of missing the quality metric will not be fee bearing and are to be identified in Column 4 as \$0. In Column 5, identify the total actual cost incurred under CLIN 2.0 for the three month period and for each work request completed under CLIN 1.0.

Step 5 - The Contractor shall calculate the following:

- A.** Target Cost:
The cumulative target cost for the period is the sum of Column 4.
- B.** The dollar amounts for Target Fee, Maximum Fee, and Minimum Fee:
Multiply the target cost by the negotiated fee percentages contained in the Incentive Fee Chart referenced in Table E.
- C.** The percentage of fee associated with the Quality Metric:
- (1) The percentage for Quality/Electronics Fabrication is derived by taking the total number of X's in Column 2 and applying it to Table A of this plan. For example, if 3 work requests missed the quality metric then the percentage is 60%. Reduce the fee percentage by 10 additional percentage points for each missed quality work request annotated with a "QS". For example, if 2 of the 3 missed work requests were annotated with a "QS" then the 60% will be reduced by 20 percentage points to 40%.
- (2) The percentage for Quality/Electronic Equipment is derived by taking the total number of X's or "CBs" in Column 2 and applying it to Table B of this plan. For example, if 2 tasks missed the quality metric then the percentage is 80%.
- D.** The percentage of fee associated with the Schedule Metric:
- (1) The percentage for Schedule/Electronics Fabrication is calculated by subtracting the total number of X's in Column 3 from the total number of work requests completed during the period and dividing the resulting number by the total number of work requests completed during the period times 100. This percentage is then applied to Table C of this plan. For example, if there is 1X and 10 work requests completed during the period then the percentage of work requirements where the Contractor has met the schedule is $((10-1)/10) \times 100 = 90\%$. The 90% is then applied to Table C of this plan, resulting in 60% for schedule. Reduce the final fee percentage by 10 additional percentage points for each missed schedule annotated with a "MH". For example, if the 1 missed schedule was annotated with a "MH" then the 60% will be reduced by 10 percentage points to 50%.
- (2) The down time percentage for Schedule/Electronic Equipment is calculated as shown in Section 2, Paragraph D of this plan. The hours identified in Column 3 for CLIN 2.0 will be used in the formula identified in Paragraph D. The calculated down time percentage is then applied to Table D.
- E.** The quality and schedule metric fee amount:
Multiply the percentages computed under C and D above by the maximum fee amount established in B above. The Quality Fee and the Schedule Fee will be used in G below to compute the Final Fee.
- F.** The fee associated with cost:
Calculate by using an 70/30 Fee adjustment formula which represents a share line where the Government's share is 70% and the Contractor's share is 30%. The calculation is as follows:
- (1) Compute the cost variance:
Cost Variance = Total Actual Cost (sum of Column 5) - Target Cost (sum of Column 4)
- (2) Compute the Change in Fee:
Change in Fee = Contractor's Share (30%) x Cost Variance
- (3) Compute the Fee associated with the cost metric:

Underrun

Fee for cost metric = Underrun (Actualcost < Target Cost) then: Target Fee + Change in Fee or the Maximum Fee calculated in Step 5B, whichever is less.

Overrun

Fee for cost metric = Overrun (Actual Cost > Target Cost) then: Target Fee - Change in Fee or the Minimum Fee calculated in Step 5B, whichever is greater.

G. Calculation of Final Fee:

Final Fee = (Quality/Electronics Fabrication from Step 5E) x (0.45) +
 (Quality/Electronic Equipment from Step 5E) x (0.05) +
 (Schedule/Electronics Fabrication from Step 5E) x (0.25) +
 (Schedule/Electronic Equipment from Step 5E) x (0.05) +
 (Cost from Step 5F) x (0.20)

4. Surveillance

The quarterly fee report **will** be reviewed by the Government to **verify** that the Contractor has correctly and accurately computed the appropriate amount of fee for the period. This review will be completed by the Government within **5** working days from receipt of the Incentive Fee Report. Once the Government notifies the Contractor of acceptance of the report a proper voucher may be submitted for payment. Accuracy of reporting of quality and schedule will consist of periodic visual monitoring of operations by the COTR or dually appointed representative(s), the NASA Quality Inspector and ISO Auditor and random audits of reports during the evaluation period. Other surveillance techniques may be employed if considered necessary by the Government. If random audits detect reporting errors, the Contractor's final percentage of incentive fee on the element(s) found in error will be reduced by 5% for the first occurrence. Any repeated reporting errors will result in an incentive fee of 0% for the element(s) found in error.

The Government reserves the right to audit actual cost records to verify accuracy for computation of fee for the cost metric. Upon any such audit, the Government may adjust the fee claimed for the current period or previous periods to reflect the correct actual cost. The Contractor shall maintain accounting records that show costs for each work requirement.

EXHIBIT C

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <small>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)</small>			1. CLEARANCE AND SAFEGUARDING A Facility Clearance Required <p style="text-align: center; font-weight: bold; font-size: 1.2em;">SECRET</p> B Level Of Safeguarding Required <p style="text-align: center; font-weight: bold; font-size: 1.2em;">NONE</p>		
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)			3. THIS SPECIFICATION IS: (X and complete as applicable)		
X	A PRIME CONTRACT NUMBER 1-135-CJE.8763	X	A ORIGINAL (Complete Date In All Cases) 97/09/10	Date (YYMMDD)	
	B SUBCONTRACT NUMBER		B REVISED (Supersedes all previous specs) Revision No	Date (YYMMDD)	
X	C SOLICITATION OR OTHER NUMBER 1-135-CJE.8763	Due Date (YYMMDD)	C FINAL (Complete Item 5 In All Cases)	Date (YYMMDD)	
4. IS THIS A FOLLOW-ON CONTRACT? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.					
5. IS THIS A FINAL DD FORM 254? YES <input type="checkbox"/> NO <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 _____					
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)					
A Name, Address, And Zip Code N/A		B Cage Code N/A	C Cognizant Security Office (Name, Address, And Zip Code)		
7. SUBCONTRACTOR					
A Name, Address, And Zip Code N/A		B Cage Code N/A	C Cognizant Security Office (Name, Address, And Zip Code) N/A		
8. ACTUAL PERFORMANCE					
A Location NASA LANGLEY RESEARCH CENTER HAMPTON, VA 23681-0001		B. Cage Code N/A	C. Cognizant Security Office (Name, Address, And Zip Code) N/A		
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT ELECTRONICS FABRICATIO AND ELECTRONIC EQUIPMENT SUPPORT SERVICES					
10. CONTRACTOR REQUIREMENTS			11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL		
A	Communications Security (Comsec) Information	X	A	Have Access To Classified Information Only At Another Contractor's Facility Or A Government Activity	X
B	Restricted Data	X	B	Receive Classified Documents Only	X
C	Critical Nuclear Weapon Design Information	X	C	Receive And Generate Classified Material	X
D	Formerly Restricted Data	X	D	Fabricate, Modify, Or Store Classified Hardware	X
E	Intelligence Information	X	E	Perform Services Only	X
	(1) Sensitive Compartmented Information (Sci)	X	F	Have Access To U.S. Classified Information Outside The U.S., Puerto Rico, U.S. Possessions And Trust Territories	X
	(2) Non-Sci	X	G	Be Authorized To Use The Services Of Defense Technical Information Center (DtIc) Or Other Secondary Distribution Center	X
F	Special Access Information	X	H	Require A Comsec Account	X
G	Nato Information	X	I	Have Tempest Requirements	X
H	Foreign Government Information	X	J	Have Operations Security (Opsec) Requirements	X
I	Limited Dissemination Information	X	K	Be Authorized To Use The Defense Couter Service	X
J	For Official Use Only Information	X	L	Other (Specify)	
K	Other (Specify) N/A				

EXHIBIT C

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)

N/A

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

THE CONTRACTOR WILL BE SUPPORTING ON GOING RESEARCH AND DEVELOPMENT PROGRAMS REQUIRING INDIVIDUALS, DESIGNATED BY GOVERNMENT, TO HAVE A SECRET SECURITY 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 covered 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

ADDRESS (Include Zip Code)

NASA LANGLEY RESEARCH CENTER
M/S 182
HAMPTON, VA 23681-0001

17. REQUIRED DISTRIBUTION

- A. Contractor
- B. Subcontractor
- C. Cognizant Security Office For Prime And Subcontractor
- D. U.S. Activity Responsible For Overseas Security Administration
- E. Administrative Contracting Officer
- F. Others As Necessary

SIGNATURE

EXHIBIT D

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	\$1 1.27
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
03 101 Computer Systems Analyst I 1/	\$17.62
03 102 Computer Systems Analyst II 1/	\$20.28
03 103 Computer Systems Analyst III 1/	\$24.98
03 160 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	E 6.05
07100 Food Service Worker (Cafeteria Worker)	\$ 6.05
07130 Meat Cutter	E 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	\$1 1.20
12280 Phlebotomist	\$ 8.98
12311 Registered Nurse I	\$12.45
123 12 Registered Nurse II	\$15.23
123 13 Registered Nurse II, Specialist	\$15.23
123 14 Registered Nurse III	\$18.43
123 15 Registered Nurse III, Anesthetist	\$18.43
123 16 Registered Nurse IV	\$22.09

INFORMATION AND ARTS:

13002 Audiovisual Librarian	\$11.96
13011 Exhibits Specialist I	\$15.02
130 12 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:

150 10 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
15 160 Presser, Machine, Wearing Apparel, Laundry	\$ 5.49
15 190 Sewing Machine Operator	\$ 7.22
15220 Tailor	\$ 7.67
15250 Washer, Machine	\$ 5.93

MACHINE TOOL OPERATION AND REPAIR:

190 10 Machine-tool Operator (Toolroom)	\$15.49
19040 Tool and Die Maker	\$17.84

MATERIALS HANDLING AND PACKING:

21010 Fuel Distribution System Operator	\$13.37
2 1020 Material Coordinator	\$12.19
21030 Material Expediter	\$12.19
2 1040 Material Handling Laborer	\$ 7.44
21050 Order Filler	\$ 8.46
2 1071 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 11)	\$ 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
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PERSONAL NEEDS:

24570 Child Care Attendant	\$ 6.34
24580 Child Care Center Clerk	\$ 7.91
24600 Chore Aide	E 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	610.50
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	E 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 E

SUBCONTRACTING PLAN

11/11/11

11/11/11

11/11/11

11/11/11

EXHIBIT F

LARC EMS REPORT IPGPLIST
DATA AS OF 10/01/97

EQUIPMENT ASSIGNED TO ON SITE CONTRACTORS

PROCESS DATE 10/01/97
PAGE NUMBER

NEW	E C N OLD	DESCRIPTION MANUFACTURER	SERIAL NO MODEL	USER NAME CUST NAME	ACQ DOCUMENT ACQ DATE	BLDG ROOM	COST
0418448	192939	DISPLAY, DIGITAL, LASER HEWLETT-PACKARD CO	2144A02731 505A		NAS 1 17198 82/10/28	1225 100	6,900
0418450	193785	COMPENSATOR, AUTOMATIC, LASER HEWLETT-PACKARD CO	2044A02565 5510A MODIFIED		L 492168 83/03/01	1225 100	7,590.
0418452	192938	LASER, HELIUM-NEON HEWLETT-PACKARD	1920A02218 5500C		NAS 1 17196 82/10/28	1225 100	7,900.
0427432	192943	TRIPOD, LASER HEWLETT-PACKARD CO	NONE 10580A		NAS 1 17196 82/10/28	1225 100	1,400.
0532017	191386	PLOTTER, GRAPHICS HEWLETT-PACKARD CO	2210A027233 7470A		L 38896B 82/05/28	1225 100	1,116.
G078775		OSCILLOSCOPE, PORTABLE TEKTRONIX INC	8017701 222		L 83924C 90/10/12	1225 201	2,303.
0020160		MULTIMETER, DIGITAL BECKMAN INDUSTRIAL CORP	80318064 HD110T		L 44041C 88/09/02	1225 201	197.
0020161		MULTIMETER, DIGITAL BECKMAN INDUSTRIAL CORP	80331088 HD110T		L 44041C 58/08/02	1225 201	197.
0021309		MULTIMETER, DIGITAL FLUKE JOHN MFG CO INC	51950123 85		L 98906C 01/07/01	1225 201	200.
0055678		OSCILLOSCOPE HITACHI MFG CO	803164 V1065		L 36325C 88/05/31	1225 201	1,421.
0060327		COMPUTER, MICRO COMPUADD	057172 286		L 50369C 89/02/21	1225 201	1,777.
0403824	403824	COMPUTER, MICRO HEWLETT-PACKARD CO	2327A07004 HP85A		L 558078 83/09/29	1225 201	2,509.
0418451	195074	STRAIGHTNESS ADAPTOR, LASER HEWLETT-PACKARD CO	2112A0897 10597A		L 48430B 83/09/28	1225 201	1,810.
0418453	195073	INTERFEROMETER, STRAIGHTNESS HEWLETT-PACKARD CO	1332A00803 10690A		L 484308 83/06/20	1225 201	3,725.
0418454	195076	OPTICAL SQUARE, LASER HEWLETT-PACKARD CO	1524A00699 106928		L 484308 83/08/20	1225 201	3,020.

LARC EMS REPORT IPGPLIST
DATA S OF 10101197

EQUIPMENT ASSIGNED TO ON SITE CONTRACTORS

PROCESS DATE 10101197
PAGE NUMBER

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NEW	OLD						
0424176	192937	RETROREFLECTOR HEWLETT-PACKARD CO	1216A02495 105508		NAS 117196 82/10/28	1225 201	1,265.
0777805	192315	INTERFEROMETER, LASR HEWLETT-PACKARD CO	1948A02405 105658		NAS 117198 82/10/28	1225 201	3,950.
0777807	192942	BEAM BENDER, LASR HEWLETT-PACKARD CO	1208A01550 10558A		ERROR 83/06/17	1225 201	1,400.
1087075		TESTER, ITERFACE DATACON TECHNOLOGIES F D T M	9106702 550		L 98898C 91/07/24	1225 201	241.
0055259		OSCILLOSCOPE PHILIPS ELECTRONIC INSTRUMENTS	0002602 PM3267		1-18655F 90106128	1225 .107	1,576.
G075038		DISPLAY UNIT COMPUADD	00600867 51086		L 80886C 09/08/13	1225 .201	400.
0038457		RECEIVER, RADO, BEEPER MOTOROLA INC AUTOMOTIVE PROD	724XWW7LQF A03GVC5961AA		L 3824 96/10/24	1225 .201	126.
1257709		PRINTER, ADP MATSUSHITA ELEC INDUS CO	3HSBMG03478 KX-P2180		L 42601D 93/12/27	1225 201	177.
006195		COMPUTER, MICRO EVERGREEN WEIGH INC	16733 EX02804A001		L 54028C 89/04/25	1238A .150	5,960
0847005		PRINTER, ADP MATSUSHITA ELEC INDUS CO	9FKARN87898 KX-P1130		L 61161C 89/08/23	1238A .150	195.
0847408		DISPLAY UNIT DELL COMPUTER COPR F-PC'S LTD	90715247 vc2		L 83194C 89/10/02	1238A .150	400.
1087875		PLOTTER, GRAPHICS HEWLETT-PACKARD CO	2929A35756 7440A		L 1199D 91/08/26	1244 .142	855.
1158939		COMPUTER, MICRO GOVERNMENT MICRO RESOURCES	GM920907030 EXPERT486133		NAS 119468 92/12/15	1244 .142	2,199.
1158945		COMPUTER, MICRO GOVERNMENT MICRO RESOURCES	GM920907015 EXPERT488133		NAS 119468 92/12/15	1244 .142	2,199
G074966		COMPUTER, MICRO MICROSMART INC	89A-19303 SMART MICRO286		NA90211-1 09/07/28	1244 .142	1,626.
0847402		DISPLAY UNIT PC'S LIMITED SEE DEL COMPUTERS	90714990 vc2		L 83201C 09/07/26	1244 .142	400.

LARC EMS REPORT IPGPLIST
 DATA AS OF 10/01/97

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PROCESS DATE 10/01/97
 PAGE NUMBER

NEW	E C N		DESCRIPTION MANUFACTURER	SERIAL NO MODEL	USER NAME CUST NAME	ACQ DOCUMENT ACQ DATE	BLDG ROOM	COST
	NEW	OLD						
1091682			MODEM, COMMUNICATIONS INTERNATIONAL BUSINESS MACHINE	23-00C7263 5883		L 9783D 02/03/23	1244 .142	481.
0036455			RECEIVER, RADI MOTOROLA INC	724XWW7LQH A03GVC5961AA		L 3824 96/10/24		126
0038456			RECEIVER, RADI MOTOROLA INC	724XWW7LQG A93GVC5961AA		L 3824 96/10/24		126
0038458			RECEIVER, RADI MOTOROLA INC	724XWW7LQD A03GVC5961AA		L 3824 96/10/24		126
0038459			RECEIVER, RADI MOTOROLA INC	724XWW7LQC A03GVC5961AA		L 3824 96/10/24		126
							TOTAL	\$58,119

EXHIBIT G

LIST OF GOVERNMENT-FURNISHED PROPERTY

CONTRACT NASI -

INVENTORY WORKSHEET - ALL ITEMS

TAG NUMBER	ITEM DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	NASA PROPERTY NUMBER	UNIT COST	DATE ACQUIRED
1003	CABINETW DOORS	EDSAL	3000			160	88/12/00
1023	CABINET, STEEL	GLOBAL	154556TN			192	88/11/00
1049	CABINET. STORAGE	HALLOWELL				02	
1053	CABINETW: SELVES	EDSAL	95654/24C			100	88/12/00
1057	TABLE. OFFICE	ROBERT BROS				130	
1062	BENCH,WORK	HALLOWELL	649M52933			197	
1063	BENCH, WORK	HALLOWELL	649M52933			197	
1074	BENCH. WORK	HALLOWELL	649M52933			197	
1075	BENCH. WORK	HALLOWELL	649M52933			197	
1082	CRIMP TOOK KITS	DANIELS	DMC220		1256869	1754	
1084	BENCH, WORK	HALLOWELL	622W530			354	
1085	TOOL, WIRE WRAP	OK MACH. & TOOL CO	EW8BF	3510		124	
1086	PUNCH/ANVIL SET 15PC	TERIONIC CORP		1500		150	
1092	GUN, ZAP	RAYCHEM	IR500	7038		350	
1098	BENCH. WORK RISER	HALLOWELL	1006010			32	
1099	BENCH. WORK RISER	HOLLOWELL	1006010			32	
1106	PERMATIZER. MINI	RAYCHEM	IR0168	313		632	
1123	TOOL, WIRE WRAP	OK MACH. & TOOL CO	EW8BF	3532		128	
1126	GUN, ZAP	RAYCHEM	IR500	07848		350	
1132	GUN, ZAP	RAYCHEM	IR500	08184		350	
1152	STATICMETER	ANDERSON EFFECTS	DCA1200/1	4234		295	
1182	SLEEVE CUTER	MCDONALD & CO	SC202B			360	
1183	PRESS LEAD FORMING	FANCORT INDUSTRIES	TOF-3			2100	
1188	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1189	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1190	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1191	BENCH WORK	LISTA	01746WS321			922	88/10/00
1192	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1193	BENCH WORK	LISTA	01746WS321			922	88/10/00
1194	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1195	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1196	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1197	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1198	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1199	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1200	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1201	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1202	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1203	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1204	BENCH WORK	LISTA	01746WS321			922	88/10/00
1205	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1206	BENCH, WORK	LISTA	01746WS321			922	88/10/00
1207	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1208	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1209	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1210	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1211	BENCH. WORK	LISTA	01746WS321			922	88/10/00
1216	CABINETW DOORS	EDSAL	3000			160	88/12/00
1217	CABINETW DOORS	EDSAL	3000			160	88/12/00
1218	CABINETW DOORS	EDSAL	3000			160	88/12/00
1219	CABINETW DOORS	EDSAL	3000			160	88/12/00
1220	CABINETW DOORS	EDSAL	3000			160	88/12/00
1221	CABINETW: SHELVES	EDSAL	956541246			100	88/12/00
1222	CABINET W SHELVES	EDSAL	95654/24C			100	88/12/00
1261	PERMATIZER	RAYCHEM	TMS208MK11	2544		500	91/10/31

TAG NUMBER	ITEM DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	NASA PROPERM NUMBER	UNIT COST	DATE ACQUIRED
1280	SHELVING, UTILITY	HALLOWELL	56017218			99	
1282	SHELVING, UTILITY	HALLOWELL	56017218			99	
1283	SHELVING, UTILITY	HALLOWELL	56017218			99	
1284	SHELVING, UTILITY	HALLOWELL	56017218			99	
1285	SHELVING, UTILITY	HALLOWELL	56017218			99	
1286	SHELVING, UTILITY	HALLOWELL	56017218			99	
1287	SHELVING, UTILITY	HALLOWELL	56017218			99	
1288	SHELVING, UTILITY	HALLOWELL	56017218			99	
1290	WIRE MESURING UNIT	HYKON	220	42681		93	
1291	DISPENSER, WIRE	GREENLEE	909			294	
1293	SHELVING, UTILITY	F.E.S.	N/A			67	
1294	SHELVING, UTILITY	F.E.S.	N/A			67	
1297	SHELVING, UTILITY	F.E.S.	N/A			67	
1298	SHELVING, UTILITY					28	
1308	CABINET W: DOORS	HALLOWELL	551018			84	
1317	SHELVING, UTILITY	F.E.S.	N/A			67	
1319	BENCH, WORK	HALLOWELL	649M52933			197	
1322	BENCH, WORK	HALLOWELL	649M52933			197	
1323	BENCH, WORK	HALLOWELL	649M52933			197	
1324	BENCH, WORK	HALLOWELL	649M52933			197	
1325	BENCH, WORK	HALLOWELL	649M52933			197	
1326	BENCH, WORK	HALLOWELL	649M52933			197	
1327	BENCH, WORK	HALLOWELL	649M52933			308	
1328	BENCH, WORK RISER	HOLLOWELL	1006010			32	
1329	BENCH, WORK RISER	HOLLOWELL	1006010			32	
1330	BENCH, WORK RISER	HOLLOWELL	1006010			32	
1331	BENCH, WORK RISER	HOLLOWELL	1006010			32	
1332	BENCH, WORK RISER	HOLLOWELL	1006010			32	
1335	CABINET, STORAGE	COLE	772			183	
1337	SOLDER REMOVER	PACE	SX/301	3258		635	
1349	CABINET W: DOORS	EDSAL	3000			160	88/12/00
1350	ILLUMINATOR F/O	BAUSCH & LOMB	313050			588	89/04/00
1351	WRIST STRAP TESTER	3M	716	71616896		373	90/01/00
1357	SOLDERING STATION	WELLER	EC2001	A00027960		255	92/03/06
1358	SOLDERING STATION	WELLER	EC2001	A00027958		255	92/03/06
1359	MICROSCOPE	BAUSCH & LOMB	SVC125	2190	1256811	450	
1431	DRAWER UNIT	DAYTON	2W787			124	
1432	DRAWER UNIT	DAYTON	2W787/2			124	
1433	DRAWER UNIT	DAYTON	2W787/2			124	
1434	DRAWER UNIT	DAYTON	2W787/2			124	
1438	DRAWER UNIT	DAYTON	2W787/28			124	
1439	DRAWER UNIT	DAYTON	2W787/28			124	
1453	CABINET, STORAGE	F E S				29	
1456	CABINET, STORAGE	HALLOWELL	815S18			82	
1492	STAND, PRINTER	ALFAX	5159			154	
1525	SHELVING, UTILITY					28	
1527	CABINET, STORAGE	HALLOWELL	815S18			82	
1532	BENCH, WORK RISER	HENRY MANN	1006010			32	
1533	CHEST, TOOL	SEARS	9GT6510C			228	
1537	BENCH, WORK	HALLOWELL	649M52933			197	
1542	TESTER CABLE	INMAC	301	01/00721		279	
1551	POUCH LAMINATOR	IBICO	PL-140IC	1407-0507		199	92/06/09
1605	LADDER STEP	LOUISVILLE	3W142/8			140	
1607	CRIMP TOOL KITS	DANIELS	DMC220		1256870	1754	
1608	CABINET, STORAGE	HALLOWELL	815S18			82	
1609	CHEST, TOOL	SEARS	65258			190	
1613	SPLICING KIT, W/TOOLS	GTE PRODUCTS CANADA	900546/536		1256871	2720	
1614	SLEEVE CUTTER	LITTLE JOE	SC102	9256		130	
1615	TABLE PRINTER	BRADY MARKER	BXMC-1	14253		985	88/08/00
1616	DRAWERS, CABINET	QUALITEX	0310186272			100	88/11/00
1617	TOOL KIT	ASTRO	ATK4003	51800007		716	89/05/00
1621	CABINET, STORAGE	F.E.S.				29	
1626	MICROSCOPE	BAUSCH & LOMB	SVC125			568	
1630	SOLDER REMOVER	PACE	PPS5	7681		475	
1639	DESOLDERING SYSTEM	PACE	MBT210	4102		924	90/10R5

TAG NUMBER	ITEM DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	NASA PROPERM NUMBER	UNIT COST	DATE ACQUIRED
1647	TABLE, OFFICE					120	
1663	CABINET, STORAGE	DAYTON	N/A			35	
1669	CABINET	HON	1491663			284	09/09/17
1689	TABLE, CONFERENCE	STEELCASE				206	
1691	CABINET, STORAGE	HALLOWELL				82	
1692	CABINET, STORAGE	HALLOWELL	815S18			82	
1721	LADDER, FIBERGLASS	NOLAND	1224			220	
1723	LIFT, HYDRAULIC	PRESTO ELECTRIC CO	PS262	0186	1256872	1978	
1724	BOOTH, PAINT/SPRAY	ALEMITE	3551T	V2		743	
1731	CABINET SAFETY	JUSTRITE	25720			448	92/04/02
1733	MACHINE, SANDBLAST	ZERO	506665381	14542	1256868	2246	
1736	ROTO BOR (10PCS)	JACY ENGINEERING	RBA			341	
1737	ROTO BOR (8PCS)	JACY ENGINEERING CO	RBAD			447	
1738	BENCH, WORK	HALLOWELL	649M52933			197	
1739	DRILL PRESS	DUMORE	37021	83233084		690	
1740	DRILL PRESS	DUMORE	37021	83233086		690	
1742	DRILL PRESS	DUMORE	37021	83233088		690	
1743	SANDER	POWERMATIC	30A	430A003		869	
1744	BANDSAW	HOUDAILLE POWERMTC	87	487375	1256855	1956	
1745	BRAKE, METAL	PEXTO	PX24A	375		690	
1748	BENCH, WORK	HALLOWELL	605H53033			237	
1749	BANDSAW WELDER	POWERMATIC	600	599118		451	
1751	BENCH, WORK	HALLOWELL				402	
1752	BENCH, WORK	HALLOWELL				321	
1753	BENCH, WORK	HALLOWELL				354	
1765	COUNTER BOR SET	CLEVELAND	39			527	
1770	CABINET, STORAGE	DAYTON				20	
1772	DRAWER UNIT	HALLOWELL				57	
1783	LIGHT, EMERGENCY	DUALITE	AS80BC	8304		231	
1794	CABINET, STORGE	F E S				29	
1796	PUMP COMPRESSOR	GRAINGER WW INC	2493		12568856	1165	88/12/00
2056	BENCH, WORK	HALLOWELL	605H6633			233	
2100	FLAMMABLE, CABINET	JUSTRITE	25450			655	93/01/01
2102	HAZ WSTE CABINET	JUSTRITE	61155			734	93/01/01
2106	ILLUMINATOR FIO	BAUSCH & LOMB	313050			588	93/01/01
2108	METAL RACK, WIRE					50	
2110	SHELVING, UTILITY	F E S.				49	93/01/01
2111	SHELVING, UTILITY	F.E.S.				49	93/01/01
2112	SHELVING, UTILITY	F.E.S.				49	93/01/01
2113	SHELVING, UTILITY	F.E.S.				49	93/01/01
2714	SHELVING, UTILITY	F.E.S.				49	93/01/01
2142	PRESS, LEVER	POPER WHITNEY	34	1086 11 92	1156910	2305	4/08/93
2149	FIBER OPTIC TEST KIT	NOYSE	OLS-1-2			1495	93/10/15
2168	LITNING WORKSTATION	SIRCO	4602WA			324	94/03/04
2174	250MB TAPE BACKUP	COLORADOTRAKKER	JT20C9	189008TA		369	94/04/27
2192	LABEL PRINTER	BROTHER	PT 12	E39325165		140	94/06/28
2240	WORKBENCH	VJDMAR	CCT			409	95/09/15
2242	FIRE PROOF LOCKER	JUSTRITE	4T196			600	95/09/15
2243	FIRE PROOF LOCKER	JUSTRITE	4T196			600	95/09/15
2244	OVEN	BLUE M	POM71406F	P38 25098	0549823	5797	95/09/15
2246	RESISTIVITY METER	ACL INC	499375	A2		150	95/09/15
2247	STRAP TESTER					124	95/09/15
2248	STATIC SENSOR	3M				522	95/09/15
2252	MICROSCOPE	CAMBRIDGE	ZOOM4		1091713	1490	95/09/15
2253	INSPECTIONLIGHT	WALDMAN	STK215FN			350	95/09/15
2256	LARGE FLAT FILE CAB	STANLEY/MIDMAR				380	95/09/15
2257	VINYL CUTER	IOLINE	STUDIO 8	M40941803	1262008	7120	95/09/15
2258	WORK BENCH	PARENT				233	95/09/15
2259	ROLLER CUTTER	ALVIN	30			689	95/09/15
2260	WORK BENCH 3PARTS	STANLEY/MIDMAR				409	95/09/15
2261	WORK BENCH 3PARTS	STANLEY/MIDMAR				409	95/09/15
2263	HOLDING RACK	EDSAL				159	95/09/15
2264	LIGHT TABLE	GRADCO				224	95/09/15
2266	BENCH TOP OVEN	FISHER	349	645		1995	95/09/15
2267	PRINTING TABLE	MICROJUST	2000UA	910		2904	95/09/15

TAG NUMBER	ITEM DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	NASA PROPERTY NUMBER	UNIT COST	DATE ACQUIRED
2268	GROUND PAINT LOCKE	EAGLE	1947			385	95/09/15
2269	WORK BENCH 3PARTS	STANLEYMDMAR				509	95/09/15
2270	MONITOR	DESK TOP DISPLAYS	DDU 4128N	LN 0036	1261444	400	95/09/15
2271	FILM PLOTTER	GERBER	3244	360	061527	42670	95/09/15
2273	CHEMICAL CABINET					100	95/09/15
2274	MONITOR. PLOTTER	LINK	MC2	QOV150062	061528	5100	95/09/15
2275	PUNCH, FILM					100	95/09/15
2276	TRIPLE BEAM SCALE	WELCH				107	95/09/15
2277	TABLE TOP CABINET	EDSAL				159	95/09/15
2278	HALIDE EXP. UNIT	DOUTHITT	3002S			4950	95/09/15
2279	SHELF UNIT					28	95/09/15
2280	DRYING RACK					500	95/09/15
2281	FILM PROCESSOR	COMPUGRAPHICS	66	1966A0859	1156296	7200	95/09/15
2282	COPY CAMERA	NUARC	SS782024	3LU H92001	1156352	9896	95/09/15
2283	STORAGE CABINET	EDSAL				159	95/09/15
2284	ZIP PROCESSOR	METAL PHOTO	14 7	14 7 390		1890	95/09/15
2285	OVEN	FISHER	ISOTEMP349			1995	95/09/15
2286	EXPOSURE UNIT	NUARC	26 1K8LC	8LC D90067	G077373	1400	95/09/15
2287	MERLIN	VARITRONICS	ELITE 2000	JH10222371	1092871	1865	95/09/15
2288	DRILL PRESS	DUMORE	37 021	0923 2445		690	95/09/15
2292	SEALING TANK	METAL PHOTO	2024PST	2024ST571	1432194	1150	95/09/15
2294	CONTACT PRINTER	NUARC	KB8	KB8 G91 02	1086286	1475	95/09/15
2295	FILM CABINET	VIDMAR	4421		1084067	1928	95/09/15
2296	TIMER/CONTROLLER	NUARC				200	95/09/15
2297	RINSE RECIRCULATOR	AGFA	G29F0501	F2900176	1156201	500	95/09/15
2298	DEHUMIDIFIER	WESTINGHOUSE	ED308K6	UNO4201900		285	95/09/15
2299	LIGHT TABLE	SSTE	2024C3LU	3LU H9201		224	95/09/15
2300	METAL SHEAR	DIACRU	4	EB3183		100	95/09/15
2301	ENGRAVING TABLE	NEW HERMES	V900EP	B00150/43	1255778	15807	95/09/15
2302	ENGRAVING TABLE	NEW HERMES	V700EP	40087244	1261023	11851	95/09/15
2303	CABINET	VIDMAR				750	95/09/15
2304	CABINET	VIDMAR				750	95/09/15
2306	CABINET	VIDMAR				409	95/09/15
2307	CABINET	VIDMAR				409	95/09/15
2308	CABINET	VIDMAR				409	95/09/15
2309	CABINET	VIDMAR				409	95/09/15
2314	VACUUM SYSTEM	GAST	R1102C 14	493		468	95/09/15
2315	VACUUM SYSTEM	GAST	R1102C 14	890		468	95/09/15
2316	VACUUM SYSTEM	GST	R1102C 14	1293		468	95/09/15
2317	SAW	N W HERMES	100184			1500	95/09/15
2318	SHEAR METAL	NNV HERMES				350	95/09/15
2319	SHEAR PLASTIC	NNV HERMES				350	95/09/15
2320	DRILL PRESS	DELTA	R9006			175	95/09/15
2321	BNELER	N W HERMES	B4	B4 100335		500	95/09/15
2322	BNELER	NEW HERMES	B6	B6 910613		500	95/09/15
2323	CUTTER, MAXI PRESS	ABILITY PLASTIC	MP9353			275	95/09/15
2324	CORNER ROUNDER	ACCU CUTTER				250	95/09/15
2325	DRILL PORTABLE	DEWALT	37299			175	95/09/15
2327	VACUUM CLEANER	MINUTEMAN	C82904/6	83500073		200	95/09/15
2328	VACUUM CLEANER	ADVACE	PA500	153056		150	95/09/15
2329	VAC EXPOSURE FRAME	NAZ DAR	SPE0616			995	95/09/15
2331	WASHOUT SINK					100	95/09/15
2332	PRESSURE WASHER	AMER. SCREEN	K073			559	95/09/15
2333	PUMP W/CART	AIR	SPE	0522V103G		200	95/09/15
2335	FABRIC STRETCHER	DIAMOND CHASE				121	95/09/15
2336	METER	NEWMAN	ST METER	1E		395	95/09/15
2337	MICROSCOPE	BAUSCH & LAUMB	32 26 94	794	0472833	754	95/09/15
2338	TABLE TOP SCALE	FISHER	XD 8KD	0056695	803558	1425	95/09/15
2339	OVEN, TABLE TOP	FISHER	750G	10700028	1086388	1995	95/09/15
2340	VACUUM PUMP	WELCH	1402	132387	t158092	1435	95/09/15
2342	BEL JAR & GAUGE	DOW/TELEDYNE	v r 4	1310		1609	95/09/15
2343	INSPECTION STATION	ULTRA VIOLET PRO	CX 50			1315	95/09/15
2344	HYGROMETER	BACHARACH	22 7059			100	95/09/15
2346	SCALE, TABLE TOP	FISHER	XD 8KD	1696	G078925	1696	95/09/15
2347	INSPECTION LIGHT	WALDMANN LIGHT	STK215FN			350	95/09/15

TAG NUMBER	ITEM DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	NASA PROPERTY NUMBER	UNIT COST	DATE ACQUIRED
2348	ANALYZER	IND. SCIENCE	TMX410	9404058 16	0803418	1559	95/09/15
2349	SURFACE PLATE	DIGIMATIC	2010			279	95/09/15
2350	CALIPERS	DIGAMATIC	CD 12P	7006878		529	95/09/15
2353	STORAGE CABINET					159	95/09/15
2354	FILE CABINET	SUPREME				100	95/09/15
2355	DRAFTINGTABLE	COMMANDO	ALVIN			500	95/12/04
2356	REVOLVING DOOR	ARISTO				2500	95/12/04
2357	CABINET	EDSAL				159	95/12/04
2423	COMPOSING MACH	JCM	ELITE2000	JH10925367	1156210	1865	96/11/01
2451	8' LADDER	LOUISVILLE				274	
TOTAL COUNT	260					241071	

NOTE: Items without an acquisition date were purchased before January 1988, and there are no records of when these items were acquired.

EXHIBIT H

EQUIPMENT LIST 1

REPRESENTATIVE LIST OF COMPUTER NUMERICAL CONTROL (CNC) & CONVENTIONAL MACHINERY AND EQUIPMENT TO BE MAINTAINED BY THE CONTRACTOR

{ } = Machine age if known

NASA LaRC Bldg 1225, 7 Langley Boulevard Advanced Machining Development Laboratory

CNC Machines

Bridgeport Milling machine (2 ea) {2, 1}
Fadal 4020 HT - Vertical Machining Center (5)
Fadal 8030 HT - Vertical Machining Center {4}
Giddings & Lewis Horizontal DiMill {22}
Japax Wire Burner, Electrical Discharge Machine (6)
P&W BG-71/Keller Contour Mill (26)
Sundstrand Omnimil OM3 (22)
Takisawa Lathe {1}
Wasino LJ 103-M Lathe (2 ea) {9, 12}

Controller Type

Proto-Trak M3-2
Fadal CNC-88
Fadal CNC-88
Allen Bradley 9230
Manufacturer control
Allen Bradley 8400H MP
LM-2/MM Micro Swinc
Fanuc 10T
Fanuc 10T

Conventional Machinery

Agie Die Sinker, Electrical Discharge Machine
Bridgeport Milling Machine (10 ea)

Cordax 100 Measurement Machine
Cordax 7000 Measurement Machine
DeVlieg 43H-48 Spiramatic JigMil
Elox Die Sinker, Electrical Discharge Machine
Lucas Precision Mill
Monarch Lathe, w/tube type spindle drive (4 ea)
Monarch Lathe, w/solid state spindle drive (5 ea)

Controller and/or Readout Type

Manufacturer control
10 w/SONY digital readout system & 6 w/variable speed X-axis
Manufacturer readout system
Manufacturer readout system
SONY digital readout system
Manufacturer control
SONY digital readout system
Manufacturer control
Manufacturer control 1 w/SONY digital readout system
SONY digital readout system
SONY digital readout system
N/A
SONY digital readout system
SONY digital readout system

P&W 1A Jig Borer
P&W 4E Jig Borer
Precision Drill, Mountable (2 ea)
Sheffield 1520 Jig Borer
Tree Mill (4 ea)

NASA LaRC Bldg 1232A, 6 Langley Boulevard Space and Facility Support Laboratory

Conventional Machinery

Clausing Lathe
Bridgeport Milling Machine

LVD Power Brake

Controller and/or Readout Type

Manufacturer readout system
SONY digital readout system with variable speed X-axis
Manufacturer control

**NASA LaRC Bldg 1237C, 1C South Marvin Street
Glass Blowing Laboratory**

CNC Machinew

Bridgeport Milling Machine {5}

Santech Instruments Milling Machine {3}

Controller and/or Readout Type

Incontrol Micromotion control and readout system
Centroid control and readout

**NASA LaRC Bldg 1238, 1 East Durand Road
Electronics Technology Laboratory**

Conventional Machinery

Bridgeport Milling Machine
Monarch Lathe

Controller and/or Readout Type

Acu-Rite III digital readout system
Manual scale readout system

**NASA LaRC Bldg 1238B, 3 East Durand Road
Composite and Model Development Laboratory**

CNC Machinew

Fadal 6030 HT - Vertical Milling Center (2)
Okamoto 3000 - Horizontal Milling Machine (15)
Supermax YCM-60 - Vertical Milling Center (11)

Controller and/or Readout Type

Fadal CNC-88
Fanuc 6M-A
Allen Bradley 8400 H MP

Conventional Machinew

Onsrud overhead router
Bridgeport Milling Machine
Gorton Mastermil Milling Machine
Pathe Single Needle/Fixed Frame Quilting Machine

Controller and/or Readout Type

SONY digital readout system
Trak 103 digital readout system
SONY digital readout system
SONY digital readout system

**NASA LaRC Bldg 1283, 1 Lewis Loop
Engineering and Fabrication Laboratory**

CNC Machinew

Bostomatic - Vertical Milling Center (24)
Fadal 6030 HT - Vertical Milling Center (6)
Hillyer - Fixed Bridge Milling Center (16)
LeBlond-Knight Lathe (15)

Controller and/or Readout Type

Allen Bradley 8400H MP
Fadal CNC-88
Allen Bradley 8400G MP
General Electric 1050

Conventional Machinery

Bridgeport Milling Machine (2 ea)
Cordax 3000 Measurement Machine
Elox Die Sinker - Electrical Discharge Machine
Meuser - Horizontal Milling Machine
Monarch Lathe (2 ea)
P&W Jig Borer 2A
Tree Milling Machine

Controller and/or Readout Type

2 w/SONY digital readout system &
1 w/ Variable speed XY & Z axis & 1 w/Variable
speed X axis only
Manufacturer readout system
Manufacturer control
SONY digital readout system
Tube controlled spindle drive
SONY digital readout system
SONY digital readout system & Variable speed X & Z
axis

EQUIPMENT LIST 2

REPRESENTATIVE LIST OF COMPUTER NUMERICAL CONTROL (CNC)
& CONVENTIONAL MACHINERY AND EQUIPMENT TO BE
CALIBRATED BY THE CONTRACTOR

NASA LaRC Bldg 1238B, 3 East Durand Road
Composite and Model Development Laboratory

Okamoto HMC 3000 Horizontal CNC Mill
YCI/YCM-60 Supermax Vertical CNC Mill
Fadal VMC 6030 Vertical Machining Center - 5 Axis

NASA LaRC Bldg 1283, 1 Lewis Loop
Engineering and Fabrication Laboratory

Bostomatic Vertical CNC Mill
Fadal VMC 6030 Vertical Machining Center
Hillyer Fixed Bridge Mill
LeBlond-Knight CNC Lathe
Mauser Conventional Mill
Pratt & Whitney 2A Conventional Jig Borer

NASA LaRC Bldg 1225, 7 Langley Boulevard
Advanced Machining Development Laboratory

DeVlieg 43H-48 Spiramatic Jig Mill
Fadal VMC 4020 Vertical Machining Center
Fadal VMC 8030 Vertical Machining Center
Giddings & Lewis DiMil Horizontal CNC Mill
Japax LDM-S Wire EDM Machine
K&T/Milwaukee-Matic 1015 Manufacturing Center
Lucas Precision 441B 48 Mil
Pratt & Whitney 4E Conventional Jig Borer
P&W BD-71/Keller CNC Contour Milling Machine
Sheffield 1520 Conventional Jig Borer
Sundstrand Ornnimil OM3 CNC Mill
Wasino LJ 103-M CNC Lathe (New)
Wasino LJ 103-M CNC Lathe (Old)
DeVlieg 3B
Tasikawa CNC Lathe
Pratt & Whitney Jig Borer 1-1/2 B

NASA LaRC Bldg 1232A, 6 Langley Boulevard
Space and Facility Support Laboratory

Waterjet Model 72120

Note: Approximately 18-20 of the listed machines are calibrated each year

EQUIPMENT LIST 3

REPRESENTATIVE LIST OF COMPUTER NUMERICAL CONTROL (CNC)
& CONVENTIONAL MACHINERY AND EQUIPMENT FOR WHICH THE
CONTRACTOR SHALL TRACK & REPORT "DOWN TIME"

NASA LaRC Bldg 1238B, 3 East Durand Road
Composite and Model Development Laboratory

Okamoto HMC 3000 Horizontal CNC Mill
YCI/YCM-60 Supermax Vertical CNC Mill
Fadal VMC 6030 Vertical Machining Center - 5 Axis

NASA LaRC Bldg 1283, 1 Lewis Loop
Engineering and Fabrication Laboratory

Fadal VMC 6030 Vertical Machining Center
Hillyer Fixed Bridge Mill
LeBlond-Knight CNC Lathe
Pratt & Whitney 2A Conventional Jig Borer

NASA LaRC Bldg 1225, 7 Langley Boulevard
Advanced Machining Development Laboratory

DeVlieg43H-48 Spiramatic JigMil
Fadal VMC 4020 Vertical Machining Center
Fadal VMC 8030 Vertical Machining Center
Giddings & Lewis DiMil Horizontal CNC Mil
Japax LDM-S Wire EDM Machine
Pratt & Whitney 4E Conventional Jig Borer
P&W BD-71/Keller CNC Contour Milling Machine
Sheffield 1520 Conventional Jig Borer
Sundstrand Omnimil OM3 CNC Mil
Wasino LJ 103-M CNC Lathe (New)
Wasino LJ 103-M CNC Lathe (Old)
Tasikawa CNC Lathe

NASA LaRC Bldg 1237C, I C South Marvin Street
Glass Blowing Laboratory

Bridgeport Milling Machine
Santech Instruments Milling Machine

EXHIBIT I

126 NAS1-#/#)

TO: NASA Langley Research Center
 126/Contract Specialist
 Hampton, VA 23681-0001

FROM: (Insert Company Name)

SUBJECT: Monthly Progress Report for Socioeconomic Goals - NAS1-_____ for Period _____
month/day/year

- 10a. Small Business Concerns: \$ _____
 (include SDB, WOSB, HBCU/MI)
- 10b. Large Business Concerns: \$ _____
- 10c. Total (sum of Sm & Lg Bus): \$ _____
- 11. Small Disadv. Bus. Concerns: \$ _____
 (include HBCU/MI)
- 12. Woman-Owned Small Bus.: \$ _____
 (include as part of 10a & 11 above)
- Historically Black Colleges/Univ.: \$ _____
 and/or Minority Institutions (include as
 part of 10a & 11 above)

You shall propose your approach for satisfying the Government's technical requirements as set forth in Section C, Statement of Work. Your technical approach shall be structured to specifically address the seven (7) Qualitative Evaluation Criteria (QEC) listed below. The QEC's will be used by the Government to evaluate the qualitative merit of your technical proposal.

PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K.1 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11) (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief, that on or after December 23, 1989, -

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

K.2 TAXPAYER IDENTIFICATION (FAR 52.204-3) (JUNE 1997)

(a) Definitions.

"Common parent," as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Corporate status," as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.

"Taxpayer Identification Number (TIN)," as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.

(b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in FAR 4.903, the failure or refusal by the

offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) Taxpayer Identification Number (TIN).

TIN: _____

TIN has been applied for.

TIN is not required because:

Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

Offeror is an agency or instrumentality of a foreign Government;

Offeror is an agency or instrumentality of a Federal, state, or local Government;

Other. State basis. _____

(d) Corporate Status.

Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

Other corporate entity;

Not a corporate entity;

Sole proprietorship

Partnership

Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(e) Common Parent.

Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

Name and TIN of common parent:

Name _____

TIN _____

K.3 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (MAR 1996)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that -

(i) The Offeror and/or any of its Principals -

(A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency:

(B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a Governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION

MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the Certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

K.4 TYPE OF BUSINESS ORGANIZATION (FAR 52.215-6)(JUL 1987)

The offeror or quoter, by checking the applicable box, represents that -

(a) It operates as () a corporation incorporated under the laws of the State of _____
() an individual, () a partnership, () a nonprofit organization, or () a joint venture; or

(b) If the offeror or quoter is a foreign entity, it operates as () an individual, () a partnership, () a nonprofit organization, () a joint venture, or () a corporation, registered for business in _____
country

K.5 AUTHORIZED NEGOTIATORS (FAR 52.215-11) (APR 1984)

The offeror or quoter represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this request for proposals or quotations: (list names, titles, and telephone numbers of the authorized negotiators).

K.6 PERIOD FOR ACCEPTANCE OF OFFER (FAR 52.215-19)(APR 1984)

In compliance with the solicitation, the offeror agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date specified in the solicitation for receipt of offers, to furnish any or all items on which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the Schedule.

K.7 PLACE OF PERFORMANCE (FAR 52.215-20)(APR 1984)

(a) The offeror or quoter, in the performance of any contract resulting from this solicitation, () intends, () does not, intend (check applicable block), to use one or more plants or facilities located at a different address from the address of the offeror or quoter as indicated in this proposal or quotation.

(b) If the offeror or quoter checks "intends" in paragraph (a) above, it shall insert in the spaces provided below the required information:

Place of Performance (Street Address, City, County, State, Zip Code)	Name and Address of Owner and Operator of the Plant or Facility if Other than Offeror or Quoter
_____	_____
_____	_____
_____	_____

K.8 SMALL BUSINESS PROGRAM REPRESENTATIONS(FAR 52.219-1) (JAN 1997)

(a)(1) The standard industrial classification (SIC) code for this acquisition is 7629 .

(2) The small business size standard is \$5.0 M .

(3) **The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.**

(b) Representations. (1) The offeror represents as part of its offer that it is: () a small business concern, () not a small business concern.

(2) (Complete only if offeror represented itself as a small business concern in Block (c)(1) of this section.) The offeror represents as part of its offer that it () is, () is into a small disadvantaged business concern.

(3) (Complete only if offeror represented itself as a small business concern in Block (b)(1) of this section.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.

(c) Definitions.

"Joint venture," for purposes of a small disadvantaged business (SDB) set-aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically disadvantaged individuals entering into a joint venture agreement with one or more business concerns and is considered to be affiliated for size purposes with such other concern(s). The combined annual receipts or employees of the concerns entering into the joint venture must meet the applicable size standard corresponding to the SIC code designated for the contract. The majority of the venture's earnings must accrue directly to the socially and economically disadvantaged individuals in the SDB concern(s) in the joint venture. The percentage of the ownership involvement in a joint venture by disadvantaged individuals must be at least 51 percent.

"Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standard in Paragraph (a) of this provision.

"Small disadvantaged business concern," as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

"Woman-owned small business concern," as used in this provision, means a small business concern—

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.
 (d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to sections 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall –

- (i) Be punished by imposition of a fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the

Act.

K.9 CERTIFICATION OF NONSEGREGATED FACILITIES (FAR 52.222-21) (APR 1984)

(a) "Segregated facilities", as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(b) By the submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(c) The offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will –

- (1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;
- (2) Retain the certifications in the files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR
CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subcontractor will be subject to the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

K.10 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22) (APR 1984)

The offeror represents that –

- (a) It () has, () has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;
- (b) It () has, () has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

K.11 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25) (APR 1984)

The offeror represents that (a) it () has developed and has on file, () has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or (b) it () has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

K.12 CLEAN AIR AND WATER CERTIFICATION (FAR 52.223-1) (APR 1984)

The offeror certifies that -

- (a) Any facility to be used in the performance of this proposed contract () is, () is not, listed on the Environmental Protection Agency List of Violating Facilities;
- (b) The offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- (c) The offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

K.13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13) (OCP 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.14 BUY AMERICAN CERTIFICATE (FAR 52.225-1) (DEC 1989)

The offeror certifies that each end product, except those listed below, is a domestic end product (as defined in the clause entitled "Buy American Act - Supplies"), and that components of unknown origin are considered to have been mined, produced, or manufactured outside the United States.

Excluded End Products	Country of Origin

(List as necessary)

Offerors may obtain from the Contracting Officer lists of articles, materials, and supplies excepted from the Buy American Act.

K.15 USE OF GOVERNMENT-OWNED PROPERTY (NASA 1852.245-79) (JUL1997)

(a) The offeror () does, () does not intend to use in performance of any contract awarded as a result of this solicitation existing Government-owned facilities (real property or plant equipment), special test equipment, or special tooling (including any property offered by this solicitation). The offeror shall identify any offered property not intended to be used. If the offeror does intend to use any of the above items, the offeror must furnish the following information required by Federal Acquisition Regulation (FAR) 45.205(b), and NASA FAR Supplement (NFS) 1845.102-71:

- (1) Identification and quantity of each item. Include the item's acquisition cost if it is not property offered by this solicitation.
- (2) For property not offered by this solicitation, identification of the Government contract under which the property is accountable and written permission for its use from the cognizant Contracting Officer.
- (3) Amount of rent calculated in accordance with FAR 45.403 and the clause at FAR 52.245-9, Use and Charges, unless the property has been offered on a rent-free basis by this solicitation.
- (4) The dates during which the property will be available for use, and if it is to be used in more than one contract, the amounts of respective uses in sufficient detail to support proration of the rent. This information is not required for property offered by this solicitation.

(b) The offeror () does, () does not request additional Government provided property for use in performing any contract awarded as a result of this solicitation. If the offeror requests additional Government-provided property, the offeror must furnish —

- (1) Identification of the property, quantity, and estimated acquisition cost of each item; and
- (2) The offeror's written statement of its inability to obtain facilities as prescribed by FAR 45.302-1(a)(4).

(c) If the offeror intends to use any Government property (paragraph (a) or (b) of this provision), the offer must also furnish the following:

- (1) The date of the last Government review of the offeror's property control and accounting system, actions taken to correct any deficiencies found, and the name and telephone number of the cognizant property administrator.
- (2) A statement that the offeror has reviewed, understands, and can comply with all property management and accounting procedures in the solicitation, FAR Subpart 45.5, and NFS Subparts 1845.5 and 1845.71.

(3) A statement indicating whether or not the costs associated with paragraph (2) of this provision, including plant clearance and/or plant reconversion costs, are included in its cost proposal.

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

L.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>
52.204-6	Contractor Identification Number—Data Universal Numbering System (DUNS) Number (DEC 1996)
52.215-5	Solicitation Definitions (JUL 1987)
52.215-7	Unnecessarily Elaborate Proposals Or Quotations (APR 1984)
52.215-8	Amendments To Solicitations (DEC 1989)
52.215-9	Submission Of Offers (MAR 1997)
52.215-10	Late Submissions, Modifications, And Withdrawals Of Proposals (MAY 1997)
52.215-13	Preparation Of Offers (APR 1984)
52.215-14	Explanation To Prospective Offerors (APR 1984)
52.215-15	Failure To Submit Offer (MAY 1997)
52.215-30	Facilities Capital Cost Of Money (SEP 1987)
52.217-5	Evaluation Of Options (JUL 1990)
52.222-24	Preaward On-Site Equal Opportunity Compliance Review (APR 1984)
52.252-2	Clauses Incorporated By Reference (JUN 1988)

NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
1852.215-75	Expenses Related To Offeror Submissions (DEC 1988)
1852.227-71	Requests For Waiver Of Rights To Inventions (APR 1984)

L.2 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (FAR 52.211-14) (SEP 1990)

Any contract awarded as a result of this solicitation will be () **DX** rated order; (X) **DO** rated order certified for national defense use under the Defense Priorities and Allocations System (**DPAS**) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation.

L.3 CONTRACT AWARD (FAR 52.215-16) (OCT 1995)—ALTERNATE II (OCT 1995)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, specified elsewhere in this solicitation, considered.

(b) The Government may (1) reject any or all offers if such action is in the public interest, (2) accept other than the lowest offer, and (3) waive informalities and minor irregularities in offers received.

(c) The Government intends to evaluate proposals and award a contract without discussions **with** offerors (except communications conducted for the purpose of minor clarification). Therefore, each initial offer should contain the offeror's best terms from a cost or price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary.

(d) The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the offer.

(e) A written award or acceptance of offer mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer, as provided in paragraph (d) above), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. Negotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, inaccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are materially unbalanced between line items or subline items. An offer is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the offer will result in the lowest overall cost to the Government, even though it may be the low evaluated offer, or it is so unbalanced as to be tantamount to allowing an advance payment.

(h) The Government may disclose the following information in post-award debriefings to other offerors; (1) the overall evaluated cost or price and technical rating of the successful offeror; (2) the overall ranking of all offerors, when any ranking was developed by the agency during source selection; (3) a summary of the rationale for award; and (4) for acquisitions of commercial end items, the make and model of the item to be delivered by the successful offeror.

L.4 TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)

The Government contemplates award of a cost-plus-incentive-fee contract resulting from this solicitation.

L.5 SERVICE OF PROTEST (FAR 52.233-2) (AUG 1996)

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Head, Acquisition Support Group A.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

L.6 RESERVED

L.7 SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN

(a) This provision is not applicable to small business concerns.

(b) The contract expected to result from this solicitation will contain FAR clause 52.219-9, "Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan" Alternate II. Each offeror must submit the complete plan with its initial proposal.

L.8 DETERMINATION OF COMPENSATION REASONABLENESS (1852.231-71) (MAR 1994)

(a) The proposal shall include a total compensation plan. This plan shall address all proposed labor categories, including those personnel subject to union agreements, the Service Contract Act, and those exempt from both of the above. The total compensation plan shall include the salaries/wages, fringe benefits and leave programs proposed for each of these categories of labor. The plan also shall include a discussion of the consistency of the plan among the categories of labor being proposed. Differences between benefits offered professional and non-professional employees shall be highlighted. The requirements of this plan may be combined with that required by the clause at FAR 52.222-46, "Evaluation of Compensation for Professional Employees."

(b) The offeror shall provide written support to demonstrate that its proposed Compensation is reasonable.

(c) The offeror shall include the rationale for any conformance procedures used or those Service Contract Act employees proposed that do not fall within the scope of any classification listed in the applicable wage determination.

(d) The offeror shall require all service subcontractors (1) with proposed cost reimbursement or non-competitive fixed-price type subcontracts having a total potential value in excess of \$500,000 and (2) the cumulative value of all their service subcontracts under the proposed prime contract in excess of 10 percent of the prime contract's total potential value, provide as part of their proposals the information identified in (a) through (c) of this provision.

L 9 PROTESTS TO NASA (1852.233-70) (MAR 1997)

Potential bidders or offerors may submit a protest under 48 CFR Part 33 (FAR Part 33) directly to the Contracting Officer. As an alternative to the Contracting Officer's consideration of a protest, a potential bidder or offeror may submit the protest to the Deputy Associate Administrator for Procurement, who will serve as or designate the official responsible for conducting an independent review. Protests requesting an independent review shall be addressed to Deputy Associate Administrator for Procurement, NASA Code H, Washington, DC 20546-0001.

L.10 IDENTIFICATION OF UNCOMPENSATED OVERTIME (FAR 52.237-10) (OCT 1997)

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

"Uncompensated overtime" means the hours worked without additional compensation in excess of an average of 40 hours per week by direct charge employees who are exempt from the Fair Labor Standards Act. Compensated personal absences such as holidays, vacations, and sick leave shall be included in the normal work week for purposes of computing uncompensated overtime hours.

"Uncompensated overtime rate" is the rate that results from multiplying the hourly rate for a 40-hour work week by 40, and then dividing by the proposed hours per week. For example, 45 hours proposed on a 40-hour work week basis at \$20 per hour would be converted to an uncompensated overtime rate of \$17.78 per hour ($\$20.00 \times 40 \text{ divided by } 45 = \17.78).

(b) For any proposed hours against which an uncompensated overtime rate is applied, the offeror shall identify in its proposal the hours in excess of an average of 40 hours per week, by labor category at the same level of detail as compensated hours, and the uncompensated overtime rate per hour, whether at the prime or subcontract level. This includes uncompensated overtime hours that are in indirect cost pools for personnel whose regular hours are normally charged direct.

- (c) The offeror's accounting practices used to estimate uncompensated overtime must be consistent with its cost accounting practices used to accumulate and report uncompensated overtime hours.
- (d) Proposals that include unrealistically low labor rates, or that do not otherwise demonstrate cost realism, will be considered in a risk assessment and will be evaluated for award in accordance with that assessment.
- (e) The offeror shall include a copy of its policy addressing uncompensated overtime with its proposal.

L. II COMMUNICATIONS REGARDING THIS SOLICITATION (LaRC 52.204-95) (OCT 1993)

Any communications in reference to this solicitation shall cite the solicitation number and be directed to the following Government representative:

Name: Tracy M. Spruill
 Phone: (757) 864-2538 (COLLECT CALLS NOT ACCEPTED)
 Facsimile: 757-864-7709
 Address: National Aeronautics and Space Administration
 Langley Research Center
 Attn: Tracy M. Spruill, Mail Code 126
 Hampton, VA 23681-0001
 Email Address: t.m.spruill@arc.nasa.gov

Any written communications must include the mail code on the envelope or on the telex.

L.12 FACSIMILE TRANSMISSION—BIDS OR PROPOSALS (LaRC 52.204-100) (APR 1996)

- (a) Definition. "Facsimile transmission," as used in this solicitation, means a submittal, via electronic equipment that communicates and reproduces both printed and handwritten material, for a modification of a bid or proposal or withdrawal of a bid or proposal that is submitted to and received by the Government, or an acknowledgment of amendment(s) to the solicitation.
- (b) OFFERORS MAY NOT SUBMIT FACSIMILE BIDS OR PROPOSALS AS RESPONSES TO THIS SOLICITATION. Facsimile bids or proposals will not be considered.

L.13 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (FAR 52.215-41) (JAN 1997) —ALTERNATE IV (OCT 1995).

- (a) Submission of cost or pricing data is not required.
- (b) The Contractor shall provide cost and pricing information as prescribed in L.16, Paragraph D, Business Proposal (Volume II) Instructions.

L.14 USE OF GOVERNMENT SUPPLY SOURCES

You may assume for proposal preparation purposes that use of Government sources such as GSA Contractors will be authorized. Reference FAR Clause 52.251-1.

L.15 SMALL DISADVANTAGED **BUSINESS** (SDB) PARTICIATION GOAL

Offerors are advised that, in keeping with Congressionally-mandated goals, NASA seeks to place a fair portion of its contract dollars, where feasible, with small disadvantaged business concerns as defined in 52.219-8 of the FAR and 1852.219-76 of the NASA FAR Supplement. For **this** procurement, the Contracting Officer has established a goal of **8** percent for SDB participation. The goal is stated as a

percentage of the total contract value, including all options, and not as a percentage of the total planned subcontracting dollars. SDB participation includes participation by small business concerns owned and controlled by women, Historically Black Colleges and Universities and other minority educational institutions.

NASA encourages all offers to propose to meet or exceed this goal to the maximum extent practicable and to continue to encourage small disadvantaged business development throughout the contract period. Proposals will be evaluated on proposed SDB participation in comparison with the 8 percent goal, and on the methods proposed for achieving the goal.

L.16 PROPOSAL PREPARATION AND SUBMISSION--SPECIAL INSTRUCTIONS

A. General Information

1. Number of Proposals, Time and Place of Submission—The offeror shall **submit the original and 7 copies** of each volume of his proposal to the **address** shown in **Block 8 of the Standard Form (SF) 33** (face page of this solicitation), or **if hand carried**, to the depository listed in **Block 9 of the SF 33**. Offers must be received at the place indicated on or before the date and hour shown in **Block 9 of the SF 33**.

2. Proposal Clarity—Your proposal should be specific, complete, and concise. The offeror is urged to examine this solicitation in its entirety and to assure that his proposal contains all the necessary information, provides all required documentation and is complete in all respects since evaluation of the proposal will be based on the actual material presented and not on the basis of what is implied. You should ensure that your cost proposal is consistent with your technical proposal in all respects since the cost proposal may be used as an aid to determine the offeror's understanding of the technical requirements. Discrepancies may be viewed as a lack of understanding.

B. Proposal Format and Content

4. Proposals must be submitted in two (2) volumes: Volume I, Technical Proposal, and Volume II, Business Proposal. No cost information shall be presented in the Technical Proposal.

2. Proposal Page Limitations (NASA 1852.215-81) (JAN 1994)

a. The following page limitations are established for each portion of the proposal submitted in response to this solicitation.

<u>Proposal Section</u>	<u>Page Limit</u>
Volume I, Technical Proposal	50 (inclusive of charts, graphs, tables, diagrams, photographs and figures)

b. A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 characters per inch (or equivalent) type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. The metric standard format most closely approximating the described standard 8 1/2" x 11" size may also be used.

c. Title pages, tables of contents and response to QEC 2 are excluded from the page counts specified in paragraph (a) of this provision. In addition, the Cost section of your proposal is not page limited. However, this section is to be strictly limited to responses to Factors 2, 3, the executed Section K, Representations, Certifications, and Other Statements of Offerors, and the executed contractual document representing your offer. (See Section L, L.16.D.2.). (The Small and Small

Disadvantaged Business Subcontracting Plan will be considered part of the contract offer, and should not be included with the response to Volume I, QEC 4 - Offeror's Approach to Meeting the 8% Small Disadvantaged Business (SDB) Participation Goal, and thus will not count against the Volume I page limitation. The response to Volume I, QEC 4 will count against Volume I page limitations.) Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that section's page limitation.

d. If Best and Final Offers (BAFOs) are requested, separate page limitations will be specified in the Government's request for that submission.

e. Pages submitted in excess of the limitations specified in this provision will not be evaluated by the Government and will be returned to the offeror.

3. Any work functions which the offeror expects to obtain through subcontracting **and/or** consulting agreements should be described and explained. Such features as the rationale for this arrangement, the qualifications of the subcontractor, magnitude of **effort, facilities/equipment and** commitment of parties providing such goods and/or services should be addressed.

4. Each volume should be specific and complete. Each volume should include **the** detailed information outlined below in order that it can be evaluated in accordance with the evaluation ratings set forth in Section M, M.3. You should structure each volume to adhere to the Factor headings listed below:

C. TECHNICAL PROPOSAL - VOLUME 1: FACTOR 1

You shall propose your approach for satisfying the Government's technical requirements as set forth in Section C, Statement of Work through your responses to the 5 Qualitative Evaluation Criteria (QEC) listed below. The QEC's will be used by the Government to evaluate the qualitative merit of your technical proposal. Subcontracting and/or teaming arrangements must be identified along with the role each team member will play in work performance.

1. Understanding the Requirement and Approach

(a) Electronics Fabrication – Your approach for accomplishing fabrication of research-oriented electronics instrumentation including meeting the multifaceted electronics fabrication requirements of the **SOW** will be evaluated. Describe your approach for **organizing**, assigning resources, tracking and controlling work including methods for monitoring performance and enhancing and maintaining quality. In addition, you should describe your plans for providing supervision and oversight of the hands-on work performed in each functional work area included under CLIN 1. Explain your approach for securing customer feedback and for ensuring a continuing high degree of customer satisfaction with electronics fabrication services. Your understanding of potential problems and solutions applicable to the fabrication of research-oriented electronics instrumentation and approach for ensuring technical objectives are met on schedule should be addressed. Your proposal will be evaluated for electronics fabrication methods, techniques, and processes employed. You should describe your approach for maintaining continuity of support during periods of increased workload as well as during increasingly frequent periods when the workload is depressed due to reduced budgets, canceled projects, and/or general lack of work. You should include your detailed plans for minimizing costs under these scenarios. Address each work area under CLIN 1.0 in relation to the above.

(b) Electronic Equipment Support – Your approach for providing the **full** range of electronic equipment services required to support the various Government-owned Computer Numerical Control (CNC) and conventional machinery and equipment described in the SOW and Exhibit H will be evaluated. Describe your approach for organizing, assigning resources, tracking and controlling work including methods for monitoring performance **and** enhancing quality. Address your approach for

ensuring timely and effective response to urgent service requests and for ensuring equipment downtime is minimized. Explain your approach for securing customer feedback and for ensuring a continuing high degree of customer satisfaction with electronic equipment services.

(c) **Response to Urgent Work Requests** – Your approach to responding to urgent work requests in all functional work areas within 1 hour of notification (on both a regular daily basis and emergency call 24 hours, 7 days a week basis), and to complete the work requirements in a timely manner will be evaluated.

2. **Phase-In/Staffing** – This OEC will be used to evaluate the effectiveness of your plan to minimize changeover difficulties, to maximize continuity of services to the Government and your approach to recruiting and retaining **qualified/skilled** personnel through contract life. Your proposal should detail your phase-in plan to include the specific schedule for completion of each phase-in activity. Your initial staffing plan should detail sources of personnel for the entire complement, recruiting methods, and initial orientation and training. You should specify the expected amount of incumbent personnel retention and **the basis therefore**. If applicable, include your **approach for integrating any proposed subcontract/teaming arrangements**. Explain your **approach for maintaining competent staffing and appropriate skill mix** for efficient contract performance in light of fluctuating workloads and an environment characterized by shrinking budgetary resources. Explain your overall **workload/workforce** management strategy including your detailed plans for adjusting, balancing and maintaining personnel staffing level appropriately matched to the workload in light of the environment.

3. **Facilities and Equipment** – Your proposal will be evaluated for suitability and availability of all electronics fabrication, electronic equipment, and other associated facilities and equipment to be provided in support of the Statement of Work. Identify and explain what equipment you deem as essential to performing the work in all areas of the SOW that are not included in Exhibits F or G. Include evidence of facility availability or substantiate your capability to establish a facility by contract start date. Your proposal should specify the location, size, general description, interior layout and equipment layout of the facility. (Layout drawing should be to scale.) Describe any lease or purchase arrangements and your plan for maintaining full operational status of the facility by contract start date. (Facility may be inspected.) Your proposal should include a discussion of the impact that the geographic location of your facilities will have on your ability to meet the response time requirements in the Statement of Work.

4. **Offeror's Approach to Meeting the 8% Small Disadvantaged Business (SDB) Participation Goal** -- While small businesses are not required to submit a subcontracting plan in accordance with FAR 52.219-9 and NASA FAR Supplement (NFS) 18-52.219-73, small businesses as well as large businesses are subject to the 8% percent small disadvantaged business (SDB) participation goal for this procurement. Offerors shall make an independent assessment of subcontracting opportunities and the SDB participation goal - expressed as a percentage of the total contract dollar value rather than as a percentage of subcontracting dollars and shall propose methods for achieving this goal (see L.15). Offerors shall include in their proposal a discussion of the types and amount of work (in dollars) that will be performed by SDB's. An initial proposal will not be rejected as unacceptable solely as a result of an offeror proposing a goal that is less than the 8 percentage goal specified by this RFP.

5. **ISO 9002**

If the Offeror is third-party registered as compliant with the requirements of the current version of ISO 9002, the Offeror shall provide a copy of its registration certificate with its proposal. Offerors that are not third-party registered as compliant with the requirements of ISO 9002 shall submit an implementation plan which conveys their approach and ability to secure a registration certification within 12 months. This plan shall include a detailed schedule of activities, a resource plan, and a cost estimate for securing the registration certificate(s) by the required date. Other details, such as consultants or subcontractors to be utilized, the identity of the certified third party registrar that will perform the ISO audit,

etc., shall be included in the plan. Compliance without certification by a third party registrar is NOT acceptable.

D. BUSINESS PROPOSAL - VOLUME II; FACTOR 2

1. FACTOR 2 - COST

It is expected that this contract will be awarded based upon a determination that there is adequate price competition. However, under requirements of the Federal Acquisition Regulation (FAR), the Contracting Officer is responsible for determining the reasonableness of prices on cost realism of the proposals and the extent to which prices reflect the performance addressed in the Technical Proposal. Therefore, each offeror is required to submit cost or pricing information with the proposal, pursuant to FAR 52.215-41, Alternate IV.

a. Standard Form (SF) 1448 Instructions

(1) In submitting the cost proposal, the offeror shall submit a fully completed SF 1448, Contract Pricing Proposal Cover Sheet, a copy of which is included as Attachment 1 of this solicitation. The cost proposal as represented by the SF 1448 should be prepared in a manner consistent with your current accounting system and Cost Accounting Standards Disclosure Statement, if applicable. Each subcontract expected to exceed in total \$500,000 shall also be supported by fully executed SF 1448. Prospective subcontractors may submit proprietary cost information directly to the Government no later than the date and time specified in the SF 33 instructions for receipt of offers.

(2) The offeror shall fully comply with the requirements set forth in Table 15-3, Instructions for Submission of Information Other Than Cost or Pricing Data, of FAR 15.804-6(b)(2). Include in your cost proposal sufficient detail to support and explain all costs proposed, giving figures and narrative explanation. Since an award may be made without further discussion, this information must be submitted with your proposal.

b. Computerized Cost Proposal Input Instructions

(1) The Government intends to use a personal computer with Windows 95 and LOTUS 1-2-3 software to aid in the evaluation of the cost proposal. The offerors and subcontractors providing direct labor are requested to submit cost data on floppy diskettes, two copies, 3-1/2 inch, formatted under MS DOS. Computerized cost data must be the identical data and format as that submitted in the paper proposal. In the event of any inconsistency between the diskettes and the paper proposal, the paper proposal will be considered the intended version. Any questions related to the computerized cost proposal shall be directed to John Bush at (757) 864-2544.

(2) If diskettes are provided, affix an external label to each indicating the company name and the RFP number. Provide all data information under one file name with no external links.

ALL DISKETTE SUBMISSIONS SHALL BE TRUE SELF-CALCULATING SPREADSHEETS. Any "absolute values" must be explained and their values supported.

c. Price and Cost Detail Instructions

(1) All cost and pricing information should be submitted in a format consistent with the contract's initial one-year base period and four one-year option periods, and should be submitted separately and in detail for each CLIN. Costs applicable to more than one CLIN, such as vehicles and management, shall be apportioned among the CLINs with the apportionment rationale provided. Assume a start date of May 1, 1998.

(2) Labor - You must propose the labor hours necessary to provide the services set forth in Section C, Statement of Work. Your proposal must show the hours and costs by labor classification; however, the resultant contract will not reflect a specified level-of-effort. If you propose to subcontract any of the positions, so indicate. Any composite hourly rates must be explained.

Fully burdened labor rates - Propose annual labor rates that are fully burdened (except for materials specified under (4) below and fee) for the blank spaces in B. 1.B and H. 2 (options). The offeror must itemize and explain all components such as direct labor rates, escalation, overhead, fringe benefits, G&A, company unique ODC, business license tax, and the basis for any other included costs. Identify applicable rates and factors. If subcontracted, any prime load should be included in any resulting fully burdened labor rate.

To assist you in your proposal preparation for this solicitation, the Government is providing the following estimates. As all work under CLIN 1 will be work request driven and very difficult to project, you must propose CLIN 1 according to these estimates. The estimates are not restrictive for proposing CLIN 2; however, your technical and cost proposals for CLIN 2 must correlate and support each other fully.

Contract Positions	DOL Classification	Estimated Direct Productive Labor Hours by CLINs				
		Base	Option 1	Option 2	Option 3	Option 4
Engineering Technician II (CLIN 1)	Engineering Technician II	3,886	3,886	3,886	3,886	3,886
Engineering Technician I (CLIN 1)	Engineering Technician I	50,505	50,505	50,505	50,505	50,505
Engineering Technician III (CLIN 2)	Engineering Technician III	1,943	1,943	1,943	1,943	1,943
Engineering Technician II (CLIN 2)	Engineering Technician II	1,943	1,943	1,943	1,943	1,943
Calibration Technician (CLIN 2)		500	500	500	500	500

The "direct labor hours" specified above are defined as those direct hands-on hours expended by Contractor personnel in performing the Statement of Work as defined in Section C (including subcontractors and Quality Assurance). Approximately 5 percent of the above hours represent overtime work. It does not include administrative or other labor which the Contractor charges as direct labor under its established accounting policy and procedures. The term does not include sick leave, vacation, holiday leave, military leave, or any type of administrative leave. It does not include hours such as work leader supervision, personnel training and certification, safety and other meetings, shop clean-up/up-keep, etc., that are not directly applied to SOW requirements. Costs associated with these hours should be included in your fully burdened rate. Identify and explain how these costs are factored into your fully burdened rate.

Additionally, historical workload data is provided in Attachment 5. Any variance from the estimated labor hours and skill mix shown above should be fully supported by your technical proposal.

A copy of the Register of Wage Determinations (WD) and Fringe Benefits issued by the Department of Labor for employees under this proposed contract is included as Exhibit D. It should be noted that the wage rates specified therein are minimum rates. Confirm the minimum benefits are met and provide the confirming

calculations. It should also be noted that the Wage Determinations may not list all labor classes to be employed under this contract. Paragraph(a) of the Section I clause entitled "Service Contract Act of 1965" states that in this event, conformable rates must be established for those service employees to be employed under the contract but not listed on the wage determination. These conformable wage rates will be the result of a three-party agreement between the employees, Contractor and the Government.

To assist you in the preparation of your Cost Proposal, listed below are minimum conformable rates that were established under the existing contract, effective October 24, 1997, in accordance with incorporation of WD 94-2544 (R-14), dated July 2, 1997, for various classes of personnel expected to continue under the proposed contract.

The conformed classes for service employees shall be paid the conformed monetary wages and furnished the fringe benefits as stated in the Wage Determination.

<u>Request for Proposal Job Title</u>	<u>DoL Class</u>	<u>WD Minimum Rate¹</u>	<u>WD Conformed Rate*</u>
Engineering Technician II (CLIN 1)	Engineering Technician II	\$12.30	\$12.51

Wage Determination 94-2544 (R-14), dated July 2, 1997. Effective date of conformable rate is October 24, 1997.

NOTE: If new conformable rates are established or a new Wage Determination is received prior to the award of the contract, the new conformable rates and Wage Determination will be incorporated prior to or during negotiations.

(3) For each indirect pool, identify the rates and bases used to determine the proposed costs. For larger indirect pool, e.g., overhead, fringe benefits, G&A, list the expense accounts and amounts in the pools. Detail any labor elements in the pools. Provide a three year history of all indirect rates. For personnel covered by the WD, confirm all minimum benefits, including death and welfare, are met and provide the confirming calculations.

(4) Materials - For estimating purposes, use \$350K annually for work performed in CLIN 1 and \$25K annually for CLIN 2. Do not allocate material costs among the fully burdened fixed hourly rates.

(5) Other Direct Costs Other Than Government Specified - Provide an itemized breakdown and detailed explanation of all ODC costs proposed for this effort.

(6) City/County Business License Tax - Consult applicable local jurisdiction to determine any applicable business license taxes. Consult the City of Hampton regarding personnel to be housed at LaRC even if your facility will not be located in Hampton.

(7) Facilities Capital Cost of Money (FCCOM) - Enter FCCOM if you choose to include it in your proposal (ref. FAR 52.215-30). If you do not propose FCCOM, Clause 52.215-31, Waiver of Facilities Capital Cost of Money (SEPT 1987) will be included in the contract. As required by NASA FAR Supplement 18-15.970-4, when facilities capital cost of money is included as an item of cost in the Contractor's proposal, a reduction in the profit objective shall be made in an amount equal to the amount of facilities capital cost of money allowed in accordance with FAR 31.205-10(a).

(8) Escalation- Escalation factors should be clearly stated and escalated amounts shown for each escalated item. Discuss the derivation and rationale for the proposed escalation.

(9) Incentive Fee - Provide a rationale for the level of incentive fee proposed for B.2 and Exhibit B, Paragraph 2.E, Cost Control Chart.

(10) Phase-In- Phase-In Costs, if proposed, should be fully detailed and supported, and should correlate with your technical proposal.

2. CONTRACT OFFER

The offeror shall submit three copies of its contract offer, each with **original** signatures, with the original of its business proposal (but not with the seven copies). A "contract offer" shall consist of Solicitation Sections A through K ("A" is the Standard Form 33), including the Exhibits referenced in Section J, **but not** the attachments. **All properly acknowledged amendments will be attached to the executed contract of the successful offeror.** All items in Sections A through K that require information to be filled in shall be completed by the Contractor. The Small and Small **Disadvantaged Business Subcontracting Plan** shall be included as "Exhibit E" to the contract offer. Should the Government select a Contractor based on initial offers, the Contracting Officer will execute the award by countersigning the three copies of the "contract offer" on the Standard Form 33.

E. RELEVANT EXPERIENCE AND PAST PERFORMANCE: FACTOR 3

Each offeror will be evaluated on its relevant experience and past performance, and that of significant subcontractors or teaming partners, if any, under existing or prior contracts for similar products or services. Past performance information will be used to assess the extent to which contract objectives (including technical, management, cost and small and small disadvantaged subcontracting goals) have been achieved on related efforts. Relevant experience is the accomplishment of work which is comparable or related to the work or effort required by this RFP. This factor includes the evaluation of overall corporate or offeror experience and past performance, but not the experience and performance of individuals who are proposed to be involved with work pursuant to this RFP. For newly formed businesses having little or no company experience, the relevant experience and past performance of a predecessor firm, the company's principal owner(s) or corporate officer(s) will be considered. You are cautioned that omissions or an inaccurate or inadequate response to this evaluation factor will have a negative effect on your overall evaluation.

The Form REPP = Relevant Experience and Past Performance (Form REPP), included in Attachment 3 to this RFP, will be used to collect information concerning the relevant experience and past performance of the offeror and any subcontractor and/or teaming partner. The offeror shall select three of its customers and three customers for each subcontractor and/or teaming partner, for which it has performed relevant work within the past three years and forward copies of the Form REPP to those agencies and/or firms for completion and submission to the Contract Specialist for this solicitation. Your customers should return or fax this form to the Contract Specialist no later than the closing date of the solicitation. The address and fax number are listed at the bottom of the first page of the Form REPP. Offerors shall include in their proposal the written consent of their proposed significant subcontractors to allow the Government to discuss the subcontractors' past performance evaluation with the offeror.

Offerors shall include with their proposal a list of the firms that will submit evaluation forms. The offeror shall also include a list of other contracts it has held and any significant subcontractors and/or teaming partners have held within the past five years for requirements similar to those being solicited in this acquisition. Other references, aside from those provided by the offeror, may be contacted and their comments considered during the source selection process. The information submitted may be verified by the Government through discussions with the references provided. While the Government may

elect to consider data obtained from other sources, the burden of providing relevant references that the Government can readily contact rests with the offeror.

Offerors shall prepare short narrative explanation on each contract listed or for which a Form REPP will be received that identifies its customers and briefly describes the contract, including the objectives achieved and any cost growth or schedule delays encountered. Your summary should include the following for each related contract:

- a. Contract Number
- b. Contracting Agency
- c. Points of contact in the program and contracting offices, including telephone numbers (Please insure that this information is current and correct.)
- d. Contract type
- e. Contract beginning and end dates
- f. Description of the contract **work** and explanation of its relevance to this solicitation

You should also describe the original cost/price and delivery terms in the contract and the cost/price and delivery actually experienced, and explain any differences. For award or incentive fee contracts, separately state in dollars the base fee and award or incentive fee available and the award or incentive fee actually received, on a contract year basis.

L.17 DETERMINATION OF FINANCIAL RESPONSIBILITY

The successful offeror may be required to demonstrate its responsibility for award and/or, if appropriate, the responsibility of its proposed subcontractors. Accordingly, you are hereby advised that if you are the selected offeror you may be requested to provide additional information pertaining to your (and your subcontractor(s)) financial resources after notification of selection for negotiation/award. (See FAR 9.104-1)

L.18 BIDDERS LIBRARY

A bidders library has been established and is located in NASA LaRC's Library, Building 1194, Reading Room 310 on 2 West Durand Street. Information regarding the library and its contents is included in Attachment 2 - Bidder's Library Contents. The hours of operation are from 8:30 a.m. to 4:00 p.m. Monday through Friday, excluding holidays. The library will be open for operation from release of the draft RFP through the proposal due date. Offerors wishing to visit the bidders library should contact Ms. Carol Ficklen at (757)864-5440 to schedule an appointment. All users of the bidders library must have a proper NASA Visitor's Badge, which may be obtained from the NASA Langley Badge and Pass Office located at the Main Gate (1 Langley Boulevard). Limited copying support will be provided for materials in the bidders library. The maximum total number of pages (single side, one copy each side) which may be copied per offeror is thirty (30).

SECTION M - METHOD OF EVALUATION

M.1 BEST VALUE SELECTION

The proposals submitted in response to this RFP will be evaluated using Best Value Selection procedures. The offeror(s) that is(are) selected for award will be the one(s) whose proposal is determined

to provide the best combination of cost, qualitative merit, and relevant experience and past performance. Qualitative merit relative to the offeror's technical proposal will be determined by evaluating the offeror's response to the Qualitative Evaluation Criteria (QEC's) listed in L.16.C. Best Value Selection is based on the premise that, if all offerors are of approximately equal qualitative merit and relevant experience and past performance, award will be made to the one with the lowest proposed cost or Government-determined probable cost. However, the Government may award to an offeror with higher cost if the offeror has higher rated qualitative merit and/or relevant experience and past performance, provided the cost differential is commensurate with the added value. Conversely, the Government may award to an offeror whose proposal has lower rated qualitative merit and/or relevant experience and past performance, if the cost differential between it and other proposals warrants doing so.

M.2 SUMMARY OF EVALUATION PROCEDURES

1. Initially, all members of the evaluation team will review each technical and business proposal in sufficient depth to identify any proposals that are patently unacceptable, as defined in NASA FAR Supplement 18-15.608-70. The offerors submitting proposals that are determined to be unacceptable will be notified and will be eliminated from further evaluation.

2. Each team member will review in depth each technical proposal, documenting strengths and weaknesses (indicating major and minor where applicable), for each QEC. Each team member will assign a rating from M.3 to each QEC for each offeror.

3. Upon completion of the individual proposal review, the evaluation team will convene and collectively discuss in depth each technical proposal. A team consensus on the proposal strengths and weaknesses will be developed for each QEC. A consensus rating from M.3 will be assigned to each QEC for each offeror.

4. The evaluation team will conduct an analysis of each offeror's cost proposal to determine its reasonableness, its acceptability, and the extent to which it reflects performance addressed in the technical proposal. The cost proposal may be used as an aid in substantiating that the objectives of the QEC's will be met. If the cost analysis impacts the assigned ratings for any of the offeror's QEC's, the reason for the change will be documented by the evaluation team. A probable cost will be developed for each offer.

5. The information provided by the Contractor regarding relevant experience and past performance will be assessed to determine the extent to which contract objectives (including technical, management, schedule, and cost) have been achieved on related efforts. For newly-formed businesses having little or no company experience, the relevant experience and past performance of a predecessor firm, the company's principal owner(s), or corporate officer(s) will be evaluated. Independent verification will be made as needed. The evaluation team will assign one of the following ratings for relevant experience and past performance: excellent, very good, good, fair or poor. The definitions for the relevant experience and past performance ratings are identified in M.3.

6. At the completion of the foregoing, the evaluation team will present their findings to the Selection Official. The evaluation team's documentation will include a summary of the ratings assigned to each QEC and to relevant experience and past performance, and the proposed and probable cost. Based on the findings presented, the Selection Official may elect to do any one of the following:

a. Select the successful offeror(s) in accordance with M.1 without further discussions with any offeror, provided that it can be clearly demonstrated that (1) selection of an initial offer will result in the best value for the Government, considering cost, qualitative merit, and relevant experience and past performance data and (2) discussions with other acceptable offerors are not anticipated to change the outcome of the initial evaluation relative to the offeror deemed to offer the best

value. The Government may conduct negotiations with the successful offeror to resolve any open issues necessary to effect a binding contract.

b. Select a competitive range, limited to those offerors having a reasonable chance of being selected for award, with which to conduct written and/or oral discussions. The purpose of discussions, if held, will be to assist the evaluation team in fully understanding each finalist's proposal and to assure that the intent and the points of emphasis of the RFP provisions have been adequately conveyed to the finalists so that all are competing equally on the basis intended by the Government. Any discussions that are conducted will be in accordance with FAR 15.1610 and 1815.610.

7. If a competitive range is selected for the purpose of conducting discussions, those offerors that are excluded from the competitive range will be immediately notified. The evaluation team will debrief any offeror excluded from the competitive range that submits a written request, either immediately following the competitive range selection or following the award selection, at the option of the offeror. Information on the composition of the competitive range and the relative standing of the offerors will not be available for release until AFTER contract award.

8. When discussions are conducted, each offeror in the competitive range will be afforded an equal opportunity to revise his/her proposal. A common cutoff date will be established for submission of best and final offers. The evaluation team will reconvene to determine if changes need to be made to the evaluation team's probable costs or assigned ratings. The basis for any changes will be documented. The evaluation team will update and resubmit the documentation initially presented to the Selection Official. The Selection Official will then select the successful offeror from the competitive range in accordance with M. 1.

9. The rationale for selection of the successful offeror will be recorded in a selection statement that sufficiently records the basis upon which selection was made.

10. The evaluation team will debrief any unsuccessful offeror submitting a written request (see also Paragraph 7 above).

M. 3 RATING SYSTEM

1. Qualitative Evaluation Criteria (QEC): Each QEC for each offeror will be assigned one of the following ratings:

Adjective Definitions:

Exceeds Requirement :

A comprehensive and thorough proposal of exceptional merit. The technical superiority is clearly demonstrated.

Meets Requirement:

A proposal that meets all the essential requirements of the QEC. Overall competence is demonstrated.

Fails To Meet Requirements:

A proposal that contains deficiencies in either approach or understanding, or does not address all the essential requirements of the **QEC**. This includes approaches that are not technically feasible to perform, or could not be technically acceptable without substantial rewriting or submission of a new approach.

2. Relevant Experience and Past Performance (REPP): The Evaluation team will assign one of the following ratings for REPP:

Adjective Definitions:

Excellent:

Exemplary performance of exceptional merit in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance. Experience is highly relevant to this procurement.

Very Good:

Very effective performance, fully responsive to contract requirements **accomplished in a timely, efficient, and economical manner for the most part; only minor** deficiencies. Experience is very relevant to **this** procurement.

Good:

Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance. Experience is relevant to this procurement.

Fair:

Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance. Experience is somewhat relevant to this procurement.

Poor:

Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely effect overall performance. Experience is not relevant to this procurement.

Firms without a past performance record will be given a neutral rating by assigning an adjective rating of Good.

M.4 RELATIVE IMPORTANCE OF COST, QUALITATIVE MERIT, AND REPP

Overall, in the selection of an offeror for contract award, cost, qualitative merit, and relevant experience and past performance will be of essentially equal importance. **All** evaluation factors other than cost, when combined, are significantly more important than cost.

PROPOSAL COVER SHEET
(Cost or Pricing Data Not Required)

1. SOLICITATION/CONTRACT/MODIFICATION NUMBER

OMB NO.: 9000-0013
Expires: 09/30/98

Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of

2a. NAME OF OFFEROR		3a. NAME OF OFFEROR'S POINT OF CONTACT		3c. TELEPHONE	
2b. FIRST LINE ADDRESS		3b. TITLE OF OFFEROR'S POINT OF CONTACT		AREA CODE	NUMBER
2c. STREET ADDRESS					
2d. CITY	2e. STATE	2f. ZIP CODE		4. TYPE OF CONTRACT ACTION (Check)	
5 TYPE OF CONTRACT (Check)			A NEW CONTRACT		
<input type="checkbox"/> FFP <input type="checkbox"/> CPFF <input type="checkbox"/> CPIF CPAF <input type="checkbox"/> FPI <input type="checkbox"/> OTHER (Specify)			B CHANGE ORDER	E UNPRICED OPTION	
			C PRICE REVISION/ REDETERMINATION	F OTHER (Specify)	

PLACE (\$)	a.		PLACEMENT	a.	
	b.			b.	
	c.			c.	

a. LINE ITEM NO.	b. IDENTIFICATION	c. QUANTITY	d. TOTAL PRICE	e. PROP. REF. PAGE

NAME OF CONTRACT ADMINISTRATION OFFICE			NAME OF AUDIT OFFICE		
STREET ADDRESS			STREET ADDRESS		
CITY	STATE	ZIP CODE	CITY	STATE	ZIP CODE
TELEPHONE	AREA CODE	NUMBER	TELEPHONE	AREA CODE	NUMBER

This proposal is submitted in response to the solicitation, contract, modification, etc., in Item 1. By submitting this proposal, the offeror, if selected for discussions, grants the contracting officer or an authorized representative the right to examine, at any time before award, any of those books, records, documents, or other records directly pertinent to the information requested or submitted. See instructions at Table 15-3.

9a. NAME OF OFFEROR (Typed)	10. NAME OF FIRM
9b. TITLE OF OFFEROR (Typed)	
11. SIGNATURE	12. DATE OF SUBMISSION

ATTACHMENT 2

BIDDER'S LIBRARY INDEX

Building 1194, Room 310
2 West Durand Street

1. Electronics Fabrication and Electronic Equipment Support Technical Requirements Summary Document which consists of the following:
 - Work description – Describes the technical requirements for each work area within the statement of work (SOW).
 - Workload analysis – Provides three years of historical data pertaining to work requests completed in each work area **within** the **SOW**. Some **information is** presented **in** spreadsheet **format reflecting** the number **of work** requests completed, the scope **of** the request, and the turnaround time for the requests.
 - Pictures – Photographs of work typically **performed** in each work area within the SOW. A **narrative briefly** describing **the** work depicted in each **photograph** is included.
2. NASA Assurance Standards Publications **NAS/NHB** 5300.4 Series.
3. Bidder's List as of November 28, 1997.

ATTACHMENT 3

RELEVANT EXPERIENCE AND PAST PERFORMANCE EVALUATION INSTRUCTIONS NASA LaRC Electronics Fabrication and Electronic Equipment Contract.

Page one, Section I through III, of the REPP form provides for contractually related descriptive information and identification of the evaluator.

Section IV lists the major work elements within our Statement of Work (**SOW**). Please provide your assessment of the extent of relevant experience associated with our SOW evidenced within the contract for which you are a reference. The following definitions are offered for your use in assigning a performance level for each of the factors in Section IV:

- Significant Experience - The contractor routinely performed a full range of experience.
- Moderate Experience - The contractor has experience in several aspects of a work element, even though **the** experience **may** not have been on a continuous basis.
- Minimal Experience - Although at least some aspects of the work may have been performed, such performance **was** limited in **scope** or frequency **by** the contractor.
- Didn't Perform - The work element was not performed under the contract.

Section V is a form to evaluate the contractor's technical performance, while section VI is to evaluate factors associated with their business management. Space is provided for comments (additional pages may be used if desired); comments would be particularly appreciated concerning excellent and less than satisfactory performance. The following definitions are offered for your use in assigning a performance level for each of the factors in Section V and VI:

Excellent:

Exemplary performance of exceptional merit in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance.

Very Good:

Very effective performance, fully responsive to contract requirements accomplished in a timely, efficient, and economical manner for the most part; only minor deficiencies.

Good:

Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.

Fair:

Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.

Poor:

Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely effect overall performance.

Section VII provides for evaluation of the contractor's management of cost and award fee history.

Please send the completed form to the address listed at the bottom of page 1

Solicitation No. 1-1-135-GJE.8762

Electronics Fabrication and Electronic Equipment Support Contract

I. CONTRACT INFORMATION:

A. Name of Company Being Evaluated: _____

B. Address: _____

C. Contract Number: _____ D. Contract Type: _____

E. Contract Value: _____ F. Period of Performance: _____ to _____

II. DESCRIPTION OF CONTRACT: _____

During the contract performance being evaluated, this firm was the:

Prime Contractor; Significant Subcontractor; Team Member; Other (Describe)

Does a corporate or business relationship exist between the firm being evaluated and your organization?

Yes No If so, please describe: _____

III. EVALUATOR:

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone No.: _____ Fax No.: _____

SEND TO: ATTN: TRACY M. SPRUILL
NASA LANGLEY RESEARCH CENTER
9A LANGLEY BOULEVARD
HAMPTON, VA 23681-0001
TELEPHONE: 804-864-2538
FAX: 804-864-7709

Solicitation No. 1-1-135-GJE.8762

Electronics Fabrication and Electronic Equipment Support Contract

IV. RELEVANT EXPERIENCE

WORK ELEMENT	RELEVANT EXPERIENCE			
	Significant	Moderate	Minimal	Didn't Perform
ELECTRONICS FABRICATION SUPPORT				
GENERAL ELECTRONICS FABRICATION				
1. Fabrication, assembly, and soldering of Printed Circuit Boards (PCBs)				
2. Fabrication and assembly of cable assemblies, wiring harnesses, etc.				
3. Machining and painting of electronics instrumentation chassis, panels, cabinets				
4. Installation and wiring of research test facilities electronics instrumentation				
5. Fabrication of spaceflight electronics hardware components and subsystems				
6. Quality assurance functions such as continuity checks, electronics inspection, problem analysis, documentation, etc.				
AIRCRAFT ELECTRONICS FABRICATION				
7. Fabrication of aircraft electronics instrumentation such as data acquisition and telemetry systems, electronic display units, etc.				
8. Installation and integration of electronics instrumentation on board aircraft				
MICROELECTRONICS FABRICATION				
9. Fabrication of microelectronics circuitry and sensors				
10. Microelectronics processes such as deposition of materials, photochemical patterning of circuit elements, etc.				
11. Mounting and attachment of microminiature electronic devices and components				
SPECIAL FABRICATION PROCESSES				
12. Photoplotting, photographing, and processing of printed circuit board electronic artwork data files				
13. PCB fabrication				
14. Graphics-related processes such as computerized engraving and vinyl cutting; metal photo imaging; artwork layout, screen printing, decaling, etc.				
15. Fabrication of signs, plaques, panels, chassis, cabinets, etc.				
16. Coatings applications processes such as conformal coating, encapsulation, etc. for protecting PCBs and electronic assemblies				

FORM REPP - RELEVANT EXPERIENCE AND PAST PERFORMANCE

a5

Solicitation No. 1-1-135-GJE.8762

Electronics Fabrication and Electronic Equipment Support Contract

WORK ELEMENT	RELEVANT EXPERIENCE			
	Significant	Moderate	Minimal	Didn't Perform
ELECTRONICS EQUIPMENT SUPPORT				
1. Maintenance, repair, modification, troubleshooting, testing, etc. of Computer Numerical Control (CNC) equipment				
2. Maintenance, repair, modification, troubleshooting, testing, etc. of conventional machinery and equipment				
3. Calibration of machine tool equipment				

Comments:

Solicitation No. 1-1-135-GJE. 8762

Electronics Fabrication and Electronic Equipment Support Contract

V. TECHNICAL PERFORMANCE EVALUATION

TECHNICAL PERFORMANCE FACTOR	PERFORMANCE LEVEL				
	Excellent	Very Good	Good	Fair	Poor
Effectiveness of technical leadership/management					
Effectiveness of meeting user's requirements					
Quality of technical performance (conformance to specifications and standards of good workmanship)					
Timeliness of technical performance (schedule compliance)					
Effectiveness of technical problem resolution					
Use of appropriate tools, equipment, methodologies, information, and materials					
Degree of cooperation and effectiveness of working relationships with the users/customers					
Ability to match personnel skills with task requirements					
Effectiveness of handling priorities, emergencies, changes, and other unexpected situations					
Demonstrated ability to stay abreast or ahead of advancing technology					
Effectiveness and timeliness of company technical support to the local contract manager					
Overall Technical Performance					

Comments:

Solicitation No. 1-1-135-GJE.8762

Electronics Fabrication and Electronic Equipment Support Contract

VI. BUSINESS PERFORMANCE EVALUATION

BUSINESS MANAGEMENT FACTOR	PERFORMANCE LEVEL				
	Excellent	Very Good	Good	Fair	Poor
Personnel management; e.g., ability to recruit/retain highly skilled personnel and to retain key personnel, training programs, employee motivation, and rewards					
Personnel utilization; e.g., application and cross training of personnel, ability to handle fluctuating workloads					
Adequacy and effectiveness of the Contractor's management systems; e.g., time keeping, purchasing, subcontract administration					
Timeliness, quality, adequacy of reporting including financial reporting					
Problem identification and resolution; initiative and innovation in accomplishing requirements					
Meeting SDB Goals					
Effectiveness of the safety program					
Compliance with contractual terms and conditions					
Responsiveness to Change Orders					
Phase-in					
Overall Business Management Performance					

Comments:

FORM REPP - RELEVANT EXPERIENCE AND PAST PERFORMANCE
Solicitation No. 1-1-135-GJE.8762

Electronics Fabrication and Electronic Equipment Support Contract

VII. COST MANAGEMENT/AWARD FEE

1. Evaluate the Contractor's overall cost management performance; provide comments as applicable.

- Excellent
 Very Good
 Average
 Marginal
 Poor

Comments:

2. **Did the Contractor experience any cost overruns or underruns? Please indicate amounts.**

- Contractor successfully met **cost** objectives.

 Overrun amount \$ _____
 - Amount of overrun within Contractor's control \$ _____
 - Amount of overrun outside Contractor's control \$ _____ Underrun amount \$ _____

Cause of overrun or underrun _____

What was the impact of any overrun or underrun on customer programs? _____

3. If this contract is an award or incentive fee contract, please indicate the available award or incentive fee pool, the amount awarded, and the percentage for the last three (3) award periods.

Award Fee Period (Most recent first)	Available Award or Incentive Fee Pool	Amount Awarded	Award or Incentive Fee Percentage
From _____ To _____			
From _____ To _____			
From _____ To _____			

4. Please provide the Contractor's yearly overhead and G&A growth:

Overhead: _____

G&A: _____

5. If ceiling rates are contained in this contract, please indicate current ceiling rates:

Overhead: _____

G&A: _____

ATTACHMENT 4

BACKGROUND AND HISTORICAL DATA

The information furnished in this section is in no way intended to restrict a prospective Offeror in its approach to preparation of its proposal. The information is furnished for the sole purpose of providing all Offerors a better understanding of the requirements contained in this solicitation.

The Offeror should recognize and understand that Government direction will be kept to an absolute minimum and the successful Offeror's obligation under this contract may be extended to include resolution of unusual or emergency situations which may occur from time to time throughout the period of performance. Work directed to the Contractor by the Government will be by Contractor Work Request (CWR) from the Contracting Officer's Technical Representative (COTR) or appointed representative(s), with the approval of the Contracting Officer, if applicable.

The following details the work processing procedures currently used by the Government to request services from the Contractor, and how the work is monitored and accepted:

Electronics Fabrication: Requests for electronics fabrication of research-oriented electronics instrumentation are received by the Electronics Technology Branch (ETB) from the customer on a Work Order (NASA Form 58). The request is assigned to an ETB electronics technologist who performs the required electronics fabrication design and develops the fabrication specifications for the requested electronics article(s). This includes preparing a Contractor work package which may contain assembly drawings, wiring diagrams, parts lists, and any special instructions needed by the Contractor to accomplish the electronics fabrication request. Concurrent with this activity, the ETB technologist estimates manpower, cost, and other resource requirements and negotiates with the customer to establish a need date. Next the ETB technologist submits the work package to the NASA technical representative who reviews the request for completeness and prepares a CWR (Form FD-EFDB N-1395). The CWR describes the work, specifications, and/or end item and includes information such as: job order/work order number, name of originator, quantity, delivery schedule, manpower estimate, material cost estimate, and any special instructions. The NASA technical representative submits the CWR package to the Contractor for review. In reviewing the CWR package the Contractor may interface with the NASA technical representative if any technical clarification is needed. After reviewing the CWR, if the requirements of the CWR are acceptable, the Contractor accepts the request and initiates the work process. If the estimate or some other aspect of the request is not acceptable the Contractor, the NASA technical representative and the Contractor negotiate and reach agreement. (The negotiated agreement defines the official conditions of the CWR.) The Contractor supports the Government's estimation process when requested. All work requests are approved by the Contracting Officer's Technical Representative (COTR) or appointed representative(s). Once approved, a record copy work request and three additional copies are provided to the Contractor.

Upon accepting the CWR, the contractor plans, coordinates, procures parts and materials, fabricates/assembles, inspects, and verifies that end items meet the requirements of the work request and associated documentation. The Contractor's designated work leaders function as the primary interface between the NASA technical representative and Contract organization for information relative to job status, schedules, and estimates.

Once fabrication of the electronics article is complete, it is inspected by the Contractor's quality assurance technician. At this time a Quality Assurance Control Card (Form FD-EFDB N-969) is generated which documents the various quality inspections performed on the completed electronics articles. If the articles pass inspection, a Shipping Receipt (Form FD-686) is prepared and the articles along with the Quality Assurance Control Card are shipped to the NASA Quality Inspector. The NASA Quality inspector inspects the completed work package and either accepts or rejects the articles. If the work is rejected it is returned the Contractor for rework. If the work package passes NASA inspection it is delivered to the NASA customer who upon receipt of the completed articles signs a Shipping Receipt (Form FD-686) for the Contractor's records. (All inspections made by the NASA Quality Inspector are documented on Form FD-EFDB N-969 which is forwarded to designated NASA technical representative upon completion of the CWR.) Completed CWR forms are closed and returned to the NASA technical representative on a monthly basis.

Electronic Equipment Support: Requests for installation, repair, maintenance, assembly, modification, setup, operation, and testing of various Government-owned Computer Numerical Control (CNC) and conventional machinery and equipment as listed in attachment EQ-1 are generally received by the lead CNC technician (located on-site at LaRC in Building 1225). However, from time to time requests are received by the NASA CNC technical representative (located in Building 1238). On a monthly basis, the NASA CNC technical representative issues a CWR (Form FD-EFDB N-1395) to the Contractor requesting the necessary electronic equipment support. All tasks received by the CNC lead technician during the month are assigned a task number and logged on the CWR form. Any significant actions that occur while troubleshooting and repair activities are underway are recorded on the CWR. When the task is complete it is noted on the CWR by the lead CNC technician. (If upon receiving a request, the contractor needs technical clarification on the task he will contact the requester or the NASA CNC technical representative before troubleshooting begins.) The lead CNC technician maintains a daily dialog with the NASA CNC technical representative (generally via telephone) in order to keep him apprised of the status of critical equipment repairs and on weekly basis provides a written repair status report on all open tasks via fax. The CWR is closed at the end of each month and is returned to the NASA CNC technical representative.

The data identified in Attachment 5 represents the historical workload in terms of the number of work requests and work hours provided for fiscal years 1994 - 1996 under the current contract. As the data contained in the attachment illustrates, contract workload is subject to fluctuate considerably (both up and down) from year to year.

ATTACHMENT 5

ESTIMATED HISTORICAL WORKLOAD AND TECHNICAL EFFORT

Table with multiple columns and rows, containing data related to workload and technical effort. The text is extremely faint and illegible.

ATTACHMENT 5

ELECTRONICS FABRICATION & ELECTRONIC EQUIPMENT SUPPORT HISTORICAL WORKLOAD

HISTORICAL WORKLOAD: ELECTRONICS FABRICATION

	HISTORICAL WORKLOAD: ELECTRONICS FABRICATION			
	SOW 1.0			
	<i>WORK REQUEST WORK-HOURS</i>			
	GENERAL SOW 1.1	AIRCRAFT sow 1.2	MICRO SOW 1.3	SPECIAL PROCESSES • sow 1.4
FY94	385/24,121	148/8,294	3713,985	274/11,617
M 9 5	264122,767	145/7,057	39/2,575	26619,533
FY96	24330,635	9419,059	37/1,758	225/7,423

▪ **NOTES:**

- Historical data does not include Printed Circuit Board (PCB) fabrication requests and associated work-hours inasmuch as the Government anticipates that on **this** procurement the Contractor will provide only a minimal number of PCBs.

	HISTORICAL WORKLOAD: ELECTRONIC EQUIPMENT SUPPORT	
	SOW 2.0	
	<i>WORK REQUEST WORK-HOURS</i>	
FY94	440/3,765	
FY95	380/3,723	
FY96	359/3,847	

NOTE:

As the above historical workload data indicates, contract workload is subject to fluctuate considerably (both up and down) from year to year. For planning purposes, the data reflected for FY96 should be considered the most representative of anticipated annual work requirements under the follow-on contract.

WORKLOAD ANALYSIS: SPECIAL PROCESSES

WORKLOAD ANALYSIS: SPECIAL PROCESSES units provided per category													
	FILM PLOTS	PRINTED CIRCUIT BOARDS (PCBs)	CONFORMAL COATING	POTTING	STAKING	SCREEN PRINT (Panels/Chassis: standard/single-print)	SCREEN PRINT (Panels/Chassis: complex/ multi-print)	SCREEN PRINT (Patch Boards)	SCREENPRINT/ SERIALIZE PCBs	LABELS/DECALS	VINYL SIGNS	ENGRAVED SIGNS	METAL PHOTOS
Y96	718	*	137	14	26	130	30	1	148	736	1929	2262	87
Y95	750	*	207	16	10	91	33	4	324	975	56	3357	359
Y94	903	*	271	185	49	103	7	0	85	402	50	4156	338

* **NOTES:**

- The current contract NAS1-19865 with Raytheon has provided the PCBs required by LaRC. However, note that on this procurement the Government anticipates a minimal number of PCBs to be provided by the Contractor.
- FY96 data is most representative of anticipated follow-on contract requirements.

ESTIMATED TECHNICAL EFFORT BY WORK AREA

SOW PARA	CONTRACT WORK AREA	Percentage of Total Electronics Fabrication Work Effort	Percentage of Total Contract Work Effort
1.0	• ELECTRONICS FABRICATION		95%
1.1	- General	65%	
1.2	- Aircraft	18%	
1.3	- Micro	5%	
1.4	- Special Processes	12%	
2.0	• ELECTRONIC EQUIPMENT		5%

ATTACHMENT 6

Draft Comments

1. General: is the governing statute for this solicitation OMB Circular A-109, or some other statute?

This requirement does not fit under the definition of a major system in accordance with OMB Circular A-109 but is considered a service.

2. Work locations: Are there any upper or lower limits on what the offeror can propose as far as work location mix. The solicitation implies that the percentages are estimates.

The work location percentages reflected in the Statement of Work (**SOW**) of the draft **RFP** are in fact estimates based on historical data. The Contractor should expect to perform work in **all SOW** work areas and work locations as dictated by the types of incoming work requests. The work area percentages will vary from time to time, again depending upon the types of work requests being received. The percentages reflected in the solicitation are intended to assist offerors in preparing their proposals.

3. The RFP states that FAR Part 12 is not applicable. If FAR Part 12 were considered it could give the Government the option for a longer overall period of performance for the contract.

The Government is not aware of any deviation for the 5 year limitation in accordance with NFS 1817.204 for commercial Services. In any event, as noted in the synopsis dated October 24, 1997, we do not intend to acquire this requirement as a commercial item.

4. Page 4, Paragraphs 1.1 to 1.4: How are access and use of the various LaRC work sites and buildings specified in the solicitation controlled? What hours are they available for contractor use? If access is required during other than normal duty hours, will the Government bear the burden for overtime costs for security? Will the contractor be responsible for security? How will schedule conflicts be resolved?

Reference Section H. 5 and 6 of the solicitation. The normal working hours for this requirement is 7:00 a.m. to 3:30 p.m., Monday through Friday. Access to the various work sites identified in the solicitation are available to the contractor during the specified normal working hours. The Government is responsible for scheduling work in the various work sites if a requirement needs to take place outside of the specified normal working hours. The solicitation does not require for Security services on-site at LaRC. LaRC will provide all on-site security services.

5. Page 4, Paragraph 1.4: The requirement states, ".The contractor shall electronically interface with the Government in an automated fashion utilizing compatible standard electronic file formats." Are these interfaces defined and what standard is used for the file format? Will the contractor be responsible for providing data processing equipment and software to meet this requirement or will the Government provide the equipment and software as GFP?

The contractor shall be required to interface electronically with the Government (in an automated fashion utilizing standard electronic file formats) by means of an electronic modem for the transfer of data files. The interface should be capable of utilizing standard electronic file formats such as GBR (Gerber) files, AutoCad to DXF files, and any vector formatted files for plotting and processing of artwork. The contractor shall be responsible for providing compatible data processing equipment and software to meet this requirement.

6. Page 5, Paragraph 2.2, Schedule: The solicitation does not contain provisions for scheduled preventive maintenance on the equipment. **Is** preventive maintenance a part of the work to be performed? If it is, is preventive maintenance time counted as down time?

In the area of Electronic Equipment Support (CLIN 2.0) the contractor shall provide preventative maintenance as a part of the work requirement. The time a machine is down for preventive maintenance does not count against the "down time" metric. "Down time" as stated in 2.2 **is** the period of time a machine is out of service while awaiting/undergoing repairs.

7. Page 6, Paragraph F.1: Does the initial 12 month period of performance include the transition or "Phase-in" period?

No. Phase-in takes place before the effective date of the contract and is not considered part of the contract base year.

- a. Page 6, Paragraph F.3: Will the contractor be required to pay travel, per diem, and overtime for other than normal duty hour travel expenses for work performed at "other" designated locations? If yes, is historical data available on the travel requirements? If no, what will be the procedure for the Government to pay travel per diem and overtime expenses?

As this is a cost reimbursement contract, the Government will cover all allocable and allowable costs associated with travel directed through work requests. Historically, travel has been minimal estimated at \$2.5K a year under CLIN 1 and \$0.5K a year under CLIN 2.

9. Page 9, Paragraph G.4.C: **Is** there a definition of what constitutes an Emergency work order? **Do** the provisions of G.1 (d) apply to emergency work requests?

Emergency work requests are those requests wherein the contractor is required to respond within 1-hour after receiving notification from the Government. Examples of emergency requests include requirements such as (1) fabricating/wiring research instrumentation cables or other equipment for an LaRC facility or wind tunnel so that a time critical test may be conducted, (2) installing and integrating electronics hardware on board an LaRC research aircraft so that a time-critical flight schedule can be met, and (3) responding to a trouble call to repair a malfunctioning CNC machine that must be fixed in order to resume machining of a critical research model. The provisions of G.1(d) apply to emergency work requests.

10. Page 9, Paragraph G.5: This section makes no provision for the replacement of Government Furnished Property. Will the Government be responsible for replacement? It may be in the best interest of the Government to allow the contractor, with Government approval, to replace the GFP.

Reference Section G.7, Paragraph C. Any of the existing facilities provided as listed in G.6 and 7 and Exhibits F and G of the solicitation reach the end of their useful life during the contract period, or which are beyond economical repair, shall be replaced by the contractor, if the facilities are still needed for contract performance. Since the facilities are Government owned, the Government, with the contractor's input, will make the final decision on determining the useful life of any facilities.

11. Page 9, Paragraph G.5 and G.6: It would be useful if the Government would structure their GFP lists into the following categories, production GFE, and administrative GFP.

There is no administrative GFP provided under Exhibit G or IPGP under Exhibit F.

12. Page 9, Paragraph G.6: It is implied that the material listed in Exhibit F may not be available for use on the contract. When will the offerors know what GFP will be available? If it is not available, will the Government procure the property or will the contractor be authorized to procure the property? How many square feet of office and work area are currently being utilized? Will any of the buildings specified in the solicitation be used jointly by the contractor and Government?

Exhibit F is available to the contractor in accordance with Section G.6 (b)(1) of the solicitation. The approximate square footage for the major work areas referenced in the solicitation (excluding contractor's facility) are as follows: Building 1225 is 120 square feet; Building 1244 is 720 square feet; and Building 1238 is 100 square feet. Buildings will be jointly used by contractor and Government personnel but office space within the buildings will not be shared.

13. Page 9, Paragraph G.6 (I): What are the reporting requirements for GFP accountability?

Reference Section I, NFS Clause 1852.245-73 for guidance.

14. Page 10, Paragraphs C to I: It may be in the best interest of the Government to allow the contractor to provide or obtain some of these services.

These items are available but the contractor is not precluded from obtaining some of the items elsewhere (i.e., (c) and (d)). Note that the items listed in this Clause G-6 are for on-site use at LaRC only.

15. Page 10, Paragraph G.7.C: This paragraph tasks the contractor for replacement of existing facilities. The Government needs to provide a list of facilities with their anticipated remaining useful life. In addition, will the contractor be required to submit a facilities capital replacement budget as part of the response to the RFP? If not, how will facility replacement costs be addressed in the contract? The draft RFP implies Government facilities use and maintenance are rent free to the contractor. Is this statement correct? If not, what are the rent charges and how should they be included in the proposal?

The Government has revised Exhibit G of the solicitation to include the property acquisition date where available for the facilities identified. The Government estimates that most of the facilities identified in Exhibits F and G will remain in good physical condition for the duration of the contract, including all options. However, the Government estimates replacement costs at \$4.5K a year under CLIN 1 and \$0.5K a year under CLIN 2. Facility replacement costs will not specifically be addressed in the contract except through Section G.7.C. Replacement should be proposed in accordance with your approved accounting system. (Ref. FAR 31.205.11) The contractor will not be able to acquire property as a direct charge against the contract without the consent of the Contracting Officer. The items identified in Section G.6 of the solicitation are provided rent free for as long as they are available. As stated in Section G.6 (h), building maintenance will be provided by the Government for facilities occupied by contractor personnel on-site.

16. Page 11, Paragraph H.1: What escalation factors should be used for the out years? If the Department of Labor wage escalation exceeds the rates in the contract, how will the Government address the increase?

Offerors are to propose escalation factors with the appropriate supporting rationale. (Ref. L.16.D.1.c.(8)). DOL mandated wage escalation will, of course, be an allowable cost under this cost reimbursement contract.

17. Page 11, Paragraph H.1: There is no mention in the solicitation of the option for the existing work force to have first right of refusal. Will the current employees have first right of refusal?

The extent of incumbent retention is up to each individual offeror. (See L. 16.C.QEC 2)

18. Page 12, Paragraph H.3: How many people will require security clearances?

Currently, approximately 90% of all technical personnel have security clearances. However, it is anticipated that approximately 50% of the technical personnel will require security clearances in the future.

19. Page 13, Paragraph H.6.B: We understand that the Government will provide badges to contractor personnel assigned to LaRC. Will the contractor be issued temporary or visitor identification badges to handle personnel which may be needed to support operations during other than normal duty hours, or emergency situations?

Contractor technical staff supporting work at LaRC will be issued badges allowing them access onto the Center outside of and during normal duty hours. If a contractor staff member does not have a LaRC badge but requires access to the Center to perform either outside of or during normal duty hours, they will be issued a temporary badge by the LaRC Security Office in coordination with a NASA technical representative.

20. Page 14, Paragraph H.11: Would this apply to computers which are used in production operations, or only office automation equipment? If the contractor provides their own computers and does not charge the costs directly to the contract, must they comply with this clause?

This clause is applicable only to computer equipment, software, and systems that are required to be delivered and/or used to perform services required by the SOW.

21. Page 21, Exhibit A: Will the contract contain a Contract Data Requirements List (CDRL) which cites specific Data Item Descriptions (DID) for each deliverable? If not, please include the specific reference document, and/or information requirements and formats.

No. The contract will not contain a CDRL. Attachment A defines the documentation requirements of specific clauses contained in the contract and other additional reporting requirements.

22. Page 22, Paragraph 5.0: Is there a specified list of hazard operations? If not, is there a definition of what could be considered a hazardous operation?

This question is in reference to Exhibit A, Paragraph D, Safety and Health Plan; which is to be Submitted by the selected offeror within 30 calendar days after the effective date of the contract. The contractor is responsible for addressing Paragraph D, 5.0 to ensure their understanding of the requirement and how they intend to protect the life, health, and well being of NASA and contractor employees as well as property and equipment during the contract.

23. Page 26, Exhibit 6: The incentive structure is good for a steady state production operation. It will be difficult to apply to the phase-in period. Recommend a separate incentive structure for the phase-in period, or additional definition on how the CPIF would be applied to this phase. The success of the phase-in will be tied to many unquantifiable measures. As a result, the Government may want to consider a Cost Plus Award Fee (CPAF) arrangement for the phase-in.

Phase-in is not considered part of the contract period of performance and takes place before the effective date of the contract. Phase-in is not applicable to the CPIF or any other fee structure.

24. Page 30, Paragraph 4: A 10% penalty for a single reporting error appears to be excessive. Reporting errors need to be clarified. A differentiation needs to be made between administrative errors and errors which result in significant over or under statement of operating results.

Reporting errors are any errors whether they are administrative or an over- or under-statement of performance results. The Government has revised the penalty to 5% for the first occurrence.

25. Page 41, Paragraph 1: How many employees will be required to wear uniforms?

The Government does not require uniforms to be worn. Uniforms are at the discretion of the contractor.

26. Page 47, Exhibit G: Exhibit F contained information on when the property was procured. Could the same information be provided for Exhibit G?

Exhibit G will include the property acquisition date where available in the final RFP.

27. Page 65, Paragraph L 6: What is the tentative date for the Pre-proposal conference? If the conference is not held will the potential offerors be allowed to schedule individual tours and briefings?

A Pre-solicitation conference will be held December 15, 1997. Notification of the conference was posted December 5, 1997, on the NAIS and CBD Net.

28. Page 69, Paragraph L. 16, B.2: Are the plans required to be submitted with the proposal (e.g. Small and Disadvantaged and Women Owned Small Business Plan - Page 66, Paragraph L. 7) included in the 50 page limit?

The Small, Small Disadvantaged, and Women Owned Small Business Subcontracting Plan to be submitted as required by Section L, L. 7 will not be part of the Technical Proposal, Volume 1 page limitation. See L.16, B, c. for further guidance.

29. Page 70, Paragraph 2: Does the Government expect the transition to be a phased transition or a turnkey turn over? Does the Government have a range of time which will be acceptable for the transition?

Offerors are required to address phase-in (reference L.16, D, 2) as part of their proposal. Assume for proposal purposes contract award by April 6, 1998, with a contract effective date of May 1, 1998. The offeror selected is expected to be fully in place to meet the requirements of the SOW by the contract effective date.

30. Page 72, Labor Hours by CLIN Table: Are the classifications shown in the table the only classifications which can be used by the offerors to perform the work specified or can other classification be used? Can the table be expanded to relate the hours by CLIN to the work categories specified on Page 4 e.g. general electronics fabrication, aircraft electronics, microelectronics fabrication and special fabrication?

Considering this is a performance based contract, the Government will not restrict your proposal by breaking down the table further. Reference Attachment 6, Historical Workload Data, for assistance. ~~Classifications shown~~ in the table are representative of personnel that perform under the current contract.

31. Page 72, last Paragraph: Exhibit D identified the wage rates. The note at the beginning of Exhibit D "Fringe Benefits Required For All Occupations Included In This Wage Determination Follow the Occupational Listing". The only benefit discussed in the attachment is uniform allowance. If other fringe benefit information is applicable it should be provided.

The minimum benefits required by Exhibit D are reflected immediately following the minimum hourly wage section of Exhibit D. (See Page 39)

32. Page 73, Paragraph (4): The draft RFP specifies estimated material costs for the CLINS. It is assumed that this is unloaded material cost (no Overhead or G&A). How should the offerors account for the Overhead and G&A costs associated with procuring, stocking, storing, and issuing the material? It is assumed that the Overhead and G&A costs would also be adjusted if the material costs exceed the estimated costs in the draft RFP?

The material cost provided in the solicitation is not loaded. Offerors should propose indirect costs associated with material in accordance with their approved accounting system. Reasonable and allowable material costs and associated burdens will be an allowable cost under this cost reimbursement contract.

33. Page 74, Section E, **First** Paragraph: If the offeror has experience in parts of the proposed business areas but no experience in others, can they use a hybrid justification (past performance for the business areas with relevant past performance and newly founded criteria for new business areas)?

No. The Source Evaluation Team will follow Section L, L.16. E. and Section **M.2.** in performing the Relative Experience and Past Performance evaluation.

34. Page 75, Paragraph L.18: Are there provisions for bidders to sign out documentation from the bidders library so they can reproduce the material at their own expense? What terms and conditions must be met to remove documentation for reproduction by the bidders? Are facilities available within the bidders library area where bidders can discuss the documentation in private?

The documents located in the bidders library cannot be removed from the library. There is no private space set aside within the bidders library for offerors to hold discussions. offerors can, of course, hold discussions but we cannot guarantee privacy.

35. Page 75, Paragraph **M.2.1**: Will the Government use separate panels for technical and business reviews in the evaluation team?

NO.

36. Page 76, M.2, Paragraph 6: Implies that there will be no discussions with the offerors. Paragraph L.3.C implies that clarification requests will be issued. ~~Will~~ the Government process Clarification Requests (CR) and Deficiency Requests (DR)?

It is the intent of the Government to evaluate proposals and award a contract without discussions with offerors. (Ref L.3, FAR Clause 52.215-16) However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. Any discussions to **be** conducted will be in accordance with FAR 15.1610 and **NFS** 1815.610.

37. Does the library contain the following information:

A. An existing organizational chart which includes skills, grades and number of **employees**?

No. Under the performance based concept, offerors are to propose their best estimate of the staffing necessary to satisfy contractual requirements. However, to assist you in your proposal preparation, Section L of the solicitation provides estimates of the anticipated direct productive labor hours by CLIN. The hours are broken down by contract position and corresponding DOL classifications.

B. Material usage data (quantities and costs)?

No. To assist you in your proposal preparation, Section L of the solicitation provides an estimate of the anticipated annual material costs.

C. Labor use profiles by job and emergency versus normal work requests?

No. This specific information is not available; however, the Electronics Fabrication and Electronic Equipment Support Technical Requirements Summary Document available in the bidder's library contains a detailed workload analysis of each SOW work area including three years of historical data pertaining to work requests which should assist you in your proposal preparation.

D. The organizational manpower profiles for the past five years?

No. Considering this is a performance based contract, it is the offerors responsibility to determine the appropriate manpower. However, to assist you in your proposal preparation, Attachment 6, Historical Workload Analysis, is provided.

E. Facility floor plans for the proposed contractor facilities? Do they contain warehouse space?

No. Offerors are expected to propose facilities suitable for supporting the various **SOW** work area requirements. Refer to Section L, L.16, C.

F. The environmental baseline survey for the facilities and operations?

No. This information will not be provided. The contractor's off-site facilities and operations including issues relative to environmental and operational hazards are the direct responsibility of the contractor.

G. Demographics of the work force - years of service CSRS vs. FERS?

This effort has been contracted out for many years. Therefore, the current contractor's workforce is neither CSRS or FERS.

H. If this information is not in the library can it be provided to potential offerors?

The Government has made every attempt to include information needed to the offeror either in the solicitation or in the bidders library. We will continue to entertain requests for additional information that is not currently in the solicitation or in the bidders library.

38. If the employees are represented by a union, will the existing union have representation rights after contract award?

There is no representation by a union of the current contractor workforce.

39. The Government may want to consider allowing the offerors the opportunity to have a period of time to do "Due Diligence" prior to issuing the final RFP. This would expedite the transition and to allow the offerors the opportunity to really understand the program prior to submitting proposals.

The Government feels that industry has had ample time since synopsis release to understand and plan for this requirement. This requirement was first published in the LaRC FY96 and NASA annual forecast documents on September 1, 1996.

40. Is there a list of hazardous materials which are used in the production processes? Are there existing environmental conditions in any of the facilities which will be turned over to the contractor? If so, what are they and what remediation efforts are underway? Where waste streams exist in the facilities, are they baselined so that the contractor would be able to determine their contribution to future streams? Will the Government be responsible for the disposal of wastes generated over the duration of the contract? If not, can the contractor reimburse the Government for the disposal of waste materials? Are there EPA 17 or ODC reduction programs that the contractor will have to comply with?

Hazardous items that may be used in the performance of this requirement are as follows: terpene solvent (emulsenator), lacquer thinner, alcohol, conformal coatings, conformal coating solvents, paints, screenprinting inks, screenprinting solvents, Kodak RF2000 developer, Kodak RA 3000 Fixer Parts A and B, and RVRSV-108 nickel/silver waste stream. The contractor is responsible for environmental issues at their facilities including disposal of wastes generated at their facility. The Government is responsible for the facilities the contractor may occupy on-site at LaRC. It is the responsibility of the contractor to ensure that all environmental regulations/standards are met in the performance of the contract.

41. What are the procedures and/or limitations associated with having discussion with LaRC employees on future employment? Are there restrictions on obtaining letters of intent for employment from employees prior to contract award?

This question appears to assume the effort is currently being performed by civil servant's. As stated before, this effort has been contracted out for many years.

42. Will the existing material stocks be turned over to the contractor to be used until exhausted? If not, can the contractor purchase the material at stocklist value? Will the contractor be allowed to requisition material from the Government **supply** system? Can the Government provide a list with quantities of on-hand material which is currently used to **support** production? Will the contractor be required to have a separate Government material storage area?

Any residual material that may exist will be turned over to the selected offeror May 1, **1998**. A list of quantities of residual material on-hand as of November 26, **1997**, is provided as part of this amendment. The contractor will be provided access to the LaRC store stock for general (excluding office supplies) and electronic supplies to the extent they are available. The contractor may assume that use of Government Sources i.e. GSA contractors will be authorized (see L. 14). The contractor will be required to store residual material in a separate locked controlled area in the contractor's facility.

Item	QTY	UNIT	PRICE

RESIDUAL FABRICATION MATERIALS AS OF NOVEMBER 26, 1997

<u>Description</u>	<u>On Hand</u>	<u>U/M</u>	<u>cost</u>
SINGLE CONDUCTOR WIRE	14540	FT	0.50
SINGLE CONDUCTOR WIRE	28865	FT	0.50
WIRE TYES (STRAP, TIE DOWN)	0	PK	3.00
MASKING TAPE	0	RL	2.00
LACING CORD (TAPE, LACING & TYING)	0	SP	5.75
PIPES	0	EA	0.50
CONDUIT HARDWARE	0	EA	0.10
THERMO COUPLE WIRE	940	FT	0.50
CABLE LABELS	0	EA	0.10
MICRODOT CABLE	740	FT	0.30
MULTI-COND. CABLE	9792	FT	1.00
RG178	460	FT	0.15
LIGHT FIXTURE	0	EA	20.00
EXTENSION CORD	0	EA	20.00
BUS WIRE	285	Fr	0.10
TINNED COPPER BRAIN (SHIELD)	450	Fr	0.40
VINYL TUBING (SLVNG, INSULATION)	4021	Fr	0.01
ZIPPER TUBING	0	FT	0.25
METAL CLAMPS	639	EA	1.50
PLASTIC CLAMPS	742	EA	1.00
COAX CABLE	3609	FT	0.12
NYLON EDGING	499	FT	0.10
SHRINKABLE SLEEVING	1187	FT	0.10
SHRINKABLE SLEEVING	923	FT	0.10
RIBBON CABLE	4013	FT	0.25
TRIAx CABLE	50	FT	2.00
BNCCONNECTORS	517	EA	3.00
XLR CONNECTORS	956	EA	4.00
PANDUIT	0	SE	1.00
PANDUIT ASSEMBLY	0	EA	0.50
COPPER WIRE	0	RL	100.00
ELCO CONNECTORS	36	EA	5.00
RIBBON DBM CONNECTORS	3	EA	4.00
RIBBON CABLE STICK DOWNS	169	EA	1.00
IEEE CONN & HARDWARE ASSEMBLY	a	EA	5.00
AMPHENOL CONNECTORS	1	EA	5.00
NEFF BACKSHELLS	0	EA	1.00
KPT CONNECTORS	456	EA	15.00
WINCHESTER CONNECTORS	228	EA	6.25
HEADERS	14	EA	6.55
EXPAND0	516	FT	0.50
A&N CONNECTORS	549	EA	7.50
CARD EDGE CONNECTORS	206	EA	5.00
DBM CONNECTORS	92	EA	7.00
DBM BACKSHELLS	51	EA	2.00
CABLE CLAMPS	231	EA	1.50

Total Value of Inventory is: \$56637.64

ATTACHMENT 7

Pre-solicitation Conference Information

The information in this attachment contains the list of attendees and viewgraphs presented during the pre-solicitation conference. Questions received during the conference are as follows:

1. Clarify IPGP and GFP under the solicitation.

NASA LaRC will provide existing facilities and services as identified in Sections G.5 & 6 and Exhibits F & G of the contract schedule. In addition, existing non-controlled property will be provided for work performed on-site. (Non-controlled property is equipment not designated as sensitive which has an acquisition cost of less than \$1,000.) This includes property such as soldering irons, ovens, various hand tools, glassware (e.g. beakers) and crimp tools. When any of the facilities reach the end of its useful life or is beyond economical repair you will be required to replace it with company owned property. The Government estimates a replacement cost of \$4.5K for CLIN 1 and \$0.5K for CLIN 2 per year.

General (excluding general office supplies) and electronic supplies will be issued from Government stores stock for as long as the supplies are available. Thereafter, as existing supplies are depleted the contractor shall furnish all supplies required in the performance of this contract. The Government estimates supplies/material costs of \$350K for CLIN 1 and \$25K for CLIN 2 per year.

You are reminded that the contractor will have access to all necessary equipment to perform in the areas of Aircraft Electronics Fabrication and Microelectronics Fabrication. (Ref. SOW CLIN 1, Tasks 1.2 & 3, and Section G.6 (b)).

2. There are approximately 52K manhours accounted for in the historical data provided. The RFP cites approximately 76K manhours required. Can you help explain the difference?

The discrepancy between the hours identified in L.16.D.c.(2) and the hours shown in Attachment 5, Historical Workload, is that the hours in L.16.D.c.(2) include work leader supervision, personnel training and certification, safety and other meetings, shop clean-up/keep, etc., as well as the direct hands-on labor (including Quality Assurance) necessary to perform the SOW requirements. The historical data from Attachment 5 includes only the direct hands-on labor without Quality Assurance. The hours in L.16.D.c.(2) have been revised to correct miscalculations and to reflect only the direct hands-on labor including Quality Assurance.

3. What types of Design tool/software are used by the electrical engineers and/or packaging people?

Engineering and packaging personnel (NASA civil servants) generally use the following software design tools: CADSTAR, PCAD, and OrCAD for printed circuit board layout design, OrCAD for schematic capture, and I SM CAD for mechanical designs. The contract requirement states, "The contractor shall electronically interface with the Government in an automated fashion utilizing compatible standard electronic file formats." This interface is accomplished by means of an electronic modem for the transfer of data files. The interface should be capable of utilizing standard electronic file formats such as GBR (Gerber) files, AutoCad to DXF files, and any vector formatted files for photoplotting and processing of printed circuit board and related artwork data files.

**PRE-PROPOSAL BRIEFING
ELECTRONIC FABRICATION AND ELECTRONIC EQUIPMENT SUPPORT**

December 15, 1997

NAME	COMPANY NAME AND ADDRESS	PHONE
Bill Mahler	Raytheon	865 - 1095
M. Dougherty	Raytheon	363 - 1273
Richard A. Clough	Jackson and Tull	(301) 805 - 6090
Kamran Mortezaev	Jackson and Tull	(301) 805 - 4545
Roy Russell	DRS	(757) 312 - 9300
Dave Petersen	DRS	(757) 312 - 9300
Kim Shields	Vigyan	(757) 865 - 1400
Wade Saltzgeber	Vigyan	(757) 865 - 1400
Greg Boeshaan	STC	766-5807
Steve Lloyd		

**Presolicitation Conference
for
Electronics Fabrication and
Electronic Equipment Support**

December 15, 1997

**NASA Langley Research Center
Hampton, Virginia 23681-0001**

AGENDA

ELECTRONICS FABRICATION AND ELECTRONIC EQUIPMENT SUPPORT PRESOLICITATION BRIEFING

- **Technical Overview**
- **Site Tour**

SOURCE EVALUATION TEAM ORGANIZATION

VOTING MEMBERS

- Peggy W. Harmon, Fabrication Division
- Alan W. Frizzell, Fabrication Division
- Tracy M. Spruill, Acquisition Division

NON-VOTING MEMBERS

- Carol L. Ficklen, Fabrication Division
- John T. Bush 111, Acquisition Division

EX-OFFICIO MEMBERS

- C. Wayne Williams, Jr., Fabrication Division
- S. Stewart Harris, Jr., Fabrication Division
- William R. Kivett, Acquisition Division
- Sandra S. Ray, Acquisition Division
- James W. Cresawn, Acquisition Division
- A. Vernon Vann, Acquisition Division
- Shawn T. Gallaher, Office of Chief Counsel

CURRENT SUPPORT SERVICE CONTRACT

Electronics Fabrication and Electronic Equipment Support Services

- **Scope of Work** **Electronics Fabrication and Electronic Equipment Support Services**
- **Contract Number** **NASI-19865**
- **Contractor** **Raytheon Support Services Company**
- **Period of Performance** **January 1, 1993 - April 30, 1998
(includes 4 4-month options)**
- **Type of Contract** **Level of Effort, Cost Plus Fixed Fee**
- **Value** **\$16M**

FOLLOW-ON SUPPORT CONTRACT

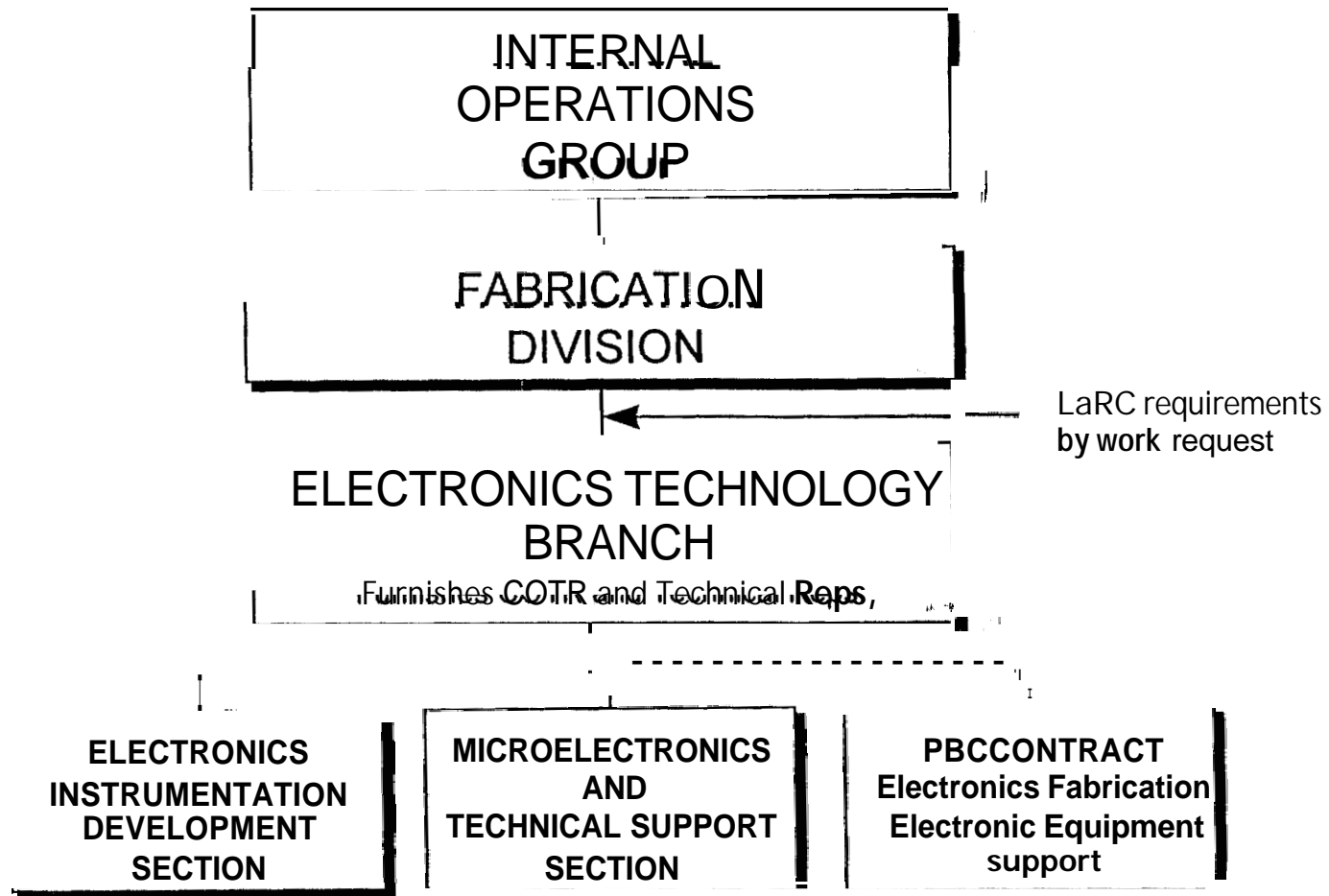
Electronics Fabrication and Electronic Equipment Support

- **Scope of Work.....** **Electronics Fabrication and Electronic Equipment Support**

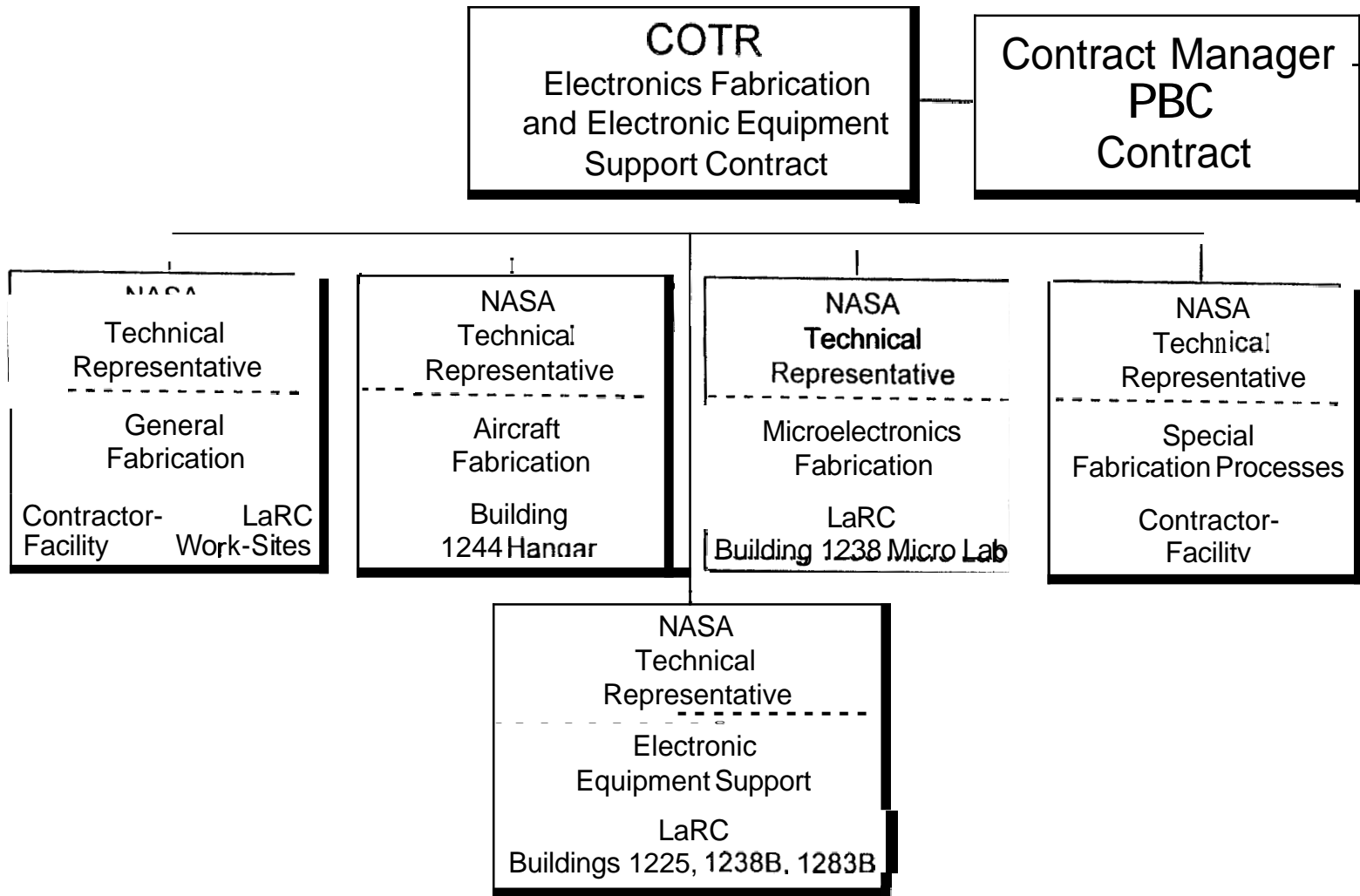
- **Total Potential Period of Performance.....** **May I, 1998 - April 30, 2003
(1-year base period and options for 4 1-year periods)**

- **Type of Contract** **Performance based cost plus incentive fee (Government issued work requests containing performance standards/ metrics)**

NASA/CONTRACTOR TECHNICAL INTERFACE



ISSUING OF TECHNICAL WORK



ELECTRONICS FABRICATION AND ELECTRONIC EQUIPMENT SUPPORT

1.0 Electronics Fabrication Support

I.1 General

I.2 Aircraft

I.3 Microelectronics

1.4 Special Fabrication Processes

2.0 Electronic Equipment Support

SITE TOUR

- **Building 1225 - Advanced Machining Development Laboratory**
- **Building 1244 - Aircraft Electronics Fabrication (Hangar)**
- **Building 1238 - Microelectronics Laboratory**

GENERAL ELECTRONICS FABRICATION

- Electronics fabrication of general electronics circuitry/hardware
- Requirements range from:
 - fabrication and assembly of printed circuit boards, cable assemblies, wiring harnesses, and electronics chassis
 - installation and wiring of complete research test facilities
 - fabrication and assembly of electronics hardware components and subsystems for Center aeronautical or aerospace research projects

AIRCRAFT ELECTRONICS FABRICATION

- **Operation of government-furnished electronics fabrication shop in LaRC Building 1244 (Hangar)**
- **Fabrication of various aircraft electronics circuitry:**
 - **data acquisition instrumentation**
 - **telemetry systems**
 - **electronic display units**
 - **ground support equipment**
- **Integration of equipment/systems on-board various research aircraft**

MICROELECTRONICS FABRICATION

- **Fabrication of unique microelectronics circuitry and sensors**
- **Perform technical functions such as:**
 - **deposition of materials'**
 - **photochemical patterning of circuit elements and interconnections**
 - **mounting of microminiature components**
- **Specialized facilities/equipment located in LaRC Building 1238 Microelectronics Lab provided for use by the Contractor**

SPECIAL FABRICATION PROCESSES

- Perform a variety of special processes such as:
 - photoplotting, photographing, and processing of printed circuit board electronic artwork data files to produce printed circuit board artwork film plots
 - printed circuit board fabrication
 - graphics-related processes including computerized engraving and vinyl cutting; metal-photo imaging; and graphics artwork layout, screen-printing, decaling, and transfer lettering.
 - coatings application processes including conformal coating, staking, encapsulating, and other processes related to the application of protective coatings to printed circuit boards and electronic assemblies

ELECTRONICS FABRICATION SUPPORT

- Layout of parts, wiring, fabrication, installation, functional checkout, and modification of electronics circuitry
- Installation of parts/components (including both surface mount and through hole devices) such as resistors, capacitors, coils, transistors, integrated circuits, etc. in printed circuit board assemblies
- Routing and soldering of wires to form circuitry
- Soldering of cable wires to specified terminals to connect circuits and subassemblies
- Machining and painting of miscellaneous hardware such as panels, chassis, and cabinets

ELECTRONICS FABRICATION SUPPORT (Cont.)

- Quality assurance functions including:
 - checking continuity of circuits using circuit analyzers
 - performing quality assurance inspection of components, assemblies, and completed instrumentation systems
 - analyzing problems encountered and documenting all inspections and tests performed
 - recording of nonconformances, rejections, reworks, and repairs
 - integrating Government-provided subassembly drawings/specifications to form detailed schematic of completed task
 - assuring compliance of end items with the **NASA Assurance Standards Publications**

ELECTRONIC EQUIPMENT SUPPORT

- **On-going support to include the installation, repair, maintenance, assembly, modification, setup, operation, and testing of a variety of government-owned Computer Numerical Control (CNC) and conventional machinery/equipment**
- **Annual calibration of selected machine tool equipment**