

NAJ1-20001

**SOLICITATION, OFFER AND AWARD**

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) RATING DO-C9 PAGE OF 1 111 PAGES

2. CONTRACT NO. 3. SOLICITATION NO. 1-64-5673.0419

4. TYPE OF SOLICITATION:  SEALED BID (IFB)  NEGOTIATED (RFP) 5. DATE ISSUED 8/7/92

6. REQUISITION/PURCHASE NO. **REQUISITION**

7. ISSUED BY: National Aeronautics and Space Administration, Langley Research Center, Hampton, VA 23665-5225

8. ADDRESS OFFER TO (If other than Item 7): NASA, Langley Research Center, 9A Langley Boulevard, Bldg. 1195A, Room 103, Hampton, VA 23665-5225

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

**SOLICITATION**

9. Sealed offers in original and ten (10) copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in 9A Langley Blvd., Bldg. 1195A, Rm. 103 until 4:00PM local time 9/21/92 (Hour) (Date)

CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: A. NAME B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS)

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

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52-232-8)

10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	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

Pursuant to the provisions of NASA FAR Supplement 18-4.7301(b)(3), I hereby

15A. NAME AND ADDRESS OF OFFEROR: 16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Officer of LARC.

*[Signature]*

15B. TELEPHONE NO. (Include area code) 17. SIGNATURE 18. OFFER DATE

15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE

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

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

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:  10 U.S.C. 2304(c)  41 U.S.C. 253(c)

23. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM 25. below (4 copies unless otherwise specified)

24. ADMINISTERED BY (If other than Item 7) CODE 25. PAYMENT WILL BE MADE BY CODE

Criticality Designator C Financial Management Division, Mail Stop 175, NASA, Langley Research Center, Hampton, VA 23665-5225

26. NAME OF CONTRACTING OFFICER (Type or print) STEELMAN KETCHUM 27. UNITED STATES OF AMERICA 28. AWARD DATE

*[Signature]* (Signature of Contracting Officer)

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



Langley Research Center  
Hampton, Virginia  
23665-5225

Reply to Attn of

It is important that you furnish the information requested below and return this sheet by the earliest practicable date. Failure to respond may result in removal of your firm from our bidders source files.

DO NOT RETURN ENTIRE PACKAGE

-----  
IFB/RFP No. 1-64-5673.0419

- I intend to submit a Bid/Proposal.
- I do not intend to submit a Bid/Proposal for this solicitation for the following reason(s):

\_\_\_\_\_  
\_\_\_\_\_

however, please retain my name in your bidders source files for future solicitations.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Typed Name and Title: \_\_\_\_\_

-----  
RETURN TO:

National Aeronautics and Space Administration  
Langley Research Center  
Attn: Industry Assistance Office, M/S 144  
Hampton, VA 23665-5225



Langley Research Center  
Hampton, Virginia  
23665-5225

**SOLICITATION NO:** 1-64-5673.0419

**REQUIREMENT:** ENGINEERING DESIGN, DEVELOPMENT, INSTALLATION AND  
TESTING OF FACILITY AUTOMATION SYSTEMS

A preproposal conference will be held at Langley Research Center on August 21, 1992. See Provision L.26 for details of conference.

Your attention is directed to Provision L.36, Proposal Preparation and Submission - Special Instructions, for important information on proposal preparation. Also see Section M for important evaluation information.

It is NASA policy to obtain maximum practicable competition consistent with the nature of each procurement. However, to prevent unnecessary expense associated with preparation and submission of a proposal, only firms with demonstrated experience and background in facility automation systems are encouraged to respond to this request.

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PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B.1 SCOPE OF WORK--ALTERNATE II (LaRC 52.212-90) (JUL 1991)

A. The Contractor shall, except as otherwise specified herein, furnish all personnel, facilities, services, equipment, supplies, and materials necessary for engineering design, development, installation and testing of facility automation systems as broadly described in Section C, Description/Specifications/Work Statement.

B. Specific detailed performance requirements within the Statement of Work will be directed by the Government in accordance with the procedures outlined in G.7, Task Assignment Information.

B.2 LEVEL-OF-EFFORT

A. In performing Government assigned tasks under this contract, the Contractor is obligated to provide up to 80,000 direct productive labor hours as defined in paragraph C. below.

B. Government authorized task assignments will be issued requiring a cumulative minimum of 1,000 direct productive labor hours over the life of the contract.

C. Direct productive labor hours are defined as those hours expended by prime personnel in the performance of the effort set forth in Section C, Description/Specifications/Work Statement. This does not include administrative and support personnel such as, financial, clerical, procurement, or any labor allocated as indirect. Further, direct productive labor hours shall mean hours actually worked including overtime but excluding all leave (vacation, holidays, sick, etc.).

D. Each task assignment shall specify a total cost and a direct labor hour limitation, neither of which shall be exceeded without the prior written consent of the Contracting Officer. Only expenditures against specific written task assignments authorized by the Contracting Officer and within the man-hour and cost limitations set forth therein shall be allocable or allowable under this contract. Notwithstanding such authorizations, in no event shall the Contractor exceed the total contract cost limitation imposed by the Section I clause entitled "Limitation of Funds."

E. The fee set forth in B.3 is based upon the furnishing of the level of effort specified in paragraph A. If the Contractor has provided the hours specified in paragraph B., but not the total level of effort specified in paragraph A. and the Government has not invoked, under the Termination clause of this contract, its rights to adjust the contract for reduced effort, the Contracting Officer may make a downward adjustment to the contract fee. The adjustment in fee will equate the percentage of fee specified in The Schedule to the percentage of direct productive labor hours expended. At the Contracting Officer's discretion, an adjustment may include consideration of efficiencies in

the Contractor's performance, including productivity improvements, if any, which contributed to the lesser number of direct labor hours being provided.

B.3 ESTIMATED COST AND FIXED FEE (NASA 18-52.216-74)  
(DEC 1991)

The estimated cost of this contract is \$ \_\_\_\_\_ exclusive of the fixed fee of \$ \_\_\_\_\_. The total estimated cost and fixed fee is \$ \_\_\_\_\_.

B.4 ADMINISTRATION OF CONTRACT FUNDING (LaRC 52.232-100)  
(MAR 1989)

A. The Contractor agrees that all future incremental funding shall be accomplished by Administrative Change Modification and that the funding procedure shall in no way change the Contractor's notification obligations as set forth in the "Limitation of Funds" clause.

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

B.5 CONTRACT FUNDING--TASK ASSIGNMENTS (LaRC 52.232-111)  
(JUN 1991)

A. In accordance with the "Limitation of Funds" clause, the amount allotted by the Government to this contract for the purpose of payment of cost, exclusive of fee, is \$ \_\_\_\_\_. This amount is to cover the Government's obligation for performance of work in accordance with the limitations and completion dates as set forth in task assignments authorized by the Contracting Officer.

B. An additional amount of \$ \_\_\_\_\_ is obligated under this contract for the payment of fee.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK - ENGINEERING DESIGN DEVELOPMENT, INSTALLATION AND TESTING OF FACILITY AUTOMATION SYSTEMS (LaRC 52.215-90)  
(JUN 1988)

I. Background

Langley Research Center possesses a wide variety of aeronautical/aerospace test facilities which are unrivaled in the free world. A continual rehabilitation program insures that the facilities are well maintained and can provide state-of-the art testing. New facilities are also periodically constructed to expand the Center's test capabilities. A key element of the rehab and new construction activities is the inclusion of microprocessor - and minicomputer-based systems to provide

precise control of facility parameters, automation of normal operational functions and existing test equipment.

## II. Scope

The efforts provided under this Statement of Work shall support the development of facility automation systems. This will be accomplished by performing tasks in the areas defined below.

## III. Development Areas

### A. Design - Task assignments in this area may include such tasks as:

Site visits and conferences to obtain the data upon which to develop a design. The preparation of preliminary analyses and studies, sketches, layout plans, and preliminary cost estimates. The preparation of final designs, including AutoCAD-generated drawings (Version 11 or later), hardware and software specifications, detailed cost estimates, and construction schedules. The presentation and technical support of two design reviews at the 30 and 85 percent design levels.

### B. Simulation - Task assignments in this area may include such tasks as:

Generation of linear and non-linear mathematical representations (math models) of physical facility plants and processes. Implementation of control algorithms and math models on digital simulation programs such as Advanced Control Simulation Language for verification of design approach. Real-time simulation of the facility plant to allow checkout of actual hardware and software components prior to installation at the facility.

### C. Electronic Fabrication - Task assignments in this area may include such tasks as:

Fabrication of printed circuit boards and control consoles, purchases of components and subsystems, and electronic systems integration. Fabrication of cabling and all components needed for system interface to existing facility hardware. Quality assurance inspection of components, assemblies, subsystems, and systems. Modifications to design drawings to reflect as-built conditions.

### D. Software Generation - Task assignments in this area may include such tasks as:

Coding of modules in a high level language such as FORTRAN, C, or ADA from flowcharts, specifications for modules, screen layouts, and general run-time environment requirements. Integration of specific modules in a real-time operating system with appropriate task priorities and execution speeds. Testing of software on both development system and target hardware for conformance to

specifications. Documentation of source code and all information required to rebuild or modify the target system.

- E. System Validation - Task assignments in this area may include such tasks as:

Assembling all target electronic hardware in a laboratory environment and providing temporary cabling for system energization. Downloading of all software into target hardware. Interconnection of target system to an analog/digital simulation of the facility processes. Validation testing to confirm appropriateness of software/hardware design. Demonstrations of operational interfaces and general system operations to operators and research customers.

- F. System Installation and Checkout - Task assignments in this area may include such tasks as:

Removal of existing equipment and associated wiring and cables. Installation of new hardware and cabling with appropriate interconnections to field devices. Initial energization and confirmation of proper operation of newly installed hardware. Checkout of affected subsystems for proper operation. System level checkout of all affected facility operations including tests throughout the facility's performance envelope. Complete documentation of the new system including operator's manuals, software manuals, maintenance manuals, and system test results. Operator training shall also be required.

#### IV. Federal Information Processing Standards (FIPS)

The following standards (FIPS), in effect on the date of this solicitation shall be applicable; unless otherwise specified to individual tasks required to be performed under this procurement and are incorporated by reference. The Federal Information Resources Management Regulation (FIRMR) standard terminology for each FIPS is set forth below. Compliance with these FIPS is mandatory.

##### Hardware

FIPS 1-2 Code for Information Interchange, Its Representation, Subsets and Extensions

##### ASCII System Requirements

The system, upon receiving a hardware or software command, must accept data on magnetic tape, paper tape, or any other input/output media covered by an approved Federal Information Processing Standard Publication (FIPS) in ASCII code and collating sequence prescribed in FIPS 1-2 and in the format prescribed in FIPS 2-1, 3-1, 25, 50, or other applicable FIPS. Such data may be translated, if necessary, into a form that the equipment can internally process, provided that, upon receiving a hardware or software command, the equipment can produce processed data



on magnetic tape, paper tape, printers, and other output media in the ASCII code and collating sequence prescribed in FIPS 1-2 and in the format prescribed in FIPS 2-1, 3-1, 25, 50, or other applicable FIPS.

FIPS 16-1 Bit Sequencing of the Code for Information Interchange in Serial-By-Bit Data Transmission

Bit Sequencing - Serial Data Transmission

All applicable equipment or services that may result from this requirement, transmitting in a serial-by-bit, serial-by-character mode, must be capable of bit sequencing as prescribed in FIPS 16-1 for the transmission of the Standard Code for Information Interchange, FIPS 1-2, at the interface between data terminal equipment and data communication equipment.

FIPS 17-1 Character Structure and Character Parity Sense for Serial-By-Bit Data Communication in the Code for Information Interchange

Character Structure/Parity - Serial Data Transmission

All applicable equipment that may result from this requirement, transmitting in a serial-by-bit, serial-by-character synchronous or asynchronous mode, must be capable of transmitting the character structure and sense of character parity prescribed in FIPS 17-1 for the transmission of the Standard Code for Information Interchange, FIPS 1-2, at the interface between data terminal equipment and data communication equipment.

FIPS 86 Additional Controls for Use with American National Standard Code for Information Interchange

Additional ASCII Controls for Character-Imaging ADP Equipment or Services

All applicable ADP character-imaging equipment or services (e.g., interactive ADP terminals of the display and printer type, line printers, microfilm printers, typesetting composers, word processors, and related devices or services using such devices,) must comply with the requirements set forth in FIPS 86 when such equipment or services employ the character set and encoding conventions prescribed in FIPS 1-2, employ primarily character-oriented controls, and are consistent with the architectural assumptions for devices in Appendix B, ANS X3.64-1979. All ADP terminals that meet these conditions are included in this requirement if they contain alphanumeric keyboards and CRT displays or printers that may be used in any form of on-line interactive application or stand alone off-line data preparation. Computer resident control software may be used, but is not required, to implement specific features of FIPS 86, unless specified elsewhere in this document.

Software Standards Other Than Program Languages

FIPS 107 Local Area Networks: Baseband Carrier Sense Multiple Access with Collision Detection Access Method and Physical Layer Specifications and Link Layer Protocol

Local Area Network Equipment and Services Employing CSMA/CD

All local area network services and equipment employing CSMA/CD which result from this requirement shall provide the capability to transmit bits and to send data link frames between nodes in compliance with the requirements set forth in FIPS 107.

FIPS 151-1 POSIX: Portable Operating Systems Interface for Computer Environments

Acquisition and Development of Portable Operating Systems

Operating systems environments offered as a result of the requirements of which this is a part shall implement FIPS 151-1, as well as any additional elements specified elsewhere in this requirements document, and shall require validation in accordance with provisions contained in FIPS 151-1.

Programing Languages

FIPS 69-1 Fortran

Acquisition of FORTRAN Language Processors

FORTRAN language processors offered as a result of the requirements of which this is a part shall conform to the requirements in FIPS 69-1 FORTRAN. These processors shall implement all of the language elements of the level of FIPS 69-1 FORTRAN as specified elsewhere in this requirements document (Paragraph III.D. above) and require prior validation as specified elsewhere in this document.

Development or Acquisition of Application Programs

When computer application programs are developed or acquired as a result of the requirements of which this is a part, and one of the FIPS programing languages is specified elsewhere in this requirements document, only the language elements of that FIPS, as well as any additional language elements as specified elsewhere in this document shall be used. In these cases, processors used in developing such programs shall be validated.

FIPS 119 Ada

## Acquisition of Ada Language Processors

Ada language processors offered as a result of the requirements of which this is a part shall conform to the requirements in FIPS 119 Ada. These processors shall implement all of the language elements of FIPS 119 Ada and require Prior Validation as specified elsewhere in this document (Section H, Clause H.14).

## Development or Acquisition of Application Programs

When computer application programs are developed or acquired as a result of the requirements of which this is a part, and one of the FIPS programming languages is specified elsewhere in this requirements document, only the language elements of that FIPS, as well as any additional language elements as specified elsewhere in this document shall be used. In these cases, processors used in developing such programs shall be validated.

FIPS 160 C

## Development or Acquisition of Application Programs

When computer application programs are developed or acquired as a result of the requirements of which this is a part, and one of the FIPS programming languages is specified elsewhere in this requirements document, only the language elements of that FIPS, as well as any additional language elements as specified elsewhere in this document shall be used. In these cases, processor used in developing such programs shall be validated.

## V. NASA Software Documentation Standard

The following standard, in effect on the date of this solicitation is applicable to this procurement and is incorporated by reference.

NASA-STD-2100-91 NASA Software Documentation Standard Software Engineering Program

SECTION D - PACKAGING AND MARKING

## D.1 PACKAGING AND MARKING

All documentation, hardware, software and reports required to be delivered under this contract shall be packed/package in a manner that insures safe arrival at destination and in accordance with additional instructions that may be specified by the Government in authorized task assignments. Marking shall be as set forth in Section J, Exhibit A, Contract Documentation and Reporting Requirements and in the Government authorized task assignments.

SECTION E - INSPECTION AND ACCEPTANCEE.1 INSPECTION OF SUPPLIES - COST-REIMBURSEMENT (FAR 52.246-3)  
(APR 1984)

(a) Definitions. "Contractor's managerial personnel," as used in this clause, means any of the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of--

- (1) All or substantially all of the Contractor's business;
- (2) All or substantially all of the Contractor's operation at a plant or separate location at which the contract is being performed; or
- (3) A separate and complete major industrial operation connected with performing this contract.

"Supplies," as used in this clause, includes but is not limited to raw materials, components, intermediate assemblies, end products, lots of supplies, and, when the contract does not include the Warranty of Data clause, data.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the supplies, fabricating methods, and special tooling under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test the contract supplies, to the extent practicable at all places and times, including the period of manufacture, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in the contract performance. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) Unless otherwise specified in the contract, the Government shall accept supplies as promptly as practicable after delivery, and supplies shall be deemed accepted 60 days after delivery, unless accepted earlier.

(f) At any time during contract performance, but no later than 6 months (or such other time as may be specified in the contract) after acceptance of the supplies to be delivered under the contract, the Government may require the Contractor to replace or correct any supplies that are nonconforming at time of delivery. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with contract requirements. Except as otherwise provided in paragraph (h) below, the cost of replacement or correction shall be included in allowable cost, determined as provided in the Allowable Cost and Payment clause, but no additional fee shall be paid. The Contractor shall not tender for acceptance supplies required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken.

(g) (1) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, the Government may--

(i) By contract or otherwise, perform the replacement or correction and charge to the Contractor any increased cost or make an equitable reduction in any fixed fee paid or payable under the contract;

(ii) Require delivery of undelivered supplies at an equitable reduction in any fixed fee paid or payable under the contract; or

(iii) Terminate the contract for default.

(2) Failure to agree on the amount of increased cost to be charged to the Contractor or to the reduction in the fixed fee shall be a dispute.

(h) Notwithstanding paragraphs (f) and (g) above, the Government may at any time require the Contractor to correct or replace, without cost to the Government, nonconforming supplies, if the nonconformances are due to (1) fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel or (2) the conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.

(i) This clause applies in the same manner to corrected or replacement supplies as to supplies originally delivered.

(j) The Contractor shall have no obligation or liability under this contract to replace supplies that were nonconforming at the time of delivery, except as provided in this clause or as may be otherwise provided in the contract.

(k) Except as otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

## E.2 INSPECTION OF SERVICES - COST-REIMBURSEMENT (FAR 52.246-5) (APR 1984)

(a) Definition. "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce any fee payable under the contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances or (2) terminate the contract for default.

## E.3 FINAL INSPECTION AND ACCEPTANCE (LaRC 52.246-94) (JUN 1988)

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 or as specified in task assignments.

SECTION F - DELIVERIES OR PERFORMANCEF.1 STOP-WORK ORDER (FAR 52.212-13) (AUG 1989) ALTERNATE I  
(APR 1984)

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

either -

- (1) Cancel the stop-work order; or
- (2) Terminate the work covered by the order as provided in the Termination clause of this contract.

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

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

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

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

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

## F.2 PLACE OF DELIVERY--ALTERNATE II (LaRC 52.212-92) (JUN 1988)

Delivery of all items hereunder shall be f.o.b. Langley Research Center, except as may be specified in task assignments.

**F.3 FACILITY AUTOMATION SYSTEMS DESIGN AND HARDWARE DELIVERY**

A. Time of Delivery--The design documentation, hardware, and software produced under this contract shall be delivered in accordance with the schedule specified in the task assignments.

B. Place of Delivery--Langley Research Center unless otherwise indicated in a task assignment. Design documentation and hardware shall be delivered prepaid.

C. Freight and/or express shipments shall be marked as follows:

National Aeronautics and Space Administration  
Langley Research Center, 4 South Marvin Street, Building 1206  
Contract NAS1- , Task No. (To Be Assigned)  
Hampton, VA 23665-5225

**F.4 PERIOD OF PERFORMANCE - TASK ASSIGNMENTS (LaRC 52.212-112)  
(JUL 1989)**

A. The period for issuance of task assignments is thirty-six (36) months from the effective date of this contract.

B. Any task assignments issued prior to the expiration of the period for issuance of task assignments shall be completed, subject to the limitations specified in B.2; provided that the Contractor will not be required to perform any work beyond 12 months after the period for issuing task assignments.

**F.5 PLACES OF PERFORMANCE--ALTERNATE II (LaRC 52.212-98) (JUN 1988)**

The places of performance shall be the Contractor's facility; NASA, Langley Research Center, Hampton, Virginia; and other sites as may be designated by task assignment.

**F.6 REPORTS AND DOCUMENTATION DELIVERY (LaRC 52.212-99)  
(JUN 1988)**

The Contractor shall provide to the Government all reports and items of documentation as required by Section I, Contract Clauses, and by task assignments issued under the contract.

**SECTION G - CONTRACT ADMINISTRATION DATA****G.1 NEW TECHNOLOGY (NASA 18-52.227-70) (APR 1988)****(a) Definitions.**

"Administrator," as used in this clause, means the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative.

"Contract," as used in this clause, means any actual or proposed contract, agreement, understanding, or other arrangement, and includes any assignment, substitution of parties, or subcontract executed or entered into thereunder.

"**Made**," as used in this clause, means conception or first actual reduction to practice; provided, that in the case of a variety of plant, the date of determination (as defined in Section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.

"**Nonprofit organization**," as used in this clause, means a domestic university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)), or any domestic nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

"**Practical application**," as used in this clause, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

"**Reportable item**," as used in this clause, means any invention, discovery, improvement, or innovation of the Contractor, whether or not the same is or may be patentable or otherwise protectible under Title 35 of the United States Code, conceived or first actually reduced to practice in the performance of any work under this contract or in the performance of any work that is reimbursable under any clause in this contract providing for reimbursement of costs incurred prior to the effective date of this contract.

"**Small business firm**," as used in this clause, means a domestic small business concern as defined at 15 U.S.C. 632 and implementing regulations of the Administrator of the Small Business Administration. (For the purpose of this definition, the size standard contained in 13 CFR 121.3-8 for small business contractors and in 13 CFR 121.3-12 for small business subcontractors will be used.)

"**Subject invention**," as used in this clause, means any reportable item which is or may be patentable or otherwise protectible under Title 35 of the United States Code, or any novel variety of plant that is or may be protectible under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

(b) **Allocation of principal rights.**

(1) **Presumption of title.**

(i) Any reportable item that the Administrator considers to be a subject invention shall be presumed to have been made in the manner specified in paragraph (1) or (2) of Section 305(a) of the National Aeronautics and Space Act of 1958 (43 U.S.C. 2457(a)) (hereinafter called "the Act"), and the above presumption shall be conclusive unless at the time of reporting the reportable item the Contractor submits to the Contracting Officer a written statement, containing supporting details, demonstrating that the reportable item was not made in the manner specified in paragraph (1) or (2) of Section 305(a) of the Act.

(ii) Regardless of whether title to a given subject invention would otherwise be subject to an advance waiver or is the subject of a petition for waiver, the Contractor may nevertheless file the statement described in subdivision (i) above. The Administrator will review the information furnished by the Contractor in any such statement and any other available information relating to the circumstances surrounding the making of the subject invention and will notify the Contractor whether the Administrator has determined that the subject invention was made in the manner specified in paragraph (1) or (2) of Section 305(a) of the Act.



(2) **Property rights in subject inventions.** Each subject invention for which the presumption of subdivision (1)(i) above is conclusive or for which there has been a determination that it was made in the manner specified in paragraph (1) or (2) of Section 305(a) of the Act shall be the exclusive property of the United States as represented by NASA unless the Administrator waives all or any part of the rights of the United States, as provided in subparagraph (3) below.

(3) **Waiver of rights.**

(i) Section 305(f) of the Act provides for the promulgation of regulations by which the Administrator may waive the rights of the United States with respect to any invention or class of inventions made or that may be made under conditions specified in paragraph (1) or (2) of Section 305(a) of the Act. The promulgated NASA Patent Waiver Regulations, 14 CFR Section 1245, Subpart 1, have adopted the Presidential Memorandum on Government Patent Policy of February 18, 1983, as a guide in acting on petitions (requests) for such waiver of rights.

(ii) As provided in 14 CFR 1245, Subpart 1, Contractors may petition, either prior to execution of the contract or within 30 days after execution of the contract, for advance waiver of rights to any or all of the inventions that may be made under a contract. If such a petition is not submitted, or if after submission it is denied, the Contractor (or an employee inventor of the Contractor) may petition for waiver of rights to an identified subject invention within eight months of first disclosure of the invention in accordance with subparagraph (e)(2) below, or within such longer period as may be authorized in accordance with 14 CFR 1245.105.

(c) **Minimum rights reserved by the Government.**

(1) With respect to each subject invention for which a waiver of rights is applicable in accordance with 14 CFR Section 1245, Subpart 1, the Government reserves --

(i) An irrevocable, nonexclusive, nontransferable, royalty-free license for the practice of such invention throughout the world by or on behalf of the United States or any foreign Government in accordance with any treaty or agreement with the United States; and

(ii) Such other rights as stated in 14 CFR 1245.107.

(2) Nothing contained in this paragraph (c) shall be considered to grant to the Government any rights with respect to any invention other than a subject invention.

(d) **Minimum rights to the Contractor.**

(1) The Contractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government acquires title, unless the Contractor fails to disclose the subject invention within the times specified in subparagraph (e)(2) below. The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the Administrator except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by the Administrator to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with 14 CFR 1245, Subpart 2, Licensing of NASA

Inventions. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the Administrator to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, the Contractor will be provided a written notice of the Administrator's intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by the Administrator for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with 14 CFR 1245.211, any decision concerning the revocation or modification of its license.

**(e) Invention identification, disclosures, and reports.**

(1) The Contractor shall establish and maintain active and effective procedures to assure that reportable items are promptly identified and disclosed to Contractor personnel responsible for the administration of this New Technology clause within six months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of the reportable items, and records that show that the procedures for identifying and disclosing reportable items are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

(2) The Contractor will disclose each reportable item to the Contracting Officer within two months after the inventor discloses it in writing to Contractor personnel responsible for the administration of this New Technology clause or, if earlier, within six months after the Contractor becomes aware that a reportable item has been made, but in any event for subject inventions before any on sale, public use, or publication of such invention known to the Contractor. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the reportable item was made and the inventor(s) or innovator(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the reportable item. The disclosure shall also identify any publication, on sale, or public use of any subject invention and whether a manuscript describing such invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the agency, the Contractor will promptly notify the agency of the acceptance of any manuscript describing a subject invention for publication or of any on sale or public use planned by the Contractor for such invention.

(3) The Contractor shall furnish the Contracting Officer the following:

(i) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing reportable items during that period, and certifying that all reportable

items have been disclosed (or that there are no such inventions) and that the procedures required by subparagraph (e)(1) above have been followed.

(ii) A final report, within 3 months after completion of the contracted work, listing all reportable items or certifying that there were no such reportable items, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such subcontracts.

(4) The Contractor agrees, upon written request of the Contracting Officer, to furnish additional technical and other information available to the Contractor as is necessary for the preparation of a patent application on a subject invention and for the prosecution of the patent application, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions.

(5) The Contractor agrees, subject to paragraph 27.302(i), of the Federal Acquisition Regulation (FAR), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

**(f) Examination of records relating to inventions.**

(1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether --

- (i) Any such inventions are subject inventions;
- (ii) The Contractor has established and maintained the procedures required by subparagraph (e)(1) of this clause; and
- (iii) The Contractor and its inventors have complied with the procedures.

(2) If the Contracting Officer learns of an unreported Contractor invention that the Contracting Officer believes may be a subject invention, the Contractor may be required to disclose the invention to the agency for a determination of ownership rights.

(3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

**(g) Withholding of payment (this paragraph does not apply to subcontracts).**

(1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the Contractor fails to --

- (i) Establish, maintain, and follow effective procedures for identifying and disclosing reportable items pursuant to subparagraph (e)(1) above;
- (ii) Disclose any reportable items pursuant to subparagraph (e)(2) above;
- (iii) Deliver acceptable interim reports pursuant to subdivision (e)(3)(i) above; or
- (iv) Provide the information regarding subcontracts pursuant to subparagraph (h)(4) below.

(2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies

exist and has delivered all reports, disclosures, and other information required by this clause.

(3) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of reportable items required by subparagraph (e)(2) above, and an acceptable final report pursuant to subdivision (e)(3)(ii) above.

(4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.

**(h) Subcontracts.**

(1) Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall --

(i) Include this clause (suitably modified to identify the parties) in any subcontract hereunder (regardless of tier) with other than a small business firm or nonprofit organization for the performance of experimental, developmental, or research work; and

(ii) Include the clause at FAR 52.227-11 (suitably modified to identify the parties) in any subcontract hereunder (regardless of tier) with a small business firm or nonprofit organization for the performance of experimental, developmental, or research work.

(2) In the event of a refusal by a prospective subcontractor to accept such a clause the Contractor --

(i) Shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such subcontract without the written authorization of the Contracting Officer.

(3) In the case of subcontracts at any tier, the agency, subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and NASA with respect to those matters covered by this clause.

(4) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(5) The subcontractor will retain all rights provided for the Contractor in the clause of subdivision (1)(i) or (1)(ii) above, whichever is included in the subcontract, and the Contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(i) **Preference for United States Industry.** Unless provided otherwise, no Contractor that receives title to any subject invention and no assignee of any such Contractor shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Administrator upon a showing by the Contractor or assignee that reasonable but

unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

G.2 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 18-52.227-72) (APR 1984)

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

<u>Title</u>	<u>Office Code</u>	<u>Address (including zip code)</u>
New Technology Representative	200	NASA, Langley Research Center Hampton, VA 23665-5225
Patent Representative	143	NASA, Langley Research Center Hampton, VA 23665-5225

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights - Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 18-27.375-3 of the NASA FAR Supplement.

G.3 FINANCIAL REPORTING OF GOVERNMENT-OWNED/CONTRACTOR-HELD PROPERTY (NASA 18-52.245-73) (MAR 1989)

(a) The Contractor shall prepare and submit annually a NASA Form 1018, Report of Government-Owned/Contractor-Held Property, in accordance with 18-45.505-14 and the instructions on the form and in Section 18-45.7101 of the NASA FAR Supplement, except that the reporting of space hardware shall be required only as directed in clause 18-52.245-78, Space Hardware Reporting, if applicable.

(b) If administration of this contract has been delegated to the Department of Defense, the original and three copies of NASA Form 1018 shall be submitted through the DOD Property Administrator to the NASA office identified below. If the contract is administered by NASA, the forms shall be submitted directly to the following NASA office:

NASA, Langley Research Center  
Attn: Industrial Property Office, M/S 377  
Hampton, VA 23665-5225

(c) The annual reporting period shall be from July 1 of each year to June 30 of the following year.

(d) The Contractor agrees to insert the reporting requirement in all first-tier subcontracts, except that the requirement shall provide for the submission of the subcontractors' reports to the Contractor, not to the Government. The Contractor shall require the subcontractors' reports to be submitted in sufficient time to meet the reporting date in paragraph (c) above.

(e) The Contractor's report shall consist of a consolidation of the subcontractors' reports and the Contractor's own report.

#### G.4 REPORT ON NASA SUBCONTRACTS (NASA 18-52.204-70) (DEC 1988)

(a) The Contractor shall submit information on NASA Form 667 to the National Aeronautics and Space Administration (Code HM-1), Washington, DC 20546, substantially as follows with respect to each subcontract or subcontract modification exceeding \$10,000 as soon as possible after its execution:

- (1) The name and address of the prime Contractor and the NASA prime contract number.
- (2) The name and address of the subcontractor.
- (3) Whether the subcontractor is a large or small business concern and/or a minority business concern.
- (4) Whether the type of effort being performed involves research and development.
- (5) A brief description of the subcontract work.
- (6) The amount of the subcontract.
- (7) The principal location where the subcontract work is to be performed, if known.

(b) The Contractor and its subcontractors will submit negative reports annually, if applicable, on each prime contract and first-tier subcontract subject to this reporting requirement. These negative reports shall be submitted not later than October 31 for the 12-month period ending September 30th of each year. The negative reporting shall be continued until the contract or subcontract has been physically completed and the National Aeronautics and Space Administration (Code HM-1), Washington, DC 20546, so notified by the Contractor or subcontractor.

(c) "Subcontract," as used in this clause, means procurement in excess of \$10,000 by the Contractor or first-tier subcontractor of articles, materials, or services for performing this contract, except purchases, regardless of amount, of stock items, materials, or services that cannot be specifically identified with this contract.

(d) "Research and development," as used in this clause, means basic and applied research, and design and development of prototypes and processes to (1) pursue a planned search for new knowledge, with or without reference to a specific application, (2) apply existing knowledge in the creation of new products or processes, or (3) apply existing knowledge in the improvement or modification of present products and processes. It excludes subcontracts for the purchase of standard commercial items and services.

(e) The Contractor shall -

(1) Insert the provisions of paragraphs (a), (b), (c), and (d) above in each subcontract over \$50,000;

(2) Instruct its subcontractors to submit their reports directly to the National Aeronautics and Space Administration (Code HM-1), Washington, DC 20546; and

(3) Provide its subcontractors with the number of the NASA prime contract.

G.5 NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING (NASA 18-52.204-71)  
(DEC 1988)

(a) The Contractor shall submit Financial Management Reports on NASA Form 533 in accordance with the instructions in Procedures for Contractor Reporting of Correlated Cost and Performance Data (NHB 9501.2B) 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 be correlated with technical and schedule reporting, shall be set forth in the Contract 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 reported 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 Contract Schedule or as designated in writing by the Contracting Officer. Upon completion and acceptance by NASA of all contract schedule line items, the Contracting Officer may direct the Contractor to submit Form 533 reports on a quarterly basis only.

(d) The Contractor shall insert the substance of this clause in all first-tier cost-reimbursement subcontracts specifically identified in writing by the Contracting Officer and shall include their cost in its cost reports.

(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) above, the Contracting Officer shall effect that change in accordance with the Changes clause of this contract.

G.6 ACQUISITION OF CENTRALLY REPORTABLE EQUIPMENT (NASA 18-52.245-70)  
(MAR 1989)

(a) "Centrally reportable equipment," as used in this clause, means plant equipment, special test equipment (including components), special tooling and non-flight space property (including ground support equipment) (1) generally commercially available and used as a separate item or as a component of a system, (2) having an acquisition cost of \$1,000 or more (unless a lower threshold is specified elsewhere in this contract), and (3) is identifiable by a manufacturer and model number.

(b) (1) Before acquiring (including acquiring by fabrication) any item of centrally reportable equipment under this contract (unless for incorporation into flight-qualified or flight-monitoring deliverable end items), the Contractor shall provide to the Contracting Officer, at the earliest possible date, a description of the item sufficiently detailed to enable screening of existing Government inventories. (2) For this purpose, the Contractor shall (i) prepare a separate DD Form 1419, DOD Industrial Plant Equipment Requisition for each item of centrally reportable equipment to be acquired and (ii) forward it through the Contracting Officer to the NASA Equipment Management System (NEMS) Coordinator at the cognizant NASA installation at least 30 days in advance of the date the Contractor intends to acquire or begin fabricating the item. If a certificate of nonavailability is not received within that period, the Contractor may proceed to acquire the item, subject to any other applicable provisions of this contract. Instructions for preparing the DD Form 1419 are contained in NASA FAR Supplement 18-45.7103. The same data may be provided in an alternate format when requesting other than Defense Industrial Plant Equipment Center (DIPEC) controlled items.

(3) Upon receiving the item on the DD Form 1419 (regardless of whether it is Contractor-acquired or Government-furnished), the Contractor shall prepare and submit a DD Form 1342 or equivalent data, in accordance with NASA FAR Supplement 18-45.505-670.

#### G.7 TASK ASSIGNMENT INFORMATION

A. The work to be performed within the areas outlined in Section C, Description/Specifications/Work Statement, will be more specifically defined and controlled by means of written task assignments, issued solely by the Contracting Officer, containing the following information:

1. Task assignment number and date
2. Description of work and/or deliverable items
3. Direct labor-hour limitation and total cost limitation
4. Required completion date and/or delivery schedule
5. Government-furnished items
6. Appropriate special instructions or information

B. A copy of each task assignment shall be furnished to the Contractor. To acknowledge receipt, the Contractor shall sign the "Acknowledgment" enclosed and return it to the Contracting Officer.

C. The Contractor agrees to assist the Government, when requested, by providing information needed to estimate the cost, manhours, etc. necessary to accomplish the proposed task assignment.

D. If the Contractor determines that the requirements of the task assignment are unrealistic regarding cost and schedule, he shall so notify the Contracting Officer in writing within two days after receipt of the task assignment and shall not perform any work pending resolution by the Contracting Officer.

#### G.8 SUBMISSION OF INVOICES (LaRC 52.232-94) (MAR 1992)

Proper invoices, as determined under the Section I clause entitled "Prompt Payment," shall be addressed to the designated payment office shown in Block 25. on page 1 of this contract. Cost and fee invoices shall be submitted separately through the delegated Government Audit Agency, which shall be the designated billing office. Cost invoices shall be submitted with the two copies of the NASA Form 533 designated to Cost Accounting in Exhibit A, Contract Documentation Requirements.

#### G.9 PAYMENTS--LEVEL-OF-EFFORT (LaRC 52.232-106) (NOV 1989)

Payments of cost and fixed fee will be made in monthly installments. No installment of fixed fee shall exceed the proportion of the total fixed fee determined by dividing the total direct labor hours (B.2, Level-of-Effort,



paragraph A.) into the number of direct labor hours expended during the period. Notwithstanding, any payments shall be subject to the withholding provisions of the clause of this contract entitled "Fixed Fee."

#### G.10 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 (804) 864-2462.

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

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

### SECTION H - SPECIAL CONTRACT REQUIREMENTS

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

Except for data contained on pages \_\_\_\_\_, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated \_\_\_\_\_, upon which this contract is based.

#### H.2 SAFETY AND HEALTH (NASA 18-52.223-70) (DEC 1988)

(a) The Contractor shall take all reasonable safety and health measures in performing under this contract and shall, to the extent set forth in the Contract Schedule, submit a safety plan and a health plan for the Contracting Officer's approval. The Contractor shall comply with all Federal, State, and local laws

applicable to safety and health in effect on the date of this contract and with the safety and health standards, specifications, reporting requirements, and provisions set forth in the Contract Schedule.

(b) The Contractor shall take or cause to be taken such other safety and health measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the changes clause of this contract; provided, that no adjustment shall be made under this safety and health clause for any change for which an equitable adjustment is expressly provided under any other provision of the contract.

(c) The Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the Contract Schedule, or property loss of \$25,000 or more arising out of work performed under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. Service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the Contract Schedule. The Contractor shall investigate all work-related incidents or accidents to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(d) (1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. The Contractor shall promptly take and report any necessary corrective action.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (1) above, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(e) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (e) and any applicable Schedule provisions, with appropriate changes of designations of the parties, in subcontracts of every tier that (1) amount to \$1,000,000 or more (unless the Contracting Officer makes a written determination that this is not required), (2) require construction, repair, or alteration in excess of \$25,000, or (3) regardless of dollar amount, involve the use of hazardous materials or operations.

(f) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and health measures under this clause.

(g) As a part of the Contractor's safety plan (and health plan, when applicable) and to the extent required by the Schedule, the Contractor shall furnish a list of all hazardous operations to be performed, including operations indicated in paragraphs (a) and (b) above, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous

operations commence, the Contractor shall submit for NASA concurrence either or both of the following as required by the Contract Schedule or by the Contracting Officer:

- (1) Written hazardous operating procedures for all hazardous operations.
- (2) A certification program for personnel involved in hazardous operations.

### H.3 PROCUREMENT AUTHORITY (201-39.5202-3) (OCT 90 FIRMR)

This acquisition is being conducted under a specific acquisition delegation of GSA's exclusive procurement authority for FIP resources. The specific GSA DPA case number is KMA-92-0406.

### H.4 ON-SITE ONLY--WORK SCHEDULE

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 8:00 a.m. to 4:30 p.m., Monday through Friday. However, some tasks will require site work at other hours.

### H.5 OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.212-104) (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.6 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.7 SUBCONTRACTING PLAN (LaRC 52.219-91) (JUN 1988)

The approved Contractor plan for subcontracting with small business and small disadvantaged business concerns is attached hereto as Exhibit B and is hereby made a part of this contract.

## H.8 EVIDENCE OF INSURANCE (LaRC 52.228-93) (MAR 1989)

The Contractor shall submit evidence of the insurance coverage, required by the NASA Clause 18-52.228-75 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.

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

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

H.10 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

Ceiling  
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.11 AUTOMATED INFORMATION SECURITY (AIS) PROGRAM/EMPLOYEE NATIONAL AGENCY CHECK (NAC)

Work to be performed under this contract requires access to ADP equipment and processing areas. Therefore, the Contractor shall comply with the requirements of NASA's Automated Information Security Program. This program is separate and distinct from security programs for safeguarding classified information. Prior to performing any work in restricted-access computer rooms or accessing NASA ADPE (either remotely or on-site at LaRC), all Contractor employees must have a favorable NAC completed. The Contractor shall submit a properly executed NASA Form 531 (NF 531), Name Check Request, to the LaRC Security Officer, Mail Stop 182, for each Contractor employee who will work in restricted access computer rooms and/or access NASA ADPE. In addition, each such employee is required to be fingerprinted at the LaRC Badge and Pass Office, Building 1228, or by any authorized agency or department utilizing Fingerprint Card FD-258. Approximately 75 days are required to complete the NAC after receipt of the NF 531 and FD-258. The NAC is not required if an employee has a Secret or higher clearance. When it is necessary for an employee to perform any work in restricted access computer rooms prior to completion of the NAC, the employee may be escorted while at the site by an individual who has a favorable NAC or a higher level of investigation favorably adjudicated, or a Secret or higher clearance, or as otherwise approved by the Security Officer. Employees may access NASA ADP equipment prior to completion of the NAC only as approved by the LaRC Security Officer on a case-by-case basis.

#### H.12 GOVERNMENT-FURNISHED COMPUTER ACCESS FOR PROGRAM DEMONSTRATION/ ACCEPTANCE (LaRC 52.245-91) (MAY 1990)

In order for the Contractor to demonstrate that the required computer program(s) are compatible with Langley Research Center computers and, in accordance with the inspection clause of the contract, to facilitate inspection by the Government during the demonstration, the Government will furnish the Contractor access to computer time at Langley Research Center. The exact date(s) and time(s) for Contractor use of Langley Research Center computers for this purpose shall be mutually agreed upon by the Contracting Officer and the Contractor.

#### H.13 GOVERNMENT-FURNISHED ITEMS (LaRC 52.245-92) (JUN 1988)

For the performance of this contract, the Government will furnish to the Contractor those items specified in task assignments.

#### H.14 VALIDATION OF FIPS IMPLEMENTATIONS

In addition to the FIPS implementation requirements specified elsewhere in this requirements document, all implementations of FIPS that are brought into the Federal inventory as a result of this document for which validation is specified, and those implementations used by vendors to develop programs or provide services

shall be validated using the official Validation System specified by the Computer Systems Laboratory (CSL). Validation shall be in accordance with CSL validation procedures for that FIPS. The results of validation shall be used to confirm that the implementation meets the requirements of the applicable FIPS as specified in this document.

A list of CSL validated products is available through the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22151, telephone (703) 487-4650, Order Number PB91-937300. For information concerning the validation of FIPS implementations contact the National Institute of Standards and Technology (NIST), CSL, Attn: FIPS Validations, Building 225, Room A266, Gaithersburg, MD 20899, telephone (301) 975-3274.

## PART II - CONTRACT CLAUSES

### SECTION I - CONTRACT CLAUSES

#### I.1 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (JUN 1988)

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

#### I.2 The following contract clauses are incorporated by reference:

##### FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
52.202-1	Definitions (SEP 1991)
52.203-1	Officials Not to Benefit (APR 1984)
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 1985)
52.203-7	Anti-Kickback Procedures (OCT 1988)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (SEP 1990)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (JUN 1991)
52.210-5	New Material (APR 1984)
52.212-8	Defense Priority and Allocation Requirements (MAY 1986)
52.215-1	Examination of Records by Comptroller General (APR 1984)
52.215-2	Audit - Negotiation (DEC 1989)
52.215-22	Price Reduction for Defective Cost or Pricing Data (JAN 1991)
52.215-24	Subcontractor Cost or Pricing Data (DEC 1991)
52.215-27	Termination of Defined Benefit Pension Plans (SEP 1989)
52.215-31	Waiver of Facilities Capital Cost of Money (SEP 1987)
52.215-33	Order of Precedence (JAN 1986)
52.215-39	Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions (JUL 1991)

52.216-8 Fixed Fee (APR 1984)  
52.219-8 Utilization of Small Business Concerns and Small Disadvantaged  
Business Concerns (FEB 1990)  
52.219-9 Small Business and Small Disadvantaged Business Subcontracting  
Plan (JAN 1991)  
52.219-13 Utilization of Women-Owned Small Businesses (AUG 1986)  
52.219-16 Liquidated Damages - Small Business Subcontracting Plan  
(AUG 1989)  
52.220-3 Utilization of Labor Surplus Area Concerns (APR 1984)  
52.222-1 Notice to the Government of Labor Disputes (APR 1984)  
52.222-20 Walsh-Healy Public Contracts Act (APR 1984)  
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 1989)  
52.223-2 Clean Air and Water (APR 1984)  
52.227-1 Authorization and Consent (APR 1984)  
52.227-2 Notice and Assistance Regarding Patent and Copyright  
Infringement (APR 1984)  
52.227-3 Patent Indemnity (APR 1984)  
52.227-14 Rights in Data - General (JUN 1987) -- as modified by NASA  
FAR Supplement 18-52.227-14  
52.228-7 Insurance - Liability to Third Persons (APR 1984)  
52.230-4 Administration of Cost Accounting Standards (SEP 1987)  
52.232-9 Limitation on Withholding of Payments (APR 1984)  
52.232-17 Interest (JAN 1991)  
52.232-18 Availability of Funds (APR 1984)  
52.232-22 Limitation of Funds (APR 1984)--as modified by NASA FAR  
Supplement 18-32.705-2  
52.232-23 Assignment of Claims (JAN 1986)  
52.232-28 Electronic Funds Transfer Payment Methods (APR 1989)--as  
modified by NASA FAR Supplement 18-32.908  
52.233-1 Disputes (DEC 1991) Alternate I (DEC 1991)  
52.233-3 Protest After Award (AUG 1989) Alternate I (JUN 1985)  
52.242-1 Notice of Intent to Disallow Costs (APR 1984)  
52.243-2 Changes - Cost-Reimbursement (AUG 1987)  
52.244-2 Subcontracts (Cost-Reimbursement and Letter Contracts)  
(JUL 1985) Alternate I (APR 1985)  
52.244-5 Competition in Subcontracting (APR 1984)  
52.245-5 Government Property (Cost-Reimbursement, Time-and-Material,  
or Labor-Hour Contracts) (JAN 1986)  
52.248-1 Value Engineering (MAR 1989)  
52.249-6 Termination (Cost-Reimbursement) (MAY 1986)  
52.249-14 Excusable Delays (APR 1984)

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

<u>CLAUSE NUMBER</u>	<u>TITLE AND DATE</u>
18-52.204-71	NASA Contractor Financial Management Reporting (DEC 1988)
18-52.212-70	Notice of Delay (DEC 1988)
18-52.219-74	Use of Rural Area Small Businesses (SEP 1990)
18-52.219-76	NASA Small Disadvantaged Business Goal (JUL 1991)
18-52.223-70	Safety and Health (DEC 1988)
18-52.227-86	Commercial Computer Software - Licensing (DEC 1987)
18-52.228-75	Minimum Insurance Coverage (OCT 1988)
18-52.245-70	Acquisition of Centrally Reportable Equipment (MAR 1989)
18-52.252-70	Compliance with NASA FAR Supplement (MAR 1989)

## I.3 CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

52.203-9	Requirement for Certificate of Procurement Integrity - Modification (NOV 1990)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (JAN 1990)
52.215-26	Integrity of Unit Prices (APR 1991)
52.216-7	Allowable Cost and Payment (JUL 1991)
52.222-2	Payment for Overtime Premiums (JUL 1990)
52.223-6	Drug-Free Workplace (JUL 1990)
52.225-9	Buy American Act - Trade Agreements Act - Balance of Payments Program (APR 1991)
CASB-2	Cost Accounting Standards (APR 1992)
52.232-25	Prompt Payment (APR 1989)
52.242-13	Bankruptcy (APR 1991)
18-52.209-71	Limitation of Future Contracting (DEC 1988)
201-39.5202-6	Warranty Exclusion and Limitation of Damages (OCT 1990 FIRMR)

I.4 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION  
(FAR 52.203-9) (NOV 1990)

(a) Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.

(b) The Contractor agrees that it will execute the certification set forth in paragraph (c) of this clause when requested by the contracting officer in connection with the execution of any modification of this contract.

(c) Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following certification:

## CERTIFICATE OF PROCUREMENT INTEGRITY--MODIFICATION (NOV 1990)

(1) I, \_\_\_\_\_,  
[Name of certifier]

am the officer or employee responsible for the preparation of this modification proposal and hereby certify that, to the best of my knowledge and belief, with the



exception of any information described in this certification, I have no information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended\* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement

(contract and modification number).

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that, to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of \_\_\_\_\_

[Name of Offeror]

who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

- (3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity--Modification (Continuation Sheet), ENTER NONE IF NONE EXIST) \_\_\_\_\_

\_\_\_\_\_  
[Signature of the officer or employee responsible for the modification proposal and date]

\_\_\_\_\_  
[Typed name of the officer or employee responsible for the modification proposal]

\*Subsections 27(a), (b), and (d) are effective on December 1, 1990.  
Subsection 27(f) is effective on June 1, 1991.

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 TITLE 18, UNITED STATES CODE, SECTION 1001.

(End of certification)

(d) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the

contractor. If a contractor decides to rely on a certification executed prior to suspension of Section 27 (i.e., prior to December 1, 1989), the contractor shall ensure that an individual who has so certified is notified that Section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.

(e) The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.

#### I.5 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-12) (JAN 1990)

##### (a) Definitions.

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

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

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

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

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

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

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

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

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

organization with respect to expenditures specifically permitted by other Federal law.

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

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

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

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

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

(b) Prohibitions.

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

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

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

(i) Agency and legislative liaison by own employees.

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

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

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

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

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

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

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

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

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

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

(ii) Professional and technical services.

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

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

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical

person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

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

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

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

(iii) Disclosure.

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

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

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

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

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

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

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

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

(v) Penalties.

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

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

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

#### I.6 INTEGRITY OF UNIT PRICES (FAR 52.215-26) (APR 1991)

(a) Any proposal submitted for the negotiation of prices for items of supplies shall distribute costs within contracts on a basis that ensures that unit prices are in proportion to the items' base cost (e.g., manufacturing or acquisition costs). Any method of distributing costs to line items that distorts unit prices shall not be used. For example, distributing costs equally among line items is not acceptable except when there is little or no variation in base cost. Nothing in this paragraph requires submission of cost or pricing data not otherwise required by law or regulation.

(b) The requirement in paragraph (a) of this clause does not apply to any contract or subcontract item of supply for which the unit price is, or is based on, an established catalog or market price for a commercial item sold in substantial quantities to the general public. A price is based on a catalog or market price only if the item being purchased is sufficiently similar to the catalog or market price commercial item to ensure that any difference in price can be identified and justified without resort to cost analysis.

(c) The Offeror/Contractor shall also identify those supplies which it will not manufacture or to which it will not contribute significant value when requested by the Contracting Officer. The information shall not be required for commercial items sold in substantial quantities to the general public when the price is, or is based on, established catalog or market prices.

(d) The Contractor shall insert the substance of this clause, less paragraph (c), in all subcontracts.

#### I.7 ALLOWABLE COST AND PAYMENT (FAR 52.216-7) (JUL 1991)

(a) Invoicing. The Government shall make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Subpart 31.2 of the Federal Acquisition Regulation (FAR) in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(b) Reimbursing costs. (1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (2) below, with respect to pension, deferred

profit sharing, and employee stock ownership plan contributions), the term "costs" includes only -

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for -

(A) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(B) Direct labor;

(C) Direct travel;

(D) Other direct in-house costs; and

(E) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of progress payments that have been paid to the Contractor's subcontractors under similar cost standards.

(2) Contractor contributions to any pension or other postretirement benefit, profit-sharing, or employee stock ownership plan funds that are paid quarterly or more often may be included in indirect costs for payment purposes; provided, that the Contractor pays the contribution to the fund within 30 days after the close of the period covered. Payments made 30 days or more after the close of a period shall not be included until the Contractor actually makes the payment. Accrued costs for such contributions that are paid less often than quarterly shall be excluded from indirect costs for payment purposes until the Contractor actually makes the payment.

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) below, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) below.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may be paid more often than every 2 weeks and may invoice and be paid for recorded costs for items or services purchased directly for the contract, even though the concern has not yet paid for those items or services.

(d) Final indirect cost rates. (1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2) The Contractor shall, within 90 days after the expiration of each of its fiscal years, or by a later date approved by the Contracting Officer, submit to the cognizant Contracting Officer responsible for negotiating its final indirect cost rates and, if required by agency procedures, to the cognizant audit activity proposed final indirect cost rates for that period and supporting cost data specifying the contract and/or subcontract to which the rates apply. The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and Contractor shall establish the final

indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify (i) the agreed-upon final annual indirect cost rates, (ii) the bases to which the rates apply, (iii) the periods for which the rates apply, (iv) any specific indirect cost items treated as direct costs in the settlement, and (v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates. The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates -

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. When the Contractor and Contracting Officer agree, the quick-closeout procedures of Subpart 42.7 of the FAR may be used.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be (1) reduced by amounts found by the Contracting Officer not to constitute allowable costs or (2) adjusted for prior overpayments or underpayments.

(h) Final payment. (1) The Contractor shall submit a completion invoice or voucher, designated as such, promptly upon completion of the work, but no later than one year (or longer, as the Contracting Officer may approve in writing) from the completion date. Upon approval of that invoice or voucher, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver -

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except -



(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

#### I.8 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 \$-0- or the overtime premium is paid for work -

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

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

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

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

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

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

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

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

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

#### I.9 DRUG-FREE WORKPLACE (FAR 52.223-6) (JUL 1990)

(a) Definitions. As used in this clause,

"Controlled substance" means a controlled substance in Schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/Contractor that has no more than one employee including the offeror/Contractor.

(b) The Contractor, if other than an individual, shall - within 30 calendar days after award (unless a longer period is agreed to in writing for contracts of 30 calendar days or more performance duration); or as soon as possible for contracts of less than 30 calendar days performance duration -

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about -

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will -

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 calendar days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 calendar days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

I.10 BUY AMERICAN ACT - TRADE AGREEMENTS ACT - BALANCE OF PAYMENTS PROGRAM  
(FAR 52.225-9) (APR 1991)

(a) This clause implements the Buy American Act (41 U.S.C. 10), the Trade Agreements Act of 1979 (19 U.S.C. 2501-2582), and the Balance of Payments Program by providing a preference for domestic end products over foreign end products, except for certain foreign end products which meet the requirements for classification as designated country end products or Caribbean Basin country end products.

"Caribbean Basin country end product," as used in this clause, means an article that (1) is wholly the growth, product, or manufacture of a Caribbean Basin country (as defined in section 25.401 of the Federal Acquisition Regulation (FAR)), or (2) in the case of an article which consists in whole or in part of materials from another country or instrumentality, has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed. The term includes services (except transportation services) incidental to its supply; provided that the value of those incidental services does not exceed that of the product itself. It does not include service contracts as such. The term excludes products that are excluded from duty free treatment for Caribbean countries under the Caribbean Basin Economic Recovery Act (19 U.S.C. 2703(b)). These exclusions presently consist of (i) textiles and apparel articles that are subject to textile agreements; (ii) footwear, handbags, luggage, flat goods, work gloves, and leather wearing apparel not designated as eligible articles for the purpose of the Generalized System of Preferences under Title V of the Trade Act of 1974; (iii) tuna, prepared or preserved in any manner in airtight containers; (iv) petroleum, or any product derived from petroleum; and (v) watches and watch parts (including cases, bracelets and straps), of whatever type including, but not limited to, mechanical, quartz digital or quartz analog, if such watches or watch parts contain any material that is the product of any country to which the Tariff Schedule of the United States (TSUS) column 2 rates of duty apply.

"Components," as used in this clause, means those articles, materials, and supplies incorporated directly into the end products.

"Designated country end product," as used in this clause, means an article that (1) is wholly the growth, product, or manufacture of the designated country (as defined in section 25.401 of the Federal Acquisition Regulation (FAR)), or (2) in the case of an article which consists in whole or in part of materials from another country or instrumentality, has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from

that of the article or articles from which it was so transformed. The term includes services (except transportation services) incidental to its supply, provided that the value of those incidental services does not exceed that of the product itself. It does not include service contracts as such.

"Domestic end product," as used in this clause, means (1) an unmanufactured end product mined or produced in the United States, or (2) an end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. A component shall also be considered to have been mined, produced, or manufactured in the United States (regardless of its source in fact) if the end product in which it is incorporated is manufactured in the United States and the component is of a class or kind (i) determined by the Government to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality, or (ii) to which the agency head concerned has determined that it would be inconsistent with the public interest to apply the restrictions of the Buy American Act.

"End products," as used in this clause, means those articles, materials, and supplies to be acquired under this contract for public use.

"Foreign end product," as used in this clause, means an end product other than a domestic end product.

(b) The Contracting Officer has determined that the Trade Agreements Act applies to this acquisition. Unless otherwise specified, the Act applies to all items in the schedule. The Contractor agrees to deliver under this contract only domestic end products unless, in its offer, it specifies delivery of foreign end products in the provision entitled "Buy American Act - Trade Agreements Act - Balance of Payments Program Certificate." An offer certifying that a designated country end product or a Caribbean Basin country end product will be supplied requires the Contractor to supply a designated country end product or a Caribbean Basin country end product or, at the Contractor's option, a domestic end product. Contractors may not supply a foreign end product for line items subject to the Trade Agreements Act unless the foreign end product is a designated country end product or a Caribbean Basin country end product (see FAR 25.401), or unless a waiver is granted under section 302 of the Trade Agreements Act of 1979 (see FAR 25.402(c)).

(c) Offers will be evaluated in accordance with the policies and procedures of Subpart 25.4 of the FAR.

#### I.11 COST ACCOUNTING STANDARDS (CASB-2) (APR 1992)

(a) Unless the contract is exempt under 9903.201-1 and 9903.201-2, the provisions of 9903 are incorporated herein by reference and the Contractor in connection with this contract, shall -

(1) (CAS-covered Contracts Only) By submission of a Disclosure Statement, disclose in writing the Contractor's cost accounting practices as required by 9903.202-1 through 9903.202-5 including methods of distinguishing direct costs from indirect costs and the basis used for allocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.

(2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract, and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with subparagraph (a)(4) or (a)(5) of this clause, as appropriate.

(3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in part 9904, in effect on the date of award of this contract or, if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4) (i) Agree to an equitable adjustment as provided in the Changes clause of this contract if the contract cost is affected by a change which, pursuant to subparagraph (a)(3) of this clause, the Contractor is required to make to the Contractor's established cost accounting practices.

(ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of subparagraph (a)(4) of this clause; provided, that no agreement may be made under this provision that will increase costs paid by the United States.

(iii) When the parties agree to a change to a cost accounting practice, other than a change under subdivision (a)(4)(i) of this clause, negotiate an equitable adjustment as provided in the Changes clause of this contract.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable Cost Accounting Standard or to follow any cost accounting practice consistently and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon computed at the annual rate established under section 6621 of Internal Revenue Code of 1936 (26 U.S.C. 6621) for such period, from the time the payment by the United States was made to the time the adjustment is effected. In no case shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.

(b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in part 9904 or a CAS rule or regulation in Part 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. 601).

(c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts, of any tier, including the

obligation to comply with all CAS in effect on the subcontractor's award date or if the subcontractor has submitted cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. This requirement shall apply only to negotiated subcontracts in excess of \$500,000 where the price negotiated is not based on -

(1) Established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(2) Prices set by law or regulation, and except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 9903.201-1.

#### I.12 PROMPT PAYMENT (FAR 52.232-25) (APR 1989)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or an electronic funds transfer is made. Definitions of pertinent terms are set forth in 32.902. All days referred to in this clause are calendar days, unless otherwise specified. The term "foreign vendor" means an incorporated concern not incorporated in the United States, or an unincorporated concern having its principal place of business outside the United States.

##### (a) Invoice Payments.

(1) For purposes of this clause, "invoice payment" means a Government disbursement of monies to a Contractor under a contract or other authorization for supplies or services accepted by the Government. This includes payments for partial deliveries that have been accepted by the Government and final cost or fee payments where amounts owed have been settled between the Government and the Contractor.

(2) Except as indicated in subparagraph (a)(3) and paragraph (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(i) The 30th day after the designated billing office has received a proper invoice from the Contractor.

(ii) The 30th day after Government acceptance of supplies delivered or services performed by the Contractor. On a final invoice where the payment amount is subject to contract settlement actions, acceptance shall be deemed to have occurred on the effective date of the contract settlement. However, if the designated billing office fails to annotate the invoice with the actual date of receipt, the invoice payment due date shall be deemed to be the 30th day after the date the Contractor's invoice is dated, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(3) The due date on contracts for meat and meat food products, contracts for perishable agricultural commodities, contracts for dairy products, edible fats or oils, and food products prepared from edible fats or oils, and contracts not requiring submission of an invoice shall be as follows:

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

(ii) The due date for perishable agricultural commodities, as defined in Section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(44)), will be as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(iii) The due date for dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, will be as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received.

(4) An invoice is the Contractor's bill or written request for payment under the contract for supplies delivered or services performed. An invoice shall be prepared and submitted to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(4)(i) through (a)(4)(viii) of this clause.

If the invoice does not comply with these requirements, then the Contractor will be notified of the defect within 7 days after receipt of the invoice at the designated billing office (3 days for meat and meat food products and 5 days for perishable agricultural commodities, edible fats or oils, and food products prepared from edible fats or oils.

Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor in the manner described in subparagraph (a)(6) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date.

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

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

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

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

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

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

(5) An interest penalty shall be paid automatically by the Government, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(5)(i) through (a)(5)(iii) of this clause are met, if applicable. An interest penalty shall not be paid on contracts awarded to foreign vendors outside the United States for work performed outside the United States.

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

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

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

(6) The interest penalty shall be at the rate established by the Secretary of the Treasury under Section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority.

This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice payment amount approved by the Government and be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice payment amount and be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in paragraph (a)(4) of this clause, then the due date on the corrected invoice will be adjusted by subtracting the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties, if requested by the Contractor.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance shall be deemed to have occurred constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivered the supplies or performed the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the actual date of acceptance.

The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

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

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

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

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1.00 need not be paid.

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

(7) An interest penalty shall also be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated as described in subparagraph (a)(6) of this clause on the amount of discount taken for the



period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(8) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with regulations issued by the Office of Management and Budget, shall be paid in addition to the interest penalty amount if the Contractor -

- (i) Is owed an interest penalty;
- (ii) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and
- (iii) Makes a written demand, not later than 40 days after the date the invoice amount is paid, that the agency pay such a penalty.

(b) Contract Financing Payments.

(1) For purposes of this clause, "contract financing payment" means a Government disbursement of monies to a Contractor under a contract clause or other authorization prior to acceptance of supplies or services by the Government. Contract financing payments include advance payments, progress payments based on cost under the clause at 52.232-16, Progress Payments, progress payments based on a percentage or stage of completion (32.102(e)(1)) other than those made under the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, or the clause at 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts, and interim payments on cost type contracts.

(2) For contracts that provide for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the 30th day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

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

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

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

### I.13 BANKRUPTCY (FAR 52.242-13) (APR 1991)

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

I.14 LIMITATION OF FUTURE CONTRACTING (NASA 18-52.209-71) (DEC 1988)

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

(b) The nature of this conflict is described in Subparagraph (c)(1) below.

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

(1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (three years). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this contract.

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

I.15 WARRANTY EXCLUSION AND LIMITATION OF DAMAGES (201-39.5202-6)  
(OCT 1990 FIRMR)

Except as expressly set forth in writing in this agreement, or except as provided in the clause entitled, "Commitments, Warranties, and Representations," if applicable, and except for the implied warranty of merchantability, there are no warranties expressed or implied. In no event will the Contractor be liable to the Government for consequential damages as defined in the Uniform Commercial Code, Section 2-715, in effect in the District of Columbia as of January 1, 1973; i.e.:

Consequential damages resulting from the seller's breach include:

(a) Any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise; and

(b) Injury to person or property proximately resulting from any breach of warranty.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

Exhibit A Contract Documentation Requirements, 3 pages

Exhibit B Subcontracting Plan, 199 , pages

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

Attachment 1 Safety and Health Plan, pages

Attachment 2 Certificate of Current Cost or Pricing Data, Form PROC./P-281,  
May 1986, 1 page

Attachment 3 Contract Pricing Proposal Cover Sheet, Standard Form 1411,  
July 1987 with instructions, 4 pages

Attachment 4 FAR Provision 52.203-8, Requirement for Certificate of Procurement  
Integrity (NOV 1990) Alternate I (SEP 1990), 2 pages

Attachment 5 Representative Task, 11 pages

Attachment 6 Summary of Program Cost (Form A)

EXHIBIT A - CONTRACT DOCUMENTATION REQUIREMENTS

## I. DOCUMENTATION PREPARATION/SUBMISSION INSTRUCTIONS

A. Monthly Technical Letter Progress Report--The Contractor shall submit monthly technical letter reports for each task assignment describing progress of the task to date, noting all technical areas in which effort is being directed and indicating the status of work within these areas. Tasks may be summarized in one letter report unless otherwise stipulated in individual task assignments. Reports shall be in narrative form, brief and informal in content. These reports shall include:

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

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

## B. Monthly Financial Management Report

1. The Contractor shall submit a monthly financial management report as provided by the Section I clause entitled "NASA Contractor Financial Management Reporting." This report shall be submitted utilizing NASA Form 533M, Monthly Contractor Financial Management Report, in accordance with submission instructions contained on the reverse side of the form. (Columns 8a and 8b, 533M, shall contain estimates for the following two (2) successive months for the reporting a. and c. of paragraph 2. below.)

2. For this task assignment contract a 533M shall be provided for the reporting levels identified below:

- a. Each Authorized Task
- b. All Unassigned Effort (Total level of effort hours set forth in B.2, minus sum of all authorized task hours.)
- c. Contract Total (Includes the sum of Items a. and b.) Column 9b shall reflect total hours of \_\_\_\_\_ and estimated cost of \$ \_\_\_\_\_ plus fixed fee of \$ \_\_\_\_\_.)

3. In addition, cost detail associated with the following elements shall be included in each of the above, if applicable.

- a. Direct Productive Labor Hours
- b. Other Direct Labor Hours
- c. Direct Productive Labor Dollars
- d. Other Direct Labor Dollars
- e. Overhead
- f. G&A
- g. Subcontract
- h. Consultants
- i. Material
- j. Travel
- k. Computing
- l. ODC
- m. FCCOM
- n. Total Estimated Cost
- o. Fee (total contract level only)
- p. Total Estimated Cost and Fee (total contract level only)

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

D. Subcontracting Reports--The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, Standard Form 295, Summary Subcontractor Report, and NASA Form 667, Report on NASA Subcontracts, in accordance with the instructions on the reverse of the form.

E. 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 Report (VETS-100) as required by this clause.

## II. DOCUMENT DISTRIBUTION REQUIREMENTS (LaRC 52.210-96) (JUN 1988)

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

National Aeronautics and Space Administration  
Langley Research Center  
Attn: \_\_\_\_\_, Mail Stop \_\_\_\_\_  
Contract NAS1-  
Hampton, VA 23665-5225

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

A--Contract Administrator, Mail Stop 126

B--Contracting Officer Technical Representative, Mail Stop

C--New Technology Representative, Mail Stop 200

- D--Patent Counsel, Mail Stop 143
- E--Cost Accounting, Mail Stop 135 (via Mail Stop 175)
- F--Safety Officer, Mail Stop 429
- G--Industry Relations Office, Mail Stop 105
- H--Property Administrator
- I--According to Instructions on Form

C. The following are the distribution requirements for reports and other documentation required to be delivered f.o.b. destination. The numeral following the letter code specifies the number of copies to be provided:

<u>DOCUMENT</u>	<u>LETTER CODE AND DISTRIBUTION</u>
Monthly Progress Report	A-1, B-2, C-1
Financial Management Report	A-1, B-2, E-2, G-1
New Technology or Patent Rights Report	A-1, B-2, C-1, D-1
Analysis of Government-Owned/Contractor-Held Property (NASA Form 1018)	H-4
Safety Plan	B-2, F-1
Oral Presentation Materials	B-1
Test Reports	B-1
Drawings	B-2
Subcontracting Report for Individual Contracts (Standard Form 294)	A-1
Summary Subcontractor Report (Standard Form 295)	A-1, I-1
Report on NASA Subcontracts	I-1
Federal Contractor Veterans Employment Report (VETS 100)	I-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  
SUBCONTRACTING PLAN

NOTE: Refer to H.7. If subcontracting opportunities exist, the Contractor's approval plan will be incorporated at the time of contract award. (This clause does not apply to those offerors that are small business as defined in L.14.)

PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K.1 CONTINGENT FEE REPRESENTATION AND AGREEMENT (FAR 52.203-4)  
(APR 1984)

(a) Representation. The offeror represents that, except for full-time bona fide employees working solely for the offeror, the offeror -

(NOTE: The offeror must check the appropriate boxes. For interpretation of the representation, including the term "bona fide employee", see Subpart 3.4 or the Federal Acquisition Regulation.)

(1) ( ) has, ( ) has not, employed or retained any person or company to solicit or obtain this contract; and

(2) ( ) has, ( ) has not, paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

(b) Agreement. The offeror agrees to provide information relating to the above Representation as requested by the Contracting Officer and, when subparagraph (a)(1) or (a)(2) is answered affirmatively, to promptly submit to the Contracting Officer -

(1) A completed Standard Form 119, Statement of Contingent or Other Fees, (SF 119); or

(2) A signed statement indicating that the SF 119 was previously submitted to the same contracting office, including the date and applicable solicitation or contract number, and representing that the prior SF 119 applies to this offer or quotation.

K.2 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.3 TAXPAYER IDENTIFICATION (FAR 52.204-3) (SEP 1989)

#### (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) The offeror is 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 4.902(a), the failure or refusal by the offeror to furnish the information may result in a 20 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 of 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 clause.  
 ( ) Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

**K.4 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (MAY 1989)**

- (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, 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.5 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.6 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).

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#### K.7 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.8 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.9 SMALL BUSINESS CONCERN REPRESENTATION (FAR 52.219-1) (JAN 1991)

(a) Representation. The offeror represents and certifies as part of its offer that it ( ) is, ( ) is not a small business concern and that ( ) all, ( ) not all end items to be furnished will be manufactured or produced by a small business concern in the United States, its territories or possessions, Puerto Rico, or the Trust Territory of the Pacific Islands.

(b) Definition. "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 and size standards in this solicitation.

(c) Notice. 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 -

- (1) be punished by imposition of fine, imprisonment, or both;
- (2) be subject to administrative remedies, including suspension and debarment; and
- (3) be ineligible for participation in programs conducted under the authority of the Act.

#### K.10 SMALL DISADVANTAGED BUSINESS CONCERN REPRESENTATION (FAR 52.219-2) (FEB 1990)

(a) Representation. The offeror represents that it ( ) is, ( ) is not a small disadvantaged business concern.

(b) Definitions.

"Asian-Pacific Americans," as used in this provision, means United States citizens whose origins are in Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust Territory of the Pacific Islands (Republic of Palau), the Northern Mariana Islands, Laos, Kampuchea (Cambodia), Taiwan, Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Republic of the Marshall Islands, or the Federated States of Micronesia.

"Indian tribe," as used in this provision, means any Indian tribe, band, nation, or other organized group or community of Indians, including any Alaska Native Corporation as defined in 13 CFR 124.100 which is recognized as eligible for the special programs and services provided by the U.S. to Indians because of their status as Indians, or which is recognized as such by the State in which such tribe, band, nation, group, or community resides.

"Native Americans," as used in this provision, means American Indians, Eskimos, Aleuts, and native Hawaiians.

"Native Hawaiian Organization," as used in this provision, means any community service organization serving Native Hawaiians in, and chartered as a not-for-profit organization by, the State of Hawaii, which is controlled by Native Hawaiians, and whose business activities will principally benefit such Native Hawaiians.

"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 and size standards in 13 CFR 121.

"Small disadvantaged business concern," as used in this provision, means a small business concern that (a) 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 (b) 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 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 124.

"Subcontinent Asian Americans," as used in this provision, means United States citizens whose origins are in India, Pakistan, Bangladesh, Sri Lanka, Bhutan, or Nepal.

(c) Qualified groups. The offeror shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and other individuals found to be qualified by SBA under 13 CFR 124. The offeror shall also presume that socially and economically disadvantaged entities also include Indian tribes and Native Hawaiian Organizations.

#### K.11 WOMEN-OWNED SMALL BUSINESS REPRESENTATION (FAR 52.219-3) (APR 1984)

(a) Representation. The offeror represents that it ( ) is, ( ) is not, a women-owned small business concern.

(b) Definitions.

"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 and size standards in 13 CFR 121.

"Women-owned", as used in this provision, means a small business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business.

#### K.12 PREFERENCE FOR LABOR SURPLUS AREA CONCERNS (FAR 52.220-1) (APR 1984)

(a) This acquisition is not a set aside for labor surplus area (LSA) concerns. However, the offeror's status as such a concern may affect (1) entitlement to award in case of tie offers or (2) offer evaluation in accordance with the Buy

American Act clause of this solicitation. In order to determine whether the offeror is entitled to a preference under (1) or (2) above, the offeror must identify, below, the LSA in which the costs to be incurred on account of manufacturing or production (by the offeror or the first-tier subcontractors) amount to more than 50 percent of the contract price.

(b) Failure to identify the locations as specified above will preclude consideration of the offeror as an LSA concern. If the offeror is awarded a contract as an LSA concern and would not have otherwise qualified for award, the offeror shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

**K.13 WALSH-HEALY PUBLIC CONTRACTS ACT REPRESENTATION (FAR 52.222-19)  
(APR 1984)**

The offeror represents as a part of this offer that the offeror ( ) is, or ( ) is not, a regular dealer in, or ( ) is, or ( ) is not, a manufacturer of the supplies offered.

**K.14 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.15 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.16 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.17 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.18 CERTIFICATION REGARDING A DRUG-FREE WORKPLACE (FAR 52.223-5)  
(JUL 1990)

(a) Definitions. As used in this provision,

"Controlled substance" means a controlled substance in Schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the

responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than minimal impact or involvement in contract performance.

"Individual" means an offeror/Contractor that has no more than one employee including the offeror/Contractor.

(b) By submission of its offer, the offeror, if other than an individual, who is making an offer that equals or exceeds \$25,000, certifies and agrees that, with respect to all employees of the offeror to be employed under a contract resulting from this solicitation, it will - no later than 30 calendar days after contract award (unless a longer period is agreed to in writing), for contracts of 30 calendar days or more performance duration, or as soon as possible for contracts of less than 30 calendar days performance duration; but in any case, by a date prior to when performance is expected to be completed -

(1) Publish a statement notifying such employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about -

- (i) The dangers of drug abuse in the workplace;
- (ii) The Contractor's policy of maintaining a drug-free workplace;
- (iii) Any available drug counseling, rehabilitation, and employee

assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this provision;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this provision that, as a condition of continued employment on the contract resulting from this solicitation, the employee will -

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 calendar days after such conviction;

(5) Notify the Contracting Officer in writing within 10 calendar days after receiving notice under subdivision (b)(4)(ii) of this provision, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee; and

(6) Within 30 calendar days after receiving notice under subdivision (b)(4)(ii) of this provision of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:



(i) Take appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this provision.

(c) By submission of its offer, the offeror, if an individual who is making an offer of any dollar value, certifies and agrees that the offeror will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of the contract resulting from this solicitation.

(d) Failure of the offeror to provide the certification required by paragraphs (b) or (c) of this provision, renders the offeror unqualified and ineligible for award. (See FAR 9.104-1(g) and 19.602-1(a)(2)(i).)

(e) In addition to other remedies available to the Government, the certification in paragraphs (b) or (c) of this provision 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 Title 18, United States Code, Section 1001.

K.19 BUY AMERICAN ACT - TRADE AGREEMENTS ACT - BALANCE OF PAYMENTS PROGRAM CERTIFICATE (FAR 52.225-8) (MAY 1986)

(a) The offeror hereby certifies that each end product, except those listed in paragraph (b) of this provision, is a domestic end product (as defined in the clause entitled "Buy American Act - Trade Agreements Act - Balance of Payments Program") and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States, a designated country, or a Caribbean Basin country, as defined in section 25.401 of the Federal Acquisition Regulation.

(b) Excluded End Products:

Line Item Number

Country of Origin

(List as necessary)

(c) Offers will be evaluated by giving certain preferences to domestic end products, designated country end products, and Caribbean Basin country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (b) of this provision, offerors must identify and certify below those excluded end products that are designated country end products or Caribbean Basin country end products. Products that are not identified and certified below will not be deemed designated country end products or Caribbean Basin country end products. Offerors must certify by inserting the applicable line item numbers in the following:

(1) The offeror certifies that the following supplies qualify as "designated country end products" as that term is defined in the clause entitled "Buy American Act - Trade Agreements Act - Balance of Payments Program":

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(Insert line item numbers)

(2) The offeror certifies that the following supplies qualify as "Caribbean Basin country end products" as that term is defined in the clause entitled "Buy American Act - Trade Agreements Act - Balance of Payments Program":

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(Insert line item numbers)

(d) Offers will be evaluated in accordance with Part 25 of the Federal Acquisition Regulation.

K.20 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION  
(CASB-1) (APR 1992)

NOTE: This notice does not apply to small businesses or foreign governments. This notice is in four parts, identified by Roman numerals I. through IV. Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

I. *Disclosure Statement - Cost Accounting Practices and Certification*

(a) Any contract in excess of \$500,000 resulting from this solicitation, except contracts in which the price negotiated is based on (1) established catalog or market prices of commercial items sold in substantial quantities to the general public, or (2) prices set by law or regulation, will be subject to the requirements of parts 9903 and 9904, except for those contracts which are exempt as specified in 9903-201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of parts 9903 and 9904 must, as a condition of contracting, submit a Disclosure Statement as required by 9903.202. The Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practice used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

CAUTION: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.

(c) Check the appropriate box below:

( ) (1) Certificate of Concurrent Submission of Disclosure Statement.

The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows: (i) original and one copy to the cognizant Administrative Contracting Officer (ACO), and (ii) one copy to the cognizant contract auditor.

(Disclosure must be on Form Number CASB-DS-1. Forms may be obtained from the cognizant ACO.)

Date of Disclosure Statement \_\_\_\_\_

Name and Address of Cognizant ACO where filed \_\_\_\_\_

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The offeror further certifies that practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

(2) Certificate of Previously Submitted Disclosure Statement.

The offeror hereby certifies that Disclosure Statement was filed as follows:

Date of Disclosure Statement \_\_\_\_\_

Name and Address of Cognizant ACO where filed \_\_\_\_\_

---

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

(3) Certificate of Monetary Exemption.

The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling more than \$10 million in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

(4) Certificate of Interim Exemption.

The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) above, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under subparagraphs (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

CAUTION: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$10 million or more in the current cost accounting period may not claim this exemption (4).

Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

## II. Cost Accounting Standards - Exemption for Contracts of \$500,000 or Less

If this proposal is expected to result in the award of a contract of \$500,000 or less, the offeror shall indicate whether the exemption below is claimed. Failure to check the box below shall mean that the resultant contract is subject to CAS requirements or that the offeror elects to comply with such requirements.

The offeror hereby claims an exemption from the CAS requirements under the provisions of 9903.201-1(b)(2).

*III. Cost Accounting Standards - Eligibility for Modified Contract Coverage.*

If the offeror is eligible to use the modified provisions of 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

( ) The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because (i) during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$10 million in awards of CAS-covered prime contracts and subcontracts, and (ii) the sum of such awards equaled less than 10 percent of total sales during that cost accounting period. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

CAUTION: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$10 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$10 million or more.

*IV. Additional Cost Accounting Standards Applicable to Existing Contracts*

The offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

( ) YES

( ) NO

**K.21 CONTRACTS BETWEEN NASA AND FORMER NASA EMPLOYEES  
(NASA 18-52.203-70) (DEC 1988) (NASA/FAR SUPPLEMENT)**

The offeror represents that he or she ( ) is, or ( ) is not, an individual who was employed by NASA during the past two (2) years, or a firm in which such an individual is a partner, principal officer, or majority shareholder or that is otherwise controlled or predominantly staffed by such individuals.

**K.22 PAYMENT INFORMATION (LaRC 52.232-98) (JUN 1988)**

The following is the address to which payment must be sent, if payment is made by check.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

## L.1 ORGANIZATIONAL CONFLICTS OF INTEREST CERTIFICATE--MARKETING CONSULTANTS (FAR 52.209-7) (NOV 1991)

## (a) Definitions.

(1) "Marketing consultant" means any independent Contractor who furnishes advice, information, direction, or assistance to an offeror or any other Contractor in support of the preparation or submission of an offer for a Government contract by that offeror. An independent Contractor is not a marketing consultant when rendering -

- (i) Services excluded in Subpart 37.2;
- (ii) Routine engineering and technical services (such as installation, operation, or maintenance of systems, equipment, software, components, or facilities);
- (iii) Routine legal, actuarial, auditing, and accounting services; or
- (iv) Training services.

(2) Organizational conflict of interest means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

(b) An individual or firm that employs, retains, or engages contractually, one or more marketing consultants in connection with a contract, shall submit to the contracting officer, with respect to each marketing consultant, the certificates described below, if the individual or firm is notified that it is the apparent successful offeror.

(c) The certificate must contain the following:

- (1) The name of the agency and the number of the solicitation in question.
- (2) The name, address, telephone number, and federal taxpayer identification number of the marketing consultant.
- (3) The name, address, and telephone number of a responsible officer or employee of the marketing consultant who has personal knowledge of the marketing consultants involvement in the contract.
- (4) A description of the nature of the services rendered by or to be rendered by the marketing consultant.
- (5) The name, address, and telephone number of the client or clients, and the name of a responsible officer or employee of the marketing consultant who is knowledgeable about the services provided to such client(s), and a description of the nature of the services rendered to such client(s), if, based on information provided to the Contractor by the marketing consultant, any marketing consultant is rendering or, in the 12\* months preceding the date of the certificate, has rendered services respecting the same subject matter of the instant solicitation, or directly relating to such subject matter, to the Government or any other client (including any foreign Government or person).
- (6) A statement that the person who signs the certificate for the prime Contractor has informed the marketing consultant of the existence of Subpart 9.5 and Office of Federal Procurement Policy Letter 89-1.
- (7) The signature, name, title, employer's name, address, and telephone number of the persons who signed the certificates for both the apparent successful offeror and the marketing consultant.

(d) In addition, the apparent successful offeror shall forward to the Contracting Officer a certificate signed by the marketing consultant that the marketing consultant has been told of the existence of Subpart 9.5 and Office of Federal Procurement Policy Letter 89-1, and the marketing consultant has made inquiry, and to the best of the consultant's knowledge and belief, the consultant has provided no unfair competitive advantage to the prime Contractor with respect to the services rendered or to be rendered in connection with the solicitation, or that any unfair competitive advantage that, to the best of the consultant's knowledge and belief, does or may exist, has been disclosed to the offeror.

(e) Failure of the offeror to provide the required certifications may result in the offeror being determined ineligible for award. Misrepresentation of any fact may result in the assessment of penalties associated with false certifications or such other provisions provided for by law or regulation.

\*If approved by the head of the contracting activity, this period may be increased up to 36 months.

L.2 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (FAR 52.212-7)  
(MAY 1986)

Any contract awarded as a result of this solicitation will be a ( ) DX rated order; ( X ) D0 rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 350), and the Contractor will be required to follow all of the requirements of this regulation.

L.3 SOLICITATION DEFINITIONS (FAR 52.215-5) (JUL 1987)

"Offer" means "proposal" in negotiation.

"Solicitation" means a request for proposals (RFP) or a request for quotations (RFQ) in negotiation.

"Government" means United States Government.

L.4 UNNECESSARILY ELABORATE PROPOSALS OR QUOTATIONS (FAR 52.215-7)  
(APR 1984)

Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation are not desired and may be construed as an indication of the offeror's or quoter's lack of cost consciousness. Elaborate art work, expensive paper and bindings, and expensive visual and other presentation aids are neither necessary nor wanted.

L.5 AMENDMENTS TO SOLICITATIONS (FAR 52.215-8) (DEC 1989)

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Offerors shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment; (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting an offer; (3) by letter or telegram or (4) facsimile, if facsimile offers are authorized in the solicitation. The Government must receive the acknowledgment by the time specified for receipt of offers.

L.6 SUBMISSION OF OFFERS (FAR 52.215-9) (DEC 1989)

(a) Offers and modifications thereof shall be submitted in sealed envelopes or packages (1) addressed to the office specified in the solicitation, and (2) showing the time specified for receipt, the solicitation number, and the name and address of the offeror.

(b) Telegraphic offers will not be considered unless authorized by the solicitation; however, offers may be modified by written or telegraphic notice.

(c) Facsimile offers, modifications or withdrawals will not be considered unless authorized by the solicitation.

(d) Item samples, if required, must be submitted within the time specified for receipt of offers. Unless otherwise specified in the solicitation, these samples shall be (1) submitted at no expense to the Government and (2) returned at the sender's request and expense, unless they are destroyed during preaward testing.

L.7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF PROPOSALS  
(FAR 52.215-10) (DEC 1989)

(a) Any proposal received at the office designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it -

(1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been postmarked by the 15th);

(2) Was sent by mail or, if authorized by the solicitation, was sent by telegram or via facsimile and it is determined by the Government that the late receipt was due solely to mishandling by the Government after receipt at the Government installation;

(3) Was sent by U.S. Postal Service Express Mail Next Day Service-Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and U.S. Federal holidays; or

(4) Is the only proposal received.

(b) Any modification of a proposal or quotation, except a modification resulting from the Contracting Officer's request for "best and final" offer, is subject to the same conditions as in subparagraphs (a)(1), (2), and (3) of this provision.

(c) A modification resulting from the Contracting Officer's request for "best and final" offer received after the time and date specified in the request will not be considered unless received before award and the late receipt is due solely to mishandling by the Government after receipt at the Government installation.

(d) The only acceptable evidence to establish the date of mailing of a late proposal or modification sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the proposal, quotation, or modification shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, offerors or quoters should request the postal clerks to place a legible hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(e) The only acceptable evidence to establish the time of receipt at the Government installation is the time/date stamp of that installation on the proposal wrapper or other documentary evidence of receipt maintained by the installation.

(f) The only acceptable evidence to establish the date of mailing of a late offer, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (d) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, offerors or quoters should request the postal clerk to place a legible hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(g) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

(h) Proposals may be withdrawn by written notice or telegram (including mailgram) received at any time before award. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision entitled "Facsimile Proposals." Proposals may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal before award.

#### L.8 PREPARATION OF OFFERS (FAR 52.215-13) (APR 1984)

(a) Offerors are expected to examine the drawings, specifications, Schedule, and all instructions. Failure to do so will be at the offeror's risk.

(b) Each offeror shall furnish the information required by the solicitation. The offeror shall sign the offer and print or type its name on the Schedule and each continuation sheet on which it makes an entry. Erasures or other changes must be initialed by the person signing the offer. Offers signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(c) For each item offered, offerors shall (1) show the unit price/cost, including, unless otherwise specified, packaging, packing, and preservation and (2) enter the extended price/cost for the quantity of each item offered in the "Amount" column of the Schedule. In case of discrepancy between a unit price/cost and an extended price/cost, the unit price/cost will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

(d) Offers for supplies or services other than those specified will not be considered unless authorized by the solicitation.

(e) Offerors must state a definite time for delivery of supplies or for performance of services, unless otherwise specified in the solicitation.

(f) Time, if stated as a number of days, will include Saturdays, Sundays, and holidays.

#### L.9 EXPLANATION TO PROSPECTIVE OFFERORS (FAR 52.215-14) (APR 1984)

Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon



enough to allow a reply to reach all prospective offerors before the submission of their offers. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective offeror concerning a solicitation will be furnished promptly to all other prospective offerors as an amendment of the solicitation, if that information is necessary in submitting offers or if the lack of it would be prejudicial to any other prospective offerors.

#### L.10 FAILURE TO SUBMIT OFFER (FAR 52.215-15) (APR 1984)

Recipients of this solicitation not responding with an offer should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter or postcard whether they want to receive future solicitations for similar requirements. If a recipient does not submit an offer and does not notify the issuing office that future solicitations are desired, the recipient's name may be removed from the applicable mailing list.

#### L.11 CONTRACT AWARD (FAR 52.215-16) (JUL 1990)--ALTERNATE II (AUG 1991)

(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 after written or oral discussions with all responsible offerors who submit proposals within the competitive range.

(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.

L.12 FACILITIES CAPITAL COST OF MONEY (FAR 52.215-30) (SEP 1987)

- (a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10 (a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective Contractor to propose facilities capital cost of money in its offer.
- (b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

L.13 TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)

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

L.14 SIC CODE AND SMALL BUSINESS SIZE STANDARD (FAR 52.219-22)  
(JAN 1991)

- (a) The standard industrial classification (SIC) code for this acquisition is 8711.
- (b)(1) The small business size standard is \$13,500,000.
- (2) 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.

L.15 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE REVIEW  
(FAR 52.222-24) (APR 1984)

An award in the amount of \$1 million or more will not be made under this solicitation unless the offeror and each of its known first-tier subcontractors (to whom it intends to award a subcontract of \$1 million or more) are found, on the basis of a compliance review, to be able to comply with the provisions of the Equal Opportunity clause of this solicitation.

L.16 ROYALTY INFORMATION (FAR 52.227-6) (APR 1984)

- (a) Cost or charges for royalties. When the response to this solicitation contains costs or charges for royalties totaling more than \$250, the following information shall be included in the response relating to each separate item of royalty or license fee:
- (1) Name and address of licensor.
  - (2) Date of license agreement.
  - (3) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable.
  - (4) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable.

- (5) Percentage or dollar rate of royalty per unit.
- (6) Unit price of contract item.
- (7) Number of units.
- (8) Total dollar amount of royalties.

(b) Copies of current licenses. In addition, if specifically requested by the Contracting Officer before execution of the contract, the offeror shall furnish a copy of the current license agreement and an identification of applicable claims of specific patents.

L.17 SERVICE OF PROTEST (FAR 52.233-2) (NOV 1988)

(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) or the General Services Administration Board of Contract Appeals (GSBCA), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Head, Grants, Supply and Construction Contracts Branch.

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

L.18 AUTHORIZED DEVIATIONS IN PROVISIONS (FAR 52.252-5) (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any NASA FAR Supplement (48 CFR Chapter 18) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

L.19 INCREASES IN ESTIMATED COSTS (NASA 18-52.215-70) (DEC 1988)

Once the apparent successful offeror has been selected, that offeror may not unilaterally increase the estimated costs submitted with its proposal except for -

(a) Changes resulting from updating or correcting the certified cost or pricing data submitted with its proposal;

(b) Costs resulting from the Government's directed correction of identified weaknesses in the proposal that must be corrected as a condition of contracting;  
or

(c) Minor changes in the requirements of the solicitation. In such cases, the Government will consider only those increases arising from requirements actually affected by the changes (irrespective of whether the changes result in an increase or decrease in the requirements or are initiated by the Government or the offeror) and then only to the extent the increases are identified and justified.

L.20 RESTRICTION ON USE AND DISCLOSURE OF PROPOSAL/QUOTATION INFORMATION (DATA) (NASA 18-52.215-72) (DEC 1984)

It is NASA policy to use information contained in proposals and quotations for evaluation purposes only. While this policy does not require that the proposal or quotation bear a restrictive notice, offerors and quoter should, in order to maximize protection of trade secrets or other information that is

commercial or financial and confidential or privileged, place the following notice on the title page of the proposal or quotation and specify the information subject to the notice by inserting appropriate identification, such as page numbers, in the notice. In any event, information (data) contained in proposals and quotations will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

RESTRICTION ON USE AND DISCLOSURE OF PROPOSAL AND QUOTATION  
INFORMATION (DATA)

The information (data) contained in (insert page numbers or other identification) of this proposal or quotation constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed for other than evaluation purposes; provided, however, that in the event a contract is awarded on this proposal or quotation the Government shall have the right to use and disclose this information (data) to the extent provided in the contract. This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

L.21 EXPENSES RELATED TO OFFEROR SUBMISSIONS (NASA 18-52.215-75)  
(DEC 1988)

This solicitation neither commits the Government to pay any cost incurred in the submission of the offer or in making necessary studies or designs for preparing the offer, nor to contract for services or supplies. Any costs incurred in anticipation of a contract shall be at the offeror's own risk.

L.22 FALSE STATEMENTS (NASA 18-52.215-76) (DEC 1988)

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THE SOLICITATION (INCLUDING ATTACHMENTS). THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

L.23 DISPOSAL OF UNSUCCESSFUL PROPOSALS (NASA 18-52.215-80)  
(DEC 1988)

After contract award, one or more copies of each unsuccessful proposal will be retained in the Government's official contract file, and all other copies will be destroyed.

L.24 SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN  
(NASA 18-52.219-73) (DEC 1988) ALTERNATE I (DEC 1988)

- (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 Business and Small Disadvantaged Business Subcontracting Plan." Each offeror must submit the complete plan with its initial proposal.

## L.25 HEALTH AND SAFETY PLAN

The successful offeror shall be required to submit a detailed safety and health plan prior to negotiation. The plan shall show 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, will be included in any resulting contract.

## L.26 PREPROPOSAL/PRE-BID CONFERENCE (NASA 18-52.215-77) (DEC 1988)

(a) A preproposal/pre-bid conference will be held as indicated below:

Date: August 21, 1992

Time: 9:00 a.m.

Location: NASA, Langley Research Center, Building 1212, Room 200

For planning your itinerary, the following is a tentative agenda for the conference:

Agenda

Opening Remarks  
LaRC Presentations  
Break  
Facilities Tour Contractor/LaRC  
Questions and Answers

Attendance will be limited to a maximum of three (3) representatives per offeror. The briefing will be unclassified. If you desire to attend the conference, you should so indicate by written or telephone contact with the appropriate individual specified below. After the briefing, advise this Center if you intend to submit a proposal.

In order that as many questions as possible may be answered at the NASA presentations during the briefing, written questions must be submitted to no later than \_\_. A limited time may be available for answering questions submitted on the day of the conference. However, as there is no assurance that adequate time to answer such questions will remain, submission of questions prior to the conference, by the date specified above, will assure their being fully answered.

(b) Attendance at the preproposal/pre-bid conference is recommended; however, attendance is neither required nor a prerequisite for proposal/bid submission and will not be considered in the evaluation.

L.27 CERTIFICATE OF PROCUREMENT INTEGRITY - OFFERS (LaRC 52.203-90)  
(JUL 1991)

Federal Acquisition Regulation (FAR) provision 52.203-8, Requirement for Certificate of Procurement Integrity, Alternate I, is included in Section J of this solicitation as Attachment 4. In accordance with FAR 3.104-9, the officer or employee responsible for your offer for this procurement must execute this

certificate after negotiation of the contract and submit it to the Contracting Officer prior to award. Do not submit the certificate with your proposal.

L.28 COMMUNICATIONS REGARDING THIS SOLICITATION (LaRC 52.204-95)  
(JUN 1988)

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

Name: Charlotte T. Hardy  
Phone: (804) 864-2526 (COLLECT CALLS NOT ACCEPTED)  
Easy Link: 709356  
Facsimile: 804-864-7709  
Address: National Aeronautics and Space Administration  
Langley Research Center  
Attn: Charlotte T. Hardy, Mail Code 126  
Hampton, VA 23665-5225

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

**NOTE:** Please note the provision in this section covering "Facsimile Transmission." This provision specifies a different facsimile number for use in transmitting modifications or withdrawals of bids or proposals and acknowledgment of amendments to solicitations.

L.29 NASA'S POLICY ON FACILITIES CAPITAL COST OF MONEY (LaRC 52.215-95)  
(JUN 1988)

As required by NASA FAR Supplement 18-15.970-3, 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).

L.30 REQUIREMENT FOR SPECIAL TECHNICAL CAPABILITIES (LaRC 52.215-96)  
(JUN 1988)

It is NASA policy to obtain maximum practicable competition consistent with the nature of each procurement. However, to prevent unnecessary expense associated with preparation and submission of a proposal, only firms with demonstrated experience and background in facility automation systems are encouraged to respond to this request.

L.31 CERTIFICATION OF COST OR PRICING DATA (LaRC 52.215-97)  
(JUN 1988)

Pursuant to the provisions of Public Law 87-653, as amended by Public Law 97-86, the Contractor will be required to certify, except where the price negotiated is based on adequate price competition, as determined by the Contracting Officer, or established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, that the cost or pricing data submitted or identified on Standard Form

1411 are accurate, complete, and current. The required certificate is set forth in FAR 15.804-4, a copy of which is attached (NASA-Langley Form PROC./P-281) and which shall be properly executed after negotiation and prior to contract award.

L.32 REJECTION, NEGOTIATION, AWARD AND EXPENDITURE OF FUNDS  
(LaRC 52.215-99) (JUN 1988)

This solicitation does not commit the Government to award a contract, since the Government reserves the right to reject any or all proposals, or to negotiate separately with any source considered qualified. The Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with the proposed procurement.

L.33 FACSIMILE TRANSMISSION PROPOSALS (LaRC 52.215-109) (MAR 1991)

(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 proposal or withdrawal of a 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 PROPOSALS AS RESPONSES TO THIS SOLICITATION. Facsimile offers will not be considered.

(c) Facsimile transmissions must contain the required signatures.

(d) Facsimile receiving data and compatibility characteristics are as follows:

Telephone: 804-864-7898

Make and Model: Pitney-Bowes Model 8050

Receiving Speed: Variable

NOTE: This facsimile number is reserved for modifications and withdrawals of offers and acknowledgment of amendments only. Other facsimile communication should be sent to the number listed elsewhere in this section of the solicitation.

(e) If the offeror chooses to reply by facsimile transmission, the Government will not be responsible for any failure attributable to the transmission or receipt of the facsimile transmission including, but not limited to, the following:

- (1) Receipt of garbled or incomplete transmission.
- (2) Availability or condition of the receiving facsimile equipment.
- (3) Incompatibility between the sending and receiving equipment.
- (4) Delay in transmission of receipt of transmission.
- (5) Failure of the bidder to properly identify the transmission.
- (6) Illegibility of transmission.

L.34 INSTRUCTIONS REGARDING THE REPRESENTATION OF LIMITED-RIGHTS  
DATA AND RESTRICTED COMPUTER SOFTWARE (LaRC 52.227-93)  
(DEC 1991)

A. Offerors are referred to the Section K provision, Representation of Limited-Rights Data and Restricted Computer Software, (FAR 52.227-15), (hereafter referred to as "the representation"), and to Section I Contract Clause 52.227-14, Rights In Data--General--Alternate II and Alternate III--modified by NASA FAR Supplement 18-52.227-14, (hereafter referred to as "the clause").

B. With respect to "limited-rights data" and "restricted computer software" (as defined in paragraph (a) of "the clause") identified in your proposal in accordance with paragraph (b) of "the representation," please advise whether or not:

1. You will deliver the identified limited-rights data in accordance with "the clause" and its Alternate II, Limited Rights Notice (paragraph (g)(2) of "the clause"); address Note 1. below regarding subcontractor requirements, including a statement, when appropriate, that it is not applicable.

2. You will deliver the identified restricted computer software in accordance with the data rights protection provided under "the clause" and its Alternate III, Restricted Rights Notice (paragraph (g)(3) of "the clause"), see Note 2. below; also, address Note 1. below regarding subcontractor requirements, including a statement, when appropriate, that it is not applicable.

C. Notes:

1. The information requirements of paragraph (b) of "the representation" and paragraphs 1. and 2. above also apply to limited-rights data and restricted computer software to be obtained from a subcontractor. In this regard, your attention is directed to paragraph (h), Subcontracting, of "the clause."

2. The Government intends to use "the clause" with its Alternate III, Restricted Rights Notice in lieu of any software licensing agreement that is used by the offeror for commercial contracts. If company policy requires you to propose your standard commercial software license in lieu of "the clause" with its Alternate III, the Government intends to incorporate the applicable and allowable portions of your proposed license in conjunction with Section I Contract Clause 18-52.227-86, Commercial Computer Software--Licensing.

D. "The clause" with its Alternates II and III and the Commercial Computer Software--Licensing clause are set forth in Section I, Contract Clauses, in full text for informational purposes.

### L.35 GOVERNMENT/CONTRACTOR INTERFACE

To assist the offeror in preparing a comprehensive plan embodying the organizational structure, management procedures, and control mechanisms essential to sound technical and administrative management of the work to be performed, the following describes the proposed interface methods to be utilized by the Government in the assignment of work under the proposed contract.

A. The Contracting Officer will delegate authority to the Contracting Officer Technical Representative (COTR) to monitor work under each of the Statement of Work (SOW) task areas.

B. The Contracting Officer will also assign Contract Administration functions to a Contract Specialist. The Government's management team will therefore consist of three (3) persons: the Contracting Officer, the COTR, and the Contract Specialist.



C. The Government will provide by written task assignment, applicable information such as: description of work; any specifications, drawings, etc.; a completion date; and any other instructions deemed appropriate. The Contractor shall furnish a control and reporting system capable of accurately obtaining in a timely manner actual man-hours and material costs associated with each work order.

#### L.36 PROPOSAL PREPARATION AND SUBMISSION - SPECIAL INSTRUCTIONS

##### A. General Information

1. The Government estimates that a total of 80,000 direct productive labor hours may be ordered during the contract period for authorization of tasks.

2. Each offeror is requested to submit proposals for the 80,000 direct productive labor hours over a three year contract period of performance. In developing your proposal, you may assume an average level of effort of 26,667 for the first and second years and 26,666 for the last year.

3. For informational purposes, offerors are advised that the magnitude of hours that may be required for Government authorized tasks could fluctuate. Approximately three tasks (ranging from 6,000 to 9,000 hours) may be issued each year. It may be necessary to perform these simultaneously.

4. The offeror shall certify in the offer that all implementations of FIPS, including applicable FIPS options, offered in response to this document have been previously validated and included on the current list of validated products maintained by the Computer Systems Laboratory (CSL). Unless specified elsewhere, proof of validation shall be in the form of a CSL Certificate of Validation.

5. The offeror shall agree to correct all implementation nonconformance from the applicable FIPS reflected in the validation summary report not previously covered by a waiver. All areas of nonconformance must be corrected within 12 months from the date of contract award unless otherwise specified elsewhere in this document. If an interpretation of the FIPS is required that will invoke the procedures set forth in FIPS 29-2, such a request for interpretation shall be made within 30 calendar days after contract award. Any corrections that are required as a result of decisions made under the procedures of FIPS 29-2 shall be completed within 12 months of the date of the formal notification to the Contractor of the approval of the interpretation. Proof of correction in either case shall be in the form of a CSL Certificate of Validation or registered validation summary report for the corrected implementation. Failure to make required corrections within the time limits set forth above shall be deemed a failure to deliver required software.

##### 6. Ordering of Standards

a. Copies of the Federal Information Processing Standards (FIPS) may be ordered from:

National Technical Information Service (NTIS)  
U.S. Department of Commerce  
Springfield, VA 22161

(703) 487-4650

b. A copy of the NASA Documentation Standard Software Engineering Program (NASA-STD-2100-91) may be ordered from:

National Aeronautics and Space Administration  
126/Contract Specialist (Ref: 1-64-5673.0419)  
Langley Research Center  
Hampton, VA 23665-5225

(804) 864-2526

B. It is noted that the Statement of Work generally describes the technical mission. For proposal purposes only, Attachment 5, sets forth a representative task which provides insight as to the subject matter which may be included in typical task(s) to be issued by the Government. It is not intended that the sum of the projected effort equates to the specified RFP levels-of-effort.

C. Number of Proposals, Time and Place of Submission--The offeror shall submit the original and ten (10) 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.

D. 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.

#### E. Proposal Format and Content

1. 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. 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.

3. Based upon our experience with procurements of this size and complexity, the items to be addressed in your technical proposal can be covered in 90 pages. Therefore, it is recommended that you limit your technical proposal to 90 pages, 40 of which could be dedicated to responding to the representative task, inclusive of charts, graphs, tables, diagrams, photographs, and figures.

4. The Business Proposal (Volume II) is not page limited. However, the Business Proposal is to be strictly limited to responses to Factors 2, 3, 4, and the executed Section K, Representations, Certifications, and Other Statements of Offerors. Information which can be construed as belonging in the Technical (Volume I) will be counted against the recommended page limitation described in Paragraph 3. above.

5. Your proposal should be submitted in accordance with the following:

a. General--All text shall be printed black on white paper. Paper size for the text shall not exceed 8-1/2 by 11 inches; charts, graphs, tables, diagrams, photographs, and figures may be larger, if necessary.

b. Proposals Prepared on a Word Processor--Type shall be no smaller than 12 points with 4 points of leading between lines.

c. Proposals Prepared on a Typewriter--Typewritten text shall be double spaced, and type size shall be no smaller than 12 characters per inch.

d. Numbering Pages--All pages of both volumes shall be numbered.

e. 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 factors set forth in Section M, M.2. You should structure each volume to adhere to the Factor headings listed below:

F. TECHNICAL PROPOSAL - VOLUME I

1. FACTOR 1 - MISSION SUITABILITY

a. Subfactor 1 - Understanding the Requirement and Approach

(1) The offeror's proposal should include the approach to accomplishing each task area set forth in the Statement of Work. The proposal should include a discussion of design, simulation, electronic fabrication, software generation, system validation and system installation and checkout.

(2) Representative Task

The offeror should describe his approach for accomplishing the task as set forth in Attachment 5. For proposal preparation purposes only, the offeror shall assume a contract award January 1993. Assume that the six development areas (A-F) identified in the Statement of Work (Section C, Clause C.1, Paragraph III) are work packages which must be accomplished during the following periods:

January 1993 - December 1993; Work packages A and B  
January 1994 - December 1994; Work packages C, D, E, and F

The offeror shall provide a technical solution for the representative task. This task is representative of the tasks to be issued under

the contract. You are not to accomplish the task. For the representative task, you will not be allowed site visits, kick-off meetings, conferences, or reviews.

Provide the following on a work package basis, as a minimum:

- list of deliverables
- areas of risk/uncertainty
- methodologies to accomplish
- resources
- labor/material cost estimate (Attachment 5, Figure 1)

Provide the following on an overall task basis, as a minimum:

- estimated number of design drawings by type (e.g. Electrical)
- task plan including master schedule, manpower loading, and skill mix
- summary of labor/material cost estimates

Response to the representative task should be bound separately and clearly marked with the Proposer's company name and solicitation number on each page. NO ADDITIONAL INFORMATION WILL BE PROVIDED TO OFFERORS. The approach should be as clear and complete as possible.

b. Subfactor 2 - Resources

Resources proposed for performing the effort should be identified. Emphasis should be placed on the availability of the proper skill mixes and numbers of people to manage and execute the tasks. This should include the capability and skill mix of subcontractor and consultant personnel proposed for direct involvement in the performance of this contract. Expertise in real time multi-variable automation systems analysis and development, simulation-math modeling methodology and analysis, software design and implementation, automation systems installation, and system integration and validation should be identified. Identify capabilities to support electronic construction, laboratory environment testing, software development stations and tools and simulation software packages.

c. Subfactor 3 - Management

Your proposal should include plans to manage and integrate this effort within the offeror's corporate structure. Elements to include are: (1) commitment to providing the necessary resources to accomplish the required efforts; (2) The degree of independent authority vested in the Project Manager; (3) the Project Manager's ability to command/integrate a diverse, expert team; (4) the level of the Project Manager's position in the corporate structure; (5) the organization's flexibility, ability to expand, and responsiveness to unanticipated needs; e.g., instances when, due to the urgency of a specific task assignment, an immediate assembling of resources and rapid performance is required. If subcontracting is proposed include: (1) the subcontracting structure; (2) the degree of subcontractor commitment; (3) the relationship of the subcontractor's organizational structure to that of the prime; (4) the authority of the subcontractor's Project Manager/the directness of his relationship to the Prime's Project Manager; and (5) the extent to which the Prime proposes to review and

integrate work performed by subcontractors. Further, you should address your proposed interface with the Government.

G. BUSINESS PROPOSAL - VOLUME II

1. FACTOR 2 - COST

a. You are required to submit cost or pricing data with your proposal including an executed Standard Form (SF) 1411. An SF 1411 is contained in Section J, as Attachment 3 of this solicitation. In submitting the cost proposal, the offeror shall comply with the requirements set forth in Table 15-2 of FAR 15.804-6(b)(2), a copy of which is attached to the Standard Form 1411 provided with this Request for Proposal. This compliance requires you to include in your cost proposal sufficient detail to support and explain all costs proposed, giving figures and narrative explanation. Failure to do so may jeopardize your competitive standing.

b. Your pricing proposal must detail all hours segmented by the base year over the 36 month period for task assignment issuance period. You may assume an average level of effort of 26,667 for the first and second years and 26,666 for the last year, and for proposal preparation purposes a contract start date of January 1, 1993.

c. Both you and your interdivision/subcontracts/consultants, if any, should propose direct/indirect labor in a manner that is consistent with your established accounting practices. However, only that direct productive labor as defined in B.2., paragraph C., will apply for purposes of satisfying the hour levels established.

d. State and explain the correlation between the composition of your labor categories enumerated in the pricing proposal and the individuals/skills presented in your Technical Proposal. Provide the basis for the rates and any proposed overtime. If principal individuals are treated as indirect, so state. If principal individuals are treated as a mix of direct and indirect, state the mix in percentages. Also, segment those direct labor-hours that do not apply to the productive levels specified by the RFP. Address specifically how you will treat program management and task implementation/planning/estimating.

e. For any subcontracting/consulting effort proposed, provide a detailed cost breakdown, the degree of competition and the extent of evaluation, the type of contractual arrangement, and the application of these hours to the levels specified. Insure the applicable SF 1411 forms and the written statements of intent from your subcontractors/consultants (if proposed) are included. You must explain any adjustments that you make to the subcontractor's proposed amounts.

f. For interdivisional transfers priced at cost, provide a separate breakdown of cost by element and provide pricing detail which supports the proposed amounts. You must also explain the application of these hours to the specified level-of-effort.

g. Explain your treatment of cost associated with computer cost. Provide all factors used to estimate this cost element. If computer cost is included as an indirect cost, explain what proportion of the indirect is computing.

h. For any travel costs, you shall assume an average of \$50,000 for each of the three years.

i. For the procurement of material components, and consumables, you shall assume an average of \$800,000 for each of the three years.

j. As required by NASA FAR Supplement 18-15.970-3, 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).

k. Provide estimates of the cost and manpower requirements to perform new technology reporting and explain how it is included in your pricing proposal.

l. Provide a three year history of your labor escalation, overhead rates, and G&A rates.

m. In addition, offerors shall complete copies of the forms included in Attachment 6 of Section J, in hard copy and on personal computer diskettes. These forms are designed to provide NASA with information necessary to evaluate all offeror's proposals on a uniform and consistent basis. Explain your derivation of these numbers in relation to your accounting system and pricing details submitted with your SF 1411. This does not replace the requirement to submit the SF 1411 and supporting pricing information/ data.

n. Computerized Cost Proposal Input Instructions

The Government intends to use an IBM-compatible personal computer with 4 MB RAM and LOTUS 1-2-3 Release 3.1 software to aid in the evaluation of the cost proposal. The offerors, including subcontractors, are required to submit cost data on floppy diskettes, two copies, 3-1/2 or 5-1/4 inch, formatted under MS DOS. Cost data, including the forms contained in Attachment 4, must be submitted as a Lotus 1-2-3 spreadsheet or any spreadsheet retrievable or translatable under LOTUS 1-2-3, Release 3.1, in formats with the identical data that is supplied on all Government and Contractor hard copy forms. Offerors must not adjust spreadsheet formats for the Attachment 6 forms in any way and all of these forms must be saved under one file name. Each diskette shall have affixed an external label indicating:

(1) The name of the offeror

(2) The RFP number

ALL DISKETTE SUBMISSIONS SHALL BE ERROR-FREE TRUE SELF-CALCULATING SPREADSHEETS. In the event the information in the hard copy of the proposal is inconsistent with that on the diskette, the hard copy will be the

basis for proposal evaluation. The Government will provide a high density diskette containing form A as a Lotus 1-2-3 file upon request. Specify, diskette size and Release 2 or 3.1.

o. Fixed Fee--Provide a rationale for the level of fixed fee proposed.

## 2. FACTOR 3 - RELEVANT EXPERIENCE AND PAST PERFORMANCE

You should submit a summary of your experience and performance history with respect to meeting technical objectives on schedule and within cost on related efforts. You should also submit a summary of the experience and performance history on related efforts of proposed subcontractors intended to perform a major role in the accomplishment of procurement objectives or to participate in a substantive manner. 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. You are cautioned that omissions or an inaccurate or inadequate response to this very important evaluation factor will have a negative effect on your overall evaluation. Your summary should include the following for each related contract: contract number, contracting agency, telephone number, point of contact at agency, contract type, dollar value, dates contract began and ended or ends, description of contract work and explanation of relevance of work to this RFP, and actual delivery and cost performance versus delivery and cost agreed to in contract. For award fee contracts, separately state in dollars the base fee and award fee available and the award fee actually received.

## 3. FACTOR 4 - OTHER CONSIDERATIONS

a. Financial Condition and Capability--In order for your financial responsibility to be evaluated, you must submit profit and loss statements for your last three Fiscal Years and balance sheets as of the end of your last three Fiscal Years. In addition, indicate your current credit rating, lines of credit, sources of funds, and proposed means for financing any resulting contract.

b. Contract Terms and Conditions--The offeror should state his acceptance of or cite any proposed exceptions that he may have to the terms and conditions, together with an explanation of the basis therefor, and his proposed means for resolving any such exceptions should be discussed. This same information for any additive terms and conditions should be provided.

## SECTION M - EVALUATION FACTORS FOR AWARD

### M.1 METHOD OF EVALUATION

A. Proposals received in response to this RFP will be evaluated by a Source Evaluation Committee in accordance with procedures similar to those prescribed in the NASA Handbook (NHB) 5103.6B. Mission Suitability will be scored. Cost, Relevant Experience and Past Performance and Other Considerations will not be scored. The Source Selection Official, after consultation with the source

evaluation team, will select the offeror (or offerors) for final negotiation which he considers can perform the contract in a manner most advantageous to the Government, all factors considered.

B. Evaluation will be on the basis of material presented and substantiated in your proposal and not on the basis of what may be implied. Vague statements will be interpreted as a lack of understanding on the part of the offeror and/or inability to demonstrate adequate qualifications. Your attention is directed to Section L, L.36, which provides important instructions concerning proposal preparation.

## M.2 EVALUATION FACTORS

A. Factor 1 - Mission Suitability--The content of this section of your proposal will provide the basis for evaluation of your response to the technical requirements of the RFP. The Mission Suitability Subfactors to be considered and scored in the evaluation of your Technical Proposal are set forth below:

### 1. Subfactor 1 - Understanding the Requirements and Technical Approach

The subfactor will be used to evaluate the offeror's understanding of the technical areas to be supported. These areas are as follows: design of automation system; automation system simulation and analysis; fabrication and interconnection of automation components; software implementation; system validation; system installation and checkout. Emphasis will be placed on the offeror's understanding of the requirements necessary to accomplish the Representative task. Further the offeror's technical approach for accomplishing the Representative Task will be evaluated. The approach will be evaluated to determine if it clearly defines methods for performance and how the proposed methods will be used to achieve task objectives. Consideration will be given to the offeror's presentation of any novel methods for accomplishing the task, the realism of the proposed approach and the proposed skill mix/hours and schedule, including milestones for the representative task.

### 2. Subfactor 2 - Resources

This subfactor will be used to evaluate the resources proposed for performing the effort. Emphasis will be placed on the availability of the proper skill mixes and number of people to manage and execute the tasks. This will include the capability and skill mix of subcontractor and consultant personnel proposed for direct involvement in the performance of this contract. Of particular importance is expertise in real time multi-variable automation systems analysis and development, simulation-math modeling methodology and analysis, software design and implementation, automation systems installation, and system integration and validation. The adequacy of capabilities to support electronic construction, laboratory environment testing, software development stations and tools, simulation software packages will be of particular interest in the evaluation.



### 3. Subfactor 3 - Management

This subfactor will be used to evaluate the adequacy and soundness of plans to manage and integrate this effort within the offeror's corporate structure. Elements that will be considered include: (1) commitment to providing the necessary resources to accomplish the required efforts; (2) the degree of independent authority vested in the Project Manager; (3) the Project Manager's ability to command/integrate a diverse, expert team; (4) the level of the Project Manager's position in the corporate structure; (5) the organization's flexibility, ability to expand, and responsiveness to unanticipated needs; e.g., instances when due to the urgency of a specific task assignment, an immediate assembling of resources and rapid performance is required. If subcontracting is proposed an assessment will be made of: (1) subcontracting structure; (2) the degree of subcontractor commitment; (3) the relationship of the subcontractor's organizational structure to that of the prime; (4) the authority of the subcontractor's Project Manager/the directness of his relationship to the Prime's Project Manager; and (5) the extent to which the Prime proposes to review and integrate work performed by subcontractors. The offeror's proposed interface with the Government will be considered.

B. Factor 2 - Cost--An analysis of the proposed cost and fee will be conducted to determine their validity and the extent to which they reflect performance addressed in the technical proposal. An assessment will be made of the offeror's capability to accomplish the contract objectives within the estimated cost proposed. The reasonableness of the fixed fee will also be determined in accordance with the guidelines set forth in NASA FAR Supplement 18-15.902. The cost proposal may be used as an aid to determine the offeror's understanding of Mission Suitability Requirements.

C. Factor 3 - Relevant Experience and Past Performance--Experience and past performance will be assessed to determine the extent to which contract objectives (including technical, schedule and cost) have been achieved on related efforts. Experience will be viewed as the demonstrated accomplishment of work which is comparable and relevant to the objectives of this procurement. This factor includes the evaluation of overall corporate or offeror experience and past performance, including major subcontractors, but not the experience and performance of individuals who are proposed to be involved in the required work.

D. Factor 4 - Other Considerations--The following subfactors will be evaluated based on information presented in the offeror's proposal and all other information available to NASA.

1. Financial Condition and Capability--An assessment will be made to determine if the offeror has adequate financial resources or the ability to obtain them to perform the contract. The soundness of the offeror's financial position will also be evaluated.

2. Contract Terms and Conditions--The proposal will be reviewed to determine the extent to which terms and conditions as set forth in the RFP are accepted. The offeror's rationale for and the acceptability of any exceptions will be evaluated.

3. Small Business and Small Disadvantaged Business Subcontracting Plan--A review of the offeror's plan will be made to determine the extent of the offeror's compliance with NASA policy to afford maximum practicable opportunity for small and small disadvantaged business concerns to participate in Government contracts. This subfactor does not apply to small business offerors.

### M.3 RELATIVE IMPORTANCE OF EVALUATION FACTORS

A. The weights to be used in the scoring of the Mission Suitability Subfactors are presented below:

<u>Subfactors</u>	<u>Weights</u>
1. Understanding the Requirement and Approach	50%
2. Resources	35%
3. Management	<u>15%</u>
	100%

The numerical weights assigned to the above subfactors are indicative of the relative importance of those evaluation areas. The weights will be utilized only as a guide.

B. Overall, in the selection of a Contractor for negotiation leading to contract award, Mission Suitability, Cost, and Relevant Experience and Past Performance will be of essentially equal importance. Other Considerations will be of less importance than each of the other three factors.

ATTACHMENT 1  
SAFETY AND HEALTH PLAN

## ATTACHMENT 2

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
 LANGLEY RESEARCH CENTER  
 HAMPTON, VIRGINIA 23665-5225

CERTIFICATE OF CURRENT COST OR PRICING DATA

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in Section 15.801 of the Federal Acquisition Regulation (FAR) and required under FAR Subsection 15.804-2) submitted, either actually or by specific identification in writing, to the Contracting Officer or the Contracting Officer's representative in support of \_\_\_\_\_\* are accurate, complete, and current as of \_\_\_\_\_\*\*

day            month            year

This certification includes the cost or pricing data supporting any advance agreements and forward pricing rate agreements between the offeror and the Government that are part of the proposal.

FIRM \_\_\_\_\_

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

\_\_\_\_\_  
 Date of Execution            \*\*\*

\*Identify the proposal, quotation, request for price adjustment, or other submission involved, giving the appropriate identifying number (e.g., RFP No.).

\*\*Insert the day, month, and year when price negotiations were concluded and the price agreement was reached.

\*\*\*Insert the day, month, and year of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

**CONTRACT PRICING PROPOSAL COVER SHEET**

1. SOLICITATION/CONTRACT/MODIFICATION NO.

FORM APPROVED  
OMB NO.  
9000-0013

NOTE: This form is used in contract actions if submission of cost or pricing data is required. (See FAR 15.804-6(b))

2. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)

3A. NAME AND TITLE OF OFFEROR'S POINT OF CONTACT

3B. TELEPHONE NO.

4. TYPE OF CONTRACT ACTION (Check)

- |                                                            |                                             |
|------------------------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> A. NEW CONTRACT                   | <input type="checkbox"/> D. LETTER CONTRACT |
| <input type="checkbox"/> B. CHANGE ORDER                   | <input type="checkbox"/> E. UNPRICED ORDER  |
| <input type="checkbox"/> C. PRICE REVISION/REDETERMINATION | <input type="checkbox"/> F. OTHER (Specify) |

5. TYPE OF CONTRACT (Check)

- FFP     CPFF     CPIF     CPAF  
 FPI     OTHER (Specify)

6. PROPOSED COST (A+B=C)

A. COST	B. PROFIT/FEE	C. TOTAL
\$	\$	\$

7. PLACE(S), AND PERIOD(S) OF PERFORMANCE

List and reference the identification, quantity and total price proposed for each contract line item. A line item cost breakdown supporting this recap is required unless otherwise specified by the Contracting Officer. (Continue on reverse, and then on plain paper, if necessary. Use same headings.)

A. LINE ITEM	B. IDENTIFICATION	C. QUANTITY	D. TOTAL PRICE	E. REF.

9. PROVIDE NAME, ADDRESS, AND TELEPHONE NUMBER FOR THE FOLLOWING (If available)

A. CONTRACT ADMINISTRATION OFFICE

B. AUDIT OFFICE

10. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS WORK? (If "Yes," identify)

- YES     NO

11A. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? (If "Yes," complete Item 11B)

- YES     NO

11B. TYPE OF FINANCING (√ one)

- ADVANCE PAYMENTS     PROGRESS PAYMENTS  
 GUARANTEED LOANS

12. HAVE YOU BEEN AWARDED ANY CONTRACTS OR SUBCONTRACTS FOR THE SAME OR SIMILAR ITEMS WITHIN THE PAST 3 YEARS? (If "Yes," identify item(s), customer(s) and contract number(s))

- YES     NO

13. IS THIS PROPOSAL CONSISTENT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31 COST PRINCIPLES? (If "No," explain)

- YES     NO

14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA (Public Law 91-379 as amended and FAR PART 30)

14A. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB REGULATIONS? (If "No," explain in proposal)

- YES     NO

14B. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT (CASB DS-1 or 2)? (If "Yes," specify in proposal the office to which submitted and if determined to be adequate)

- YES     NO

14C. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NON-COMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal)

- YES     NO

14D. IS ANY ASPECT OF THIS PROPOSAL INCONSISTENT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal)

- YES     NO

This proposal is submitted in response to the RFP, contract, modification, etc. in Item 1 and reflects our best estimates and/or actual costs as of this date and conforms with the instructions in FAR 15.804-6(b) (2), Table 15-2. By submitting this proposal, the offeror, if selected for negotiation, grants the contracting officer or an authorized representative the right to examine, at any time before award, those books, records, documents and other types of factual information, regardless of form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

15. NAME AND TITLE (Type)

16. NAME OF FIRM

17. SIGNATURE

18. DATE OF SUBMISSION

## TABLE 15-2 INSTRUCTIONS FOR SUBMISSION OF A CONTRACT PRICING PROPOSAL\*

1. SF 1411 provides a vehicle for the offeror to submit to the Government a pricing proposal of estimated and/or incurred costs by contract line item with supporting information, adequately cross-referenced, suitable for detailed analysis. A cost-element breakdown, using the applicable format prescribed in 7A, B, or C below, shall be attached for each proposed line item and must reflect any specific requirements established by the contracting officer. Supporting breakdowns must be furnished for each cost element, consistent with offeror's cost accounting system. When more than one contract line item is proposed, summary total amounts covering all line items must be furnished for each cost element. If agreement has been reached with Government representatives on use of forward pricing rates/factors, identify the agreement, include a copy, and describe its nature. Depending on offeror's system, breakdowns shall be provided for the following basic elements of cost, as applicable:

**Materials**--Provide a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include raw materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity, and price.

**Competitive Methods**--For those acquisitions (e.g., subcontracts, purchase orders, material orders, etc.) over \$500,000 priced on a competitive basis, also provide data showing degree of competition, and the basis for establishing the source and reasonableness of price. For interorganizational transfers priced at other than cost of the comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor, explain the pricing method (see 31.205-26(e)).

**Established Catalog or Market Prices/Prices Set by Law or Regulation**--When an exemption from the requirement to submit cost or pricing data is claimed, whether the item was produced by others or by the offeror, provide justification for the exemption as required by 15.804-3(e).

**Noncompetitive Methods**--For those acquisitions (e.g., subcontracts, purchase orders, material orders, etc.) over \$500,000 priced on a noncompetitive basis, also provide data showing the basis for establishing source and reasonableness of price. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown if priced based on cost. For interorganizational transfers priced at cost, provide a separate breakdown of cost by elements. As required by 15.806-2(a), provide a copy of cost or pricing data submitted by the prospective source in support of each subcontract, or purchase order that is either (i) \$1,000,000 or more, or (ii) both more than \$500,000 and more than 10 percent of the prime contractor's proposed price. The contracting officer may require submission of cost or pricing data in support of proposals in lower amounts. Submit the results of the analysis of the prospective source's proposal as required by 15.806. When the submission of a prospective source's cost or pricing data is required as described above, it shall be included as part of the offeror's initial pricing proposal.

**Direct Labor**--Provide a time-phased (e.g., monthly, quarterly, etc.) breakdown of labor hours, rates, and cost by appropriate category, and furnish bases for estimates.

**Indirect Costs**--Indicate how offeror has computed and applied offeror's indirect costs, including cost breakdowns, and showing trends and budgetary data, to provide a basis for evaluating the reasonableness of proposed rates. Indicate the rates used and provide an appropriate explanation.

**Other Costs**--List all other costs not otherwise included in the categories described above (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework, and Federal excise tax on furnished articles) and provide bases for pricing.

**Royalties**--If more than \$250, provide the following information on a separate page for each separate royalty or license fee: name and address of licensor; date of license agreement; patent numbers, patent application serial numbers, or other basis on which the royalty is payable; brief description (including any part or model numbers of each contract item or component on which the royalty is payable); percentage or dollar rate of royalty per unit; unit price of contract item; number of units; and total dollar amount of royalties. In addition, if specifically requested by the contracting officer, provide a copy of the current license agreement and identification of applicable claims of specific patents. (See FAR 27.204 and 31.205-37).

**Facilities Capital Cost of Money**--When the offeror elects to claim facilities capital cost of money as an allowable cost, the offeror must submit Form CASI3-CMB and show the calculation of the proposed amount (see FAR 31.205-10).

2. As part of the specific information required, the offeror must submit with offeror's proposal, and clearly identify as such, cost or pricing data (that is, data that are verifiable and factual and otherwise as defined at FAR 15.801). In addition, submit with offeror's proposal any information reasonably required to explain offeror's estimating process, including--

a. The judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data; and

b. The nature and amount of any contingencies included in the proposed price.

3. Whenever the offeror has incurred costs for work performed before submission of proposal, those costs must be identified in the offeror's cost/price proposal.

4. There is a clear distinction between submitting cost or pricing data and merely making available books, records, and other documents without identification. The requirement for submission of cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification, to the contracting officer or an authorized representative. As later information comes into the offeror's possession, it should be promptly submitted to the contracting officer. The requirement for submission of cost or pricing data continues up to the time of final agreement on price.

5. In submitting offeror's proposal, offeror must include an index, appropriately referenced, of all the cost or pricing data and information accompanying or identified in the proposal. In addition, any future additions and/or revisions, up to the date of agreement on price, must be annotated on a supplemental index.

\*Federal Acquisition Regulation, paragraph 15.804-6(b).

6. By submitting offeror's proposal, the offeror, if selected for negotiation, grants the contracting officer or an authorized representative the right to examine, at any time before award, those books, records, documents, and other types of factual information, regardless of form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

7. As soon as practicable after final agreement on price, but before the award resulting from the proposal, the offeror shall, under the conditions stated in FAR 15.804-4, submit a Certificate of Current Cost or Pricing Data.

8. HEADINGS FOR SUBMISSION OF LINE-ITEM SUMMARIES:

A. New Contracts (including Letter contracts).

COST ELEMENTS	PROPOSED CONTRACT ESTIMATE-TOTAL COST	PROPOSED CONTRACT ESTIMATE-UNIT COST	REFERENCE
(1)	(2)	(3)	(4)

Under Column (1)--Enter appropriate cost elements.

Under Column (2)--Enter those necessary and reasonable costs that in offeror's judgment will properly be incurred in efficient contract performance. When any of the costs in this column have already been incurred (e.g., under a letter contract or unpriced order), describe them on an attached supporting schedule. When preproduction or startup costs are significant, or when specifically requested to do so by the contracting officer, provide a full identification and explanation of them.

Under Column (3)--Optional, unless required by the contracting officer.

Under Column (4)--Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.

B. Change Orders Modifications, and Claims.

COST ELEMENTS	ESTIMATED COST OF ALL WORK DELETED	COST OF DELETED WORK ALREADY PERFORMED	NET COST TO BE DELETED	COST OF WORK ADDED	NET COST OF CHANGE	REFERENCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Under Column (1)--Enter appropriate cost elements.

Under Column (2)--Include (i) current estimates of what the cost would have been to complete deleted work not yet performed, and (ii) the cost of deleted work already performed.

Under Column (3)--Include the incurred cost of deleted work already performed, actually computed if possible, or estimated in the contractor's accounting records. Attach a detailed inventory of work, materials, parts, components, and hardware already purchased, manufactured, or performed and deleted by the change, indicating the cost and proposed disposition of each line item. Also, if offeror desires to retain these items or any portion of them, indicate the amount offered for them.

Under Column (4)--Enter the net cost to be deleted which is the estimated cost of all deleted work less the cost of deleted work already performed. Column (2) less Column (3) = Column (4).

Under Column (5)--Enter the offeror's estimate for cost of work added by the change. When nonrecurring costs are significant, or when specifically requested to do so by the contracting officer, provide a full identification and explanation of them. When any of the costs in this column have already been incurred, describe them on an attached supporting schedule.

Under Column (6)--Enter the net cost of change which is the cost of work added, less the net cost to be deleted. When this result is negative, place the amount in parentheses. Column (4) less Column (5) = Column (6).

Under Column (7)--Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.

C. Price Revision/Redetermination.

CUTOFF DATE	NUMBER OF UNITS COMPLETED	NUMBER OF UNITS TO BE COMPLETED	CONTRACT AMOUNT	REDETERMINATION PROPOSAL AMOUNT	DIFFERENCE
(1)	(2)	(3)	(4)	(5)	(6)

COST ELEMENTS	INCURRED COST- PREPRODUCTION	INCURRED COST- COMPLETED UNITS	INCURRED COST- WORK IN PROGRESS	TOTAL INCURRED COST	ESTIMATED COST TO COMPLETE	ESTIMATED TOTAL COST	REFERENCE
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Under Column (1)--Enter the cutoff date required by the contract if applicable.

Under Column (2)--Enter the number of units completed during the period for which experienced costs of production are being submitted.

Under Column (3)--Enter the number of units remaining to be completed under the contract.

Under Column (4)--Enter the cumulative contract amount.

Under Column (5)--Enter the offeror's redetermination proposal amount.

Under Column (6)--Enter the difference between the contract amount and the redetermination proposal amount.

When this result is negative, place the amount in parenthesis. Column (4) less Column (5) = Column (6).

Under Column (7)--Enter appropriate cost elements. When residual inventory exists, the final costs established under fixed-price-incentive and fixed-price-redeterminable arrangements should be net of the fair market value of such inventory. In support of subcontract costs, submit a listing of all subcontracts subject to repricing action, annotated as to their status.

Under Column (8)--Enter all costs incurred under the contract before starting production and other nonrecurring costs (usually referred to as startup costs) from offeror's books and records as of the cutoff date. These include such costs as preproduction engineering, special plant rearrangement, training program, and any identifiable nonrecurring costs such as initial rework, spoilage, pilot runs, etc. In the event the amounts are not segregated in or otherwise available from offeror's records, enter in this column offeror's best estimates. Explain the basis for each estimate and how the costs are charged on offeror's accounting records (e.g., included in production costs as direct engineering labor, charged to manufacturing overhead, etc.). Also show how the costs would be allocated to the units at their various stages of contract completion.

Under Columns (9) and (10)--Enter in Column (9) the production costs from offeror's books and records (exclusive of preproduction costs reported in Column (8)) of the units completed as of the cutoff date. Enter in Column (10) the costs of work in process as determined from offeror's records or inventories at the cutoff date. When the amounts for work in process are not available in contractor's records but reliable estimates for them can be made, enter the estimated amounts in Column (10) and enter in Column (9) the differences between the total incurred costs (exclusive of preproduction costs) as of the cutoff date and these estimates. Explain the basis for the estimates, including identification of any provision for experienced or anticipated allowances, such as shrinkage, rework, design changes, etc. Furnish experienced unit or lot costs (or labor hours) from inception of contract to the cutoff date, improvement curves, and any other available production cost history pertaining to the item(s) to which offeror's proposal relates.

Under Column (11)--Enter total incurred costs (Total of Column (8), (9), and (10)).

Under Column (12)--Enter those necessary and reasonable costs that in contractor's judgment will properly be incurred in completion the remaining work to be performed under the contract with respect to the item(s) to which contractor's proposal relates.

Under Column (13)--Enter total estimated cost (Total of Column (11) and (12)).

Under Column (14)--Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.



REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY  
(FAR 52.203-8) (NOV 1990) ALTERNATE I (SEP 1990)

(a) Definitions. The definitions at FAR 3.104-4 are hereby incorporated in this provision.

(b) Certifications. As required in paragraph (c) of this provision, the officer or employee responsible for this offer shall execute the following certification:

CERTIFICATE OF PROCUREMENT INTEGRITY

(1) I, \_\_\_\_\_  
[Name of certifier]

am the officer or employee responsible for the preparation of this offer and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certificate, I have no information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended\* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement

\_\_\_\_\_  
(solicitation number)

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that, to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of \_\_\_\_\_

\_\_\_\_\_  
[Name of offeror]

who has participated personally and substantially in the preparation or submission of this offer has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of subsection 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity (Continuation Sheet), ENTER NONE IF NONE EXIST) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(4) I agree that, if awarded a contract under this solicitation, the certifications required by subsection 27(e)(1)(B) of the Act shall be maintained in accordance with paragraph (f) of this provision.

\_\_\_\_\_  
[Signature of the officer or employee responsible for the offer and date]

\_\_\_\_\_  
[Typed name of the officer or employee responsible for the offer]

\*Subsections 27(a), (b), and (d) are effective on December 1, 1990.  
Subsection 27(f) is effective on June 1, 1991.

(c) For procurements, including contract modifications, in excess of \$100,000 made using procedures other than sealed bidding, the signed certifications shall be submitted by the successful Offeror to the Contracting Officer within the time period specified by the Contracting Officer when requesting the certificates except as provided in subparagraphs (c)(1) through (c)(5) of this clause. In no event shall the certificate be submitted subsequent to award of a contract or execution of a contract modification:

(1) For letter contracts, other unpriced contracts, or unpriced contract modifications, whether or not the unpriced contract or modification contains a maximum or not to exceed price, the signed certifications shall be submitted prior to the award of the letter contract, unpriced contract, or unpriced contract modification, and prior to the definitization of the letter contract or the establishment of the price of the unpriced contract or unpriced contract modification. The second certification shall apply only to the period between award of the letter contract and execution of the document definitizing the letter contract, or award of the unpriced contract or unpriced contract modification and execution of the document establishing the definitive price of such unpriced contract or unpriced contract modification.

(2) For basic ordering agreements, prior to the execution of a priced order; prior to the execution of an unpriced order, whether or not the unpriced order contains a maximum or not to exceed price; and, prior to establishing the price of an unpriced order. The second certificate to be submitted for unpriced orders shall apply only to the period between award of the unpriced order and execution of the document establishing the definitive price for such order.

(3) A certificate is not required for indefinite delivery contracts (see Subpart 16.5) unless the total estimated value of all orders eventually to be placed under the contract is expected to exceed \$100,000.

(4) For contracts and contract modifications which include options, a certificate is required when the aggregate value of the contract or contract modification and all options (see 3.104-4(e)) exceeds \$100,000.

(5) For purposes of contracts entered into under section 8(a) of the SBA, the business entity with whom the SBA contracts, and not the SBA, shall be required to comply with the certification requirements of subsection 27(e). The SBA shall obtain the signed certificate from the business entity and forward the certificate to the Contracting Officer prior to the award of a contract to the SBA.

(6) Failure of an Offeror to submit the signed certificate within the time prescribed by the Contracting Officer shall cause the offer to be rejected.

(d) Pursuant to FAR 3.104-9(d), the Offeror may be requested to execute additional certifications at the request of the Government. Failure of an Offeror to submit the additional certifications shall cause its offer to be rejected.

(e) A certification containing a disclosure of a violation or possible violation will not necessarily result in the withholding of award under this solicitation. However, the Government, after evaluation of the disclosure, may cancel this procurement or take any other appropriate actions in the interests of the Government, such as disqualification of the Offeror.

(f) In making the certification in paragraph (2) of the certificate, the officer or employee of the competing contractor responsible for the offer may rely upon a onetime certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the contractor. If a contractor decides to rely on a certification executed prior to suspension of Section 27 (i.e., prior to December 1, 1989), the contractor shall ensure that an individual who has so certified is notified that Section 27 is reinstated. These certifications shall be maintained by the Contractor for 6 years from the date a certifying employee's employment with the company ends or, for an agent, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the Contractor.

(g) The certifications in paragraphs (b) and (d) of this provision are a material representation of fact upon which reliance will be placed in awarding a contract.

ATTACHMENT 5  
REPRESENTATIVE TASK

## **Facility Automation Systems Upgrade to the Combustion Heated Scramjet Facility and the Direct-Connect Supersonic Combustion Test Facility, B1221C**

### **Scope and Description**

#### **Part 1 Scope**

- 1.1 The work to be provided under these specifications includes Engineering Services for designing and preparing working drawings, cost estimates, and building, installation, and checkout for the following project:

Facility Automation Systems Upgrade to the Combustion Heated Scramjet Facility and the Direct-Connect Supersonic Combustion Test Facility, B1221C.

The construction will be located in the West Area, Langley Research Center, Hampton, Virginia.

#### **Part 2 Project Description**

- 2.1 The work to be provided under these specifications includes Facility Automation Systems Upgrade to the Combustion Heated Scramjet Facility and the Direct-Connect Supersonic Combustion Test Facility, B1221C.
- 2.2 The modifications detailed in the specification shall provide an enhancement/upgrade to the existing system via hardware, software, and interface additions. The existing system consists of manually operated valves, calibration flow/sensor/valve display devices, and a timer-sequencer for operations. These modifications shall provide complete closed-loop control, timed sequencing, and operation interface within an embedded computer/hardware/software/interface system.
- 2.3 The construction details and materials selected shall be influenced by their suitability to the environment to which they are exposed.

#### **Part 3 Drawings and Information Furnished by the Government**

- 3.1 The items and data are included as a reference and shall not be interpreted as limiting or defining the exact scope of the work. The ultimate design shall be the responsibility of the contractor and shall be guided by the Facilities Engineering Handbook -- NHB 7320.1B.
- 3.2 Reference construction, electrical, mechanical, and utility drawings and applicable standard detail drawings which are available will be furnished by the Government at the Contractor's request. These drawings are not "As-Built Drawings," and the Contractor shall confirm and establish data concerning existing construction, which

will be necessary for the accomplishment of the work. The Contractor shall make sufficient site investigations to insure accuracy and completeness of the drawing details of new construction and interfaces with existing construction. Particular attention is required to coordinate the interface of existing construction with new construction and to identify the limits of demolition, repair, and replacement, as well as the limits of new construction.

- 3.3 Existing software and operational manuals and documents will be provided to the Contractor. Refer to attached drawing list.

**Part 4 Services to be Performed**

- 4.1 All references in this document to Contractor-developed drawings shall include hard copy plots and data files from a Computer-Aided Design and Drafting (CADD) program. Aforementioned drawing files shall be totally compatible for all parameters with AutoCAD, Version 11 or later (Autodesk, Inc., CADD Software) and provided in drawing file format (.DWG) on 5.25"/1.2 Mb or 3.5"/1.44 Mb disks for DOS application.

Development of Electronic Database Drawings shall be governed by generally accepted industry CADD operation procedures describing proper CADD drafting techniques including the following:

- All drawing practices and conventions shall adhere to standards defined in DOD-STD-100 and DOD-D-1000.
- All extraneous layers, line types, blocks, and styles not necessary shall be purged; layer 0 not to be used.
- Lines shall be continuous, not segmented, with only special application of poly line or non-standard width lines accepted.
- Drawings shall be layered, colored, and text styled per LaRC standard format layering schemes.
- Deviations from aforementioned procedures must be submitted for approval.

- 4.2 The Contractor shall arrange to meet with Government personnel involved in the project prior to the start of design, to discuss the project, and to settle any questions, changes, or controversies before actual design is begun.

- 4.3 The Contractor shall take all action necessary to obtain the data upon which to develop the design of the project, such as visiting the sites, holding conferences, and any other action he may deem necessary for the completion of the work.

- 4.4 The Contractor shall prepare preliminary studies, sketches, layout plans and reports, including preliminary estimates of the cost of the proposed project, including

all structures, utilities, and appurtenances thereto.

- 4.5 The Contractor shall prepare final designs, complete working (contract) drawings, specifications, and a detailed cost estimate (Figure 1). It shall be the responsibility of the Contractor to check all drawings he prepares and so indicate on the drawings.
- 4.6 The Contractor shall give special attention to the design to minimize energy utilization of the facility. The Contractor shall utilize "value engineering" while conducting this design.
- 4.7 The Contractor shall provide technical support for design reviews as specified in Part 6.
- 4.8 The Contractor shall work in close liaison with NASA representatives throughout the design contract.
- 4.9 The Contractor shall provide a desk or table and a telephone for use by NASA representatives during visits to the Contractor's office.

#### **Part 5 Schedule**

- 5.1 All drawings, specifications, and four copies of all design calculations and cost estimates shall be submitted by the Contractor for final review by the Government.
- 5.2 The Contractor shall complete all work, including correcting and delivering final drawings and specifications to the Government.

#### **Part 6 Design Reviews**

- 6.1 The Contractor shall conduct two design reviews at Langley Research Center: a Preliminary Design Review (PDR), and a Critical Design Review (CDR). The Contractor shall furnish qualified representatives knowledgeable in all applicable engineering disciplines to prepare and conduct the design reviews.
- 6.2 The purpose of the Preliminary Design Review (PDR) is to verify the design approach relative to the intended use of the facility; to verify that the design is within available funding; and to assure project completion within the established schedule. The PDR will be conducted by the Contractor, at Langley Research Center, when the project is approximately 30 percent complete.
- 6.3 The CDR shall be conducted when the design is approximately 85 percent complete. The purpose of the CDR is to verify the design, construction details, and technical aspects of the design and specifications. It will also verify that the design is compatible with the budgeted funding and established schedule.

- 6.4 For the CDR, the Contractor's material and presentation shall cover the complete facility design, including explanation of overall concepts, system definition, and identification of salient features, fabrication processes, testing, environmental factors, safety, and technical aspects of the design for each project element or discipline as applicable. Project schedule and cost estimate shall also be covered for each project element and discipline.
- 6.5 The Contractor shall provide the applicable information necessary for the review in the form of viewgraphs. Projector equipment will be furnished by the Government. Twenty (20) copies of all material to be presented shall be furnished to the Government Technical Representative ten (10) days prior to the review.
- 6.6 The Design Review Panels will be appointed by the Government and will direct comments and recommendations to the Government Technical Representative, who will initiate all contractual action through the Contracting Officer.

## **Part 7 Progress Reports**

- 7.1 The Contractor shall submit two reproducible copies of all updated drawings and three copies of all cost estimates, applicable design data, and computations for Government review at monthly (30) day intervals. Prints of work "as is" will serve the purpose. These prints shall be clearly dated and marked "Progress Prints." Each progress report shall be accompanied by an updated cost estimate review and a written report that verifies that the project design is within the allotted construction funding.
- 7.2 The Contractor shall submit a Progress Report for receipt by the Government by the 20th of each month. This progress report shall contain a narrative summary of the design activities and a design schedule. The narrative summary shall cover progress since the last report, problem areas, corrective actions, plans, and recommendations for NASA actions. The schedule shall show the Contractor's planned work and actual progress to date.

## **Part 8 Estimated Cost**

- 8.1 The construction cost for this project is limited to \$950,000. This number includes neither the 10 percent project contingency, nor the 6 percent project management requirement.
- 8.2 The Contractor shall prepare his final design, including construction contract drawings and specifications, to bring the contract cost of constructing the project within this authorization. If, at any time, during the preparation of plans and specifications, the Contractor finds that the requirements for the project appear inconsistent with the funds available, the Contractor shall promptly refer such findings to the Contracting Officer for action.

- 8.3 The construction cost estimate shall include a 5.0 percent per year inflation percentage to cover forecast of cost to mid-construction period. The midpoint of construction is anticipated to be July 1994. The cost estimate shall be reasonable and adequate. Any special features that increase or decrease costs appreciably from normal or basic construction costs shall be explained fully. A separate form similar to Figure 1 shall be completed in detail. This estimate shall show quantity, unit pricing, and total price for each item.

**Part 9 Construction Contract**

- 9.1 The construction contract plans and specifications to be prepared under these specifications shall provide for one contract for the Facility Automation Systems Upgrade to the Combustion Heated Scramjet Facility and the Direct-Connect Supersonic Combustion Test Facility, B1221C.
- 9.2 Contractor shall build, install, and check out system within 365 days after task award, based upon design task deliverables.





# Facility Automation Systems Upgrade to the Combustion Heated Scramjet Facility and the Direct-Connect Supersonic Combustion Test Facility, B1221C

## Detailed Requirements

### Part 1 Scope

#### Researcher/User Requirements

Research is performed in these facilities in support of the National Aero-Space Plane and Generic Hypersonics Programs.

Presently, the gases used in the Combustion-Heated Scramjet Test Facility (CHSTF) and the Direct-Connect Supersonic Combustion Test Facility (DCSCTF) in Building 1221C are under manual control, thus impacting the time to achieve the desired operation and precision of the operation. In addition, the present controls do not provide good repeatability for day-to-day operations of the facilities. For tests which require steady facility operation at a pre-defined point, the characteristics stated above adversely impact data quality, efficient operation, and productivity of the facilities. These statements are especially true for the DCSCTF.

Modifications to the gas handling systems are proposed to incorporate computer controlled valves. Sensors would be included to enable mass flow measurements upon which feedback information would be based. Software should be provided to determine the individual mass flow parameters based upon desired total pressure, temperature, and oxygen makeup for the facility. Time response of the control/feedback systems should be fast enough to reach the desired tunnel operating parameters within 5 seconds after the first ignition event and the model fuel within 3 seconds of initial injection. The desired tunnel mass flow rates should then be maintained for the run duration (10 to 30 seconds) within a pre-determined accuracy, and the model fuel flow rate maintained during the duration of step changes. **Excursions into unsafe operating conditions must be prevented.**

#### Physical Size and Characteristics

The propulsion tunnels and the associated gas systems are located in Building 1221D.

#### **Gross Floor Area**

The proposed system modifications will require little, if any, additional floor space. Only the system control computer console will require space.

## Special Features Required

The system additions will consist of: (1) computer controlled metering and shutoff valves (may be two separate valves) and gas mass flow measurement instrumentation for each of the gases for each of the two facilities, (2) a control computer, (3) control software, and (4) setup software that would uniquely specify the individual gas flow rates to produce the desired total pressure and temperature and oxygen composition of the tunnel vitiated air flow and each of the "fuel" flows into the model. The DCSTF consists of up to ten gas flow systems as follows: (1) primary air flow for the heater, (2) hydrogen flow for the heater, (3) oxygen flow for the heater, (4) primary fuel (hydrogen) flow for the model, (5) secondary fuel flow for the model, and (6) five auxiliary gas flow systems for the model. The CHSTF consists of flow systems as follows: (1) primary air flow for the heater, (2) heater liner cooling/purge air flow, (3) hydrogen flow for the heater, (4) oxygen flow for the heater, (5) five individually controlled model fuels (hydrogen), (6) silane/hydrogen mixture for model fuel ignition, (7) four model oxygen sources, and (8) three hydrogen and oxygen controls for model fuel torch ignitors. The time response of the control system must be low enough to achieve the desired flows in 5 seconds or less for the tunnel conditions and 3 seconds or less for the model fuel systems. The flows would then be maintained within pre-determined limits for the duration of the tunnel operation and step changes of the model fuels.

### Typical Mass Flows for the Two Facilities:

	CHSTF	DCSTF
Heater Air Flow	10.0 to 60.0 Lbs/Sec	2.0 Lbs/Sec
Heater Hydrogen Flow	0.15 to 0.5	0.06
Heater Oxygen Flow	1.8 to 6.5	0.75
Model Hydrogen Flow	0.012 to 0.55 through 1 to 6 Tubes	0.027

### Basis for Scope

The facilities are presently operational under manual control. Open/Close of model fuel shutoff controlled by a programmable controller.

### Relationship to Existing Facility

The existing manually regulated valves would be replaced (or supplemented, to be decided) with the proposed valve and control system.

Problems in obtaining functional control valves for hydrogen and oxygen as in the past will occur!! Without these, automation not possible!! Such availability should be explored prior to allowing the contract to proceed.

## **Benefits**

### **Improved Performance**

Automated controls would provide good test condition repeatability. Some test (such as non-intrusive diagnostics) require good repeatability. Data obtained during "off point" facility operation must be discarded.

### **Attraction and Retention of Personnel**

Tests may possibly be easier to perform, thus lowering the level of frustration for the support technicians and the professional staff involved in use of the facility.

### **Reduction in Total Manpower Required**

It is conceivable that automatic controls could reduce the number of technicians required for a testing program.

### **Reduction in Energy Requirements**

Anticipated improvements in facility flow control will improve the quality of data and consequently reduce the amount of wasted hydrogen and oxygen as well as compressed air. Such improvements will translate directly into increased productivity and reduced operational cost.

### **High Level Protection**

No change in protection for facility equipment or personnel is anticipated.

### **Greater Responsiveness, Reliance, or Performance**

As indicated above, the facility operating conditions should be maintained more closely than can be presently achieved. Improved productivity would result.

## **Disadvantages of Existing Facilities**

### **Size, Parameter, Ranges, Operational Limitations**

Presently, desired mass flows for the various gases cannot be accurately preset, nor precisely maintained during all tunnel operations.

### **Cost**

Uncertain flow control results in unusable data. In a recent series of CARS measurements conducted in the DCSFTF, an estimated half of the data were unusable. Automated controls should, therefore, reduce cost and/or increase the amount of good steady-state condition tests.

## **Lack of Trained Personnel**

Present operations require engineering calculations to establish the desired operating conditions. Such training would be less difficult with a pre-programmed control system.

## **Disposition of Existing Facilities to be Replaced**

No replacement of facilities is anticipated.

## **Part 2 Design Standards**

- 2.1 The design shall conform to the provisions of NASA Facilities Engineering Handbook NHB 7320.1B, Public Law 91-596 (Occupational Safety and Health Act), the National Electrical Code, the National Electrical Manufacturers Association, the American National Standards Institute, the National Electrical Safety Code, and applicable UL, CSA, FM, NEMA, or ANSI/IEEE design practices for control systems.

## **Part 3 Math Model Simulation**

- 3.1 A detailed, dynamic analysis simulation of the flow control system shall be provided. Elements of the system to be simulated include:

1. Gas flow-pressure-temperature process from supply inlet through nozzle
2. Flow modulating valves and actuators
3. Flow sensors
4. Digital controller algorithm/logic and related sampling intervals
5. Operator forcing functions/profiles

The simulation shall be used to evaluate the following system responses:

1. Mass flow and nozzle pressure response to design requirements.
2. Component requirements and computer update rates for both CASF and DCSCF

The simulation shall determine the closed-loop system characteristic in the following terms:

Steady state flow accuracy  
 Maximum rate of flow change (setpoint A to setpoint B)  
 Closed-loop system eigen values within operating envelope  
 Gain and phase stability margin

The dynamic analysis simulation of the model positioning system shall be developed using a commercially available digital computer simulation language, such as ACSL. Block diagrams which identify the transfer function or governing equations for each simulated system element shall be provided. Functions or subroutines used to

simulate non-linear characteristics shall be completely defined by tables, charts, functions, or a detailed functional description with specification of all applicable parameters. The simulation code shall be compilable using Microsoft FORTRAN 4.1 optimizing compiler and executable on a PC-based workstation. Two copies of the simulation source code shall be provided on a 5-1/4 inch floppy diskette.

- 3.2 Load calculations shall be made to determine required current and voltage loads on the AC electrical supply system.

#### **Part 4 Drawings**

- 4.1 The Contractor shall prepare separate electrical drawings which shall be clear and concise, with notes, references, construction details, and all information necessary for a complete installation. Each drawing shall reference the applicable higher level drawing and lower level drawing of its respective system. Drawings shall conform to DOD-STD-100 "Drawing Requirements Manual."

- 4.2 The drawing package shall include, as a minimum, the following presentations, not necessarily separate drawing sheets:

##### **4.2.1 Cover Sheet and List of Drawings**

This drawing shall be the top drawing associated with any drawing package. It shall specify the project, facility, general location, a list of all applicable top-level drawings contained in the project package, and list for reference top-level drawings from other existing systems.

##### **4.2.2 System/Block Diagram Drawing**

This drawing shall define the system or block nature of the project or system. It shall illustrate the functioning and general philosophy of the major system components and their association with each other as well as existing system components. This drawing may not be required for a simple, stand-alone project or system where the schematic drawing is self-explanatory.

##### **4.2.3 Schematic Drawing/Ladder Diagram**

This drawing shall show all major components or assembly members of the project or system. It shall show the general connection and interface of all system devices and components without scaling of the location, physical size, and interconnection methods. A legend table shall identify symbols and labeling nomenclature. On a large multi-component project, several drawings may be required, including high level system schematics/ladder diagrams and component assembly level schematics/ladder diagrams.

##### **4.2.4 Arrangement Drawing**

This drawing shall show the physical scaled location (plan, elevation, side, section) for each component or assembly unit shown in the schematic or ladder diagram.

This drawing may contain a list of materials and may reference specific assembly unit drawings.

#### 4.2.5 Interconnecting Drawings

This drawing shall show the scaled location and interconnecting interface between all major components and/or assembly units, including components or devices presently existing in the facility.

#### 4.2.6 Assembly and Parts List Drawing

This drawing shall show the scaled assembly (front, back, side, top sections) of a specific unit or device shown in the arrangement and/or interconnection drawings. This drawing shall show the location of all major internal components. This drawing shall contain a parts list for this specific assembly and list the applicable drawings associated with internal wiring and special mounting details.

#### 4.2.7 Internal Wiring and Mounting Detail Drawings

This drawing shall show the details of internal wiring and component interconnection. Any special mounting or fabrication specifics shall be shown or detailed in notes where applicable.

#### 4.2.8 Cable Assemblies/Wiring Harnesses/PC Layouts

Any specialized assemblies such as cables and PC boards shall be drawn per the applicable accepted commercial practice for that type of assembly. Special mounting or fabrication specifics shall be shown or detailed in notes where applicable.

### 4.3 Manuals

#### 4.3.1 Operating Manual - The Contractor shall provide a Preliminary Operating Manual for the controls provided, including an operating description with emphasis on sequence of operation and operator interactions. Binding is not required.

Commercial manuals shall be provided for commercial equipment and shall be packaged together and indexed from this preliminary operating manual.

## Part 5 Specifications

#### 5.1 The Contractor shall prepare a complete hardware/software design covering all aspects of control system functionality.

#### 5.2 The hardware design shall include the following items as a minimum:

##### 5.2.1 General requirements, material, workmanship, codes, submittal requirements.

- 5.2.2 Hardware design specifications for modulating valves and actuators.
- 5.2.3 Hardware design specifications for gas flow sensors/signal conditioning.
- 5.2.4 Hardware design for CHSTF and DCSTF separation of control/operations functions.
- 5.2.5 Hardware design for specifications for facility automation computer/operator interface.
- 5.2.6 Hardware design for system integration/interconnection of control room and tunnel area components.
- 5.3 The software design shall include the following items as a minimum:
  - 5.3.1 General requirements, submittal requirements, applicable standards, quality, reliability, and maintainability.
  - 5.3.2 The Contractor shall provide a software design and implementation concept document which specifies applicable system and applications software such that the software can be coded following good engineering principles relating to real-time control systems. This document shall address new project software requirements and conversion of existing software requirements where applicable. This design document shall contain the following:
    - A. Introduction.
    - B. Top level architecture diagram which depicts the hierarchy of sub-systems.
    - C. Functional control loop block diagrams for all controlled processes, showing symbolic names of setpoints, feedbacks, feed forwards, gains, command outputs, and all interface I/O port assignments.
    - D. Operator interface information:
      - 1. Identification and description of operator inputs (e.g. touch terminal zones, keyboard commands, or light pen touch zones), and
      - 2. Identification and description of operator outputs (e.g. CRT display layouts, LCD/LED displays, system/error messages, and printed reports), system/operator error messages.
    - E. Functional description of all tasks, including application modules which identifies inputs and outputs, processing logic in pseudo-code or flowchart form, exceptional conditions, error detection/handling, and special execution requirements.
    - F. Identification of all modifiable parameters, (e.g. gains, limits) categorized according to operator/programmer accessibility.



G. Run-time and calibration diagnostics.

H. Development requirements including: operating system software, commercially-available application software, hardware capability, development environment, and programming tools for implementing custom-design software.

I. Commercial software incorporated into the design shall be described including selection criteria and utilization. Commercial software reference manuals which accompany sub-systems incorporated into the design shall be referenced by title and identification such as manufacturer's serial number.

5.4 I/O Wiring - Design of I/O wiring for process control systems shall be in accordance with the following publications:

NEMA ICS2-1983 "Standards for Industrial Control Devices, Controllers, and Assemblies"

NEMA ICS3-1983 "Industrial Systems"

In addition, for distances exceeding 10 feet, wiring carrying analog signals shall use current loops, filter buffering, shielding, guarding, opto-isolation and/or other means of protection against extraneous noise contamination. Cable grounding shall be in accordance with applicable NEMA, NEC, MIL, and IEEE specifications for grounding, bonding, and electromagnetic interference prevention. Contacts driving relays (or equivalent devices) in critical or safety related circuits through inter-unit wiring shall be located on the "hot" side of the relays to minimize the chance of a wiring short to ground causing unwanted relay activation. Wiring external to chassis shall be rated 300 VDC minimum and shall be 22 AWG or larger unless it is a part of a cable or enclosed harness rated 300 VDC or better. All I/O wires and/or cables shall be marked with suitable permanent markings as to source and destination.

5.5 Operator Interfaces - Devices for use by the system operator (thumbwheel switches, pushbuttons, readouts, touchscreens) shall be positioned so that the most frequently used items are in easily accessible locations. Devices shall be grouped by function. Device groups shall be laid out in accordance with a written plan of operation for the facility. Industry standards such as:

" Human Factors Engineering "

by Ernest J. McCormick

McGraw Hill Co. 1982

or

MIL-HDBK-759A "Human Factors Engineering Design for Army Equipment"

shall be consulted to maximize ease-of-use of the layout.

Touchscreens (or display terminals) used for operator I/O shall be designed for ease-of-use, and shall display data grouped by function and importance. Displays

shall not look "cluttered." Multiple screens or pop-up "windows" may be used if single screens become too cluttered. Safety-related parameters, however, shall appear on all screens in case of an emergency condition. Special "operator acknowledge" procedures shall minimize the chance for operator error during critical data entry.

- 5.6 Safety Related Devices - Safety-related devices (interlocks/permissives/limit switches) shall be installed whenever there is a danger that operator error or a single-point component failure can cause a hazard to personnel or major damage to equipment. Critical permissives/interlocks shall be connected to the manual control logic, the microcomputer, and the external computer. For equipment remotely located from the control station, this shall include: local power disconnect switch or breaker with pilot lights to indicate whether system is energized and devices (fixed or movable) to ensure that the controlled item cannot run into other items due to operator inattention or component failure. These devices shall be highly reliable items and shall be connected to highly reliable logic.
- 5.7 Safety-Related Software - Software used in equipment where program errors (or gain coefficient errors) can cause a hazard to personnel or major damage to equipment shall be protected against accidental loss or unauthorized changes. Software shall be in EPROM or EEPROM, requiring specialized access (internal switches or passwords) or specialized equipment (EPROM or other programmers) to change.

## **Part 6**

- 6.1 The Contractor shall fabricate, assemble, implant software, plant test, install/interconnect within facility, and system test within designed cost and schedule developed.

**Drawing List for Facility Automated Systems  
Upgrade to the Combustion Heated Scramjet  
and the Direct Connect Supersonic Combustion  
Test Facilities, B1221C**

Drawing	Rev.	Description
PLD-600431	K	Graphic Control Panel #1, Internal Wiring Diagram
PLD-600434	H	Graphic Control Panel #1 & 2, Interconnection Diagram
PLD-600435	E	Junction Box 1 & 2 Interconnect Diagram
LD-657208	W	Cntrl Cabinet Pnl Arrangement
LD-657209	AA	Vitiated Heater Elem. Diagram No. 1
LD-657210	AA	Elem. Diagram
LD-657212	AG	Vitiated Heater Cntrl Cabinet No. 1 Wiring Diagram
LD-657213	R	Vitiated Heater Cntrl Pnl #4 Wiring Diagram
LD-657214	L	Interconn. Diagram
LD-657215	J	Interconn. Wiring Diagram
LD-657991	K	Servo Controller Schematic
LD-658010	L	Elem. Diagram
LD-658011	C	Interconnection Wiring Diagram
LD-658260	T	One-Line Diagram 440V Building Axillary Power
LD-658261	K	600 PSI Valves and Pump Schematic and J.B. No. 3 Wiring
LD-658264	D	Graphic Control Panel #2, Internal Wiring Diagram
LD-659454	P	Vitiated Heater Control Panel #5 Wiring Diagram
LD-659455	C	Thermocouple Controlers 1-6 Wiring - Back of Panel 7
LD-660910	B	Console A Panel Layout
LD-660911	C	Console B Panel Layout
LD-660912	C	Console C Panel Layout
LD-660913	N	Elem. Diagram #1
LD-660914	G	Elem. Diagram #2
LD-660915	K	Elem. Diagram #3
LD-660916	T	Console A Wiring
LD-660917	K	Console B Wiring
LD-660918	R	Console C Wiring
LD-660919	M	Wiring - Interconnection
LD-660921	U	Elem. Diagram #4
LD-661609	D	Control Room 203 - Floor Plan
LD-661615	A	Programmable Controler-Input/Output Modules External Wiring
LD-661616	K	Programmable Controler-Input Modules 3 & 4 Schematic Diagram
LD-661617	H	Programmable Cntrlr-Input/Output Modules Schematic Diagram
LD-661618	N	Programmable Controler-Input/Output Modules Schematic Diagram
LD-661619	F	Programmable Controler-Output Modules 5 & 6 Schematic Diagram
LD-661620	B	Programmable Controler-Output Modules 7 & 8 Schematic Diagram
LD-661791	E	Engine Fuel Control Graphic Panel Layout (E1)
LD-661792	L	Programmable Controler-Output 3 & 4 Schematic Diagram
LD-661793	M	Back of Engine Injection Graphic Panel-Wiring Diagram
LD-661794	E	Engine Fuel Dual-Mode Control Sys.-Elem. & Interconnect Wiring
LD-661877	E	Ejector Air Panel Wiring
LD-661954	E	Ejector Air Panel Elem.
LD-662832	C	Elem. H2 Detectors and Alarm
LD-662855, SH 1	P	Vitiated Heater Elem. No. 2
LD-662855, SH 2	P	Vitiated Heater Elem. No. 2
LD-662856	F	Vitiated Heater Elem. No. 3
LD-662861	E	Vitiated Heater Control Cabinet No. 3
LD-663162	H	Console BB and CC Wiring Diagram
LD-663163	B	Console B - Wiring - Right Side
LD-663164	V	Vitiated Heater Piping Schematic
LD-663377	C	High Pressure Air Shutdown Alarm 1221
LD-705394	L	Cooling Water Schematic
LD-705909	D	Control Schematic for Valves 3051D & 3134D w/Panel Layout
LD-705913	B	Control Schematic for Valves 3050D & 3051D w/Panel Layout

LC-708057	A	Hydrogen Heater System Schematic
LD-708258	AH	Vitiated Heater Piping Schematic
LD-708259	J	Probe Cooling System Flow Schematic
LD-708260	W	600 PSI Air & Blowdown System
LD-708591	J	100 PSI Service Air Schematic
LD-708592	J	100 PSI Service Air Schematic
LD-708598	V	Test Cell #1 Schematic
LC-709054	C	Test Cell Doors and V3050D Hydraulic System
LD-709676	D	Plan and Details
LD-709870	A	Engine Fuel Gas Generator System (Installation)
LD-709871	A	Engine Fuel Igniter System (Installation)
LD-709880	A	Engine Fuel Gas Generator N2 Supply System
LD-710590		Vacuum Flow Diagram
LD-740055	N	Schematic of 1000 PSI Air System
LD-740327	C	Schematic Fuel Systems A-F
LD-756310	D	Panel 6A & Top Panel #2 Layout
LD-756311	G	Panel 7 - Schematic Diagram
LD-756312	H	Panel 7 - Wiring Diagram
LD-756647	D	Flow Control Valves Schematic Diagram
LD-756682	C	Flow Control Valves Interconnection Wiring Diagram
LD-756766	B	Engine Fuel Gas Generator System Panel Layout & Wiring
LD-756767	A	Engine Fuel Gas Generator System Elementary
LD-756768		Engine Fuel Gas Generator System Elementary & Wiring
LD-756943	B	System Block Diagram Flow Control Valve
LD-756944		Flow Control Valves Panel and PCB Layout
LD-756945		Flow Control Valves Cabinet No. 6 Wiring Diagram

ATTACHMENT 6

SUMMARY OF PROGRAM COST

FORM A - PROGRAM COST - LEVEL OF EFFORT/TASK ASSIGNMENT CONTRACT

FORM A – PROGRAM COST  
LEVEL OF EFFORT/TASK ASSIGNMENT CONTRACT

RFP 1-64-5673.0419

CONTRACT YEAR 1 - 3

COMPANY NAME: \_\_\_\_\_

DESCRIPTION *	TOTAL	YEAR 1	YEAR 2	YEAR 3
Direct Productive LOE Hours				
Prime				
Engineering				
Technician				
Other				
TOTAL DIRECT PRODUCTIVE LOE HOURS	80,000	26,667	26,667	26,666
Prime Costs				
Direct Productive Labor				
Engineering				
Technician				
Other				
TOTAL DIRECT LABOR COSTS				
OVERHEAD (notes 1,2)				
INTERDIVISION				
SUBCONTRACT				
CONSULTANT				
MATERIAL	2,400,000	800,000	800,000	800,000
Other Direct Costs (ODC)				
Travel	150,000	50,000	50,000	50,000
Computer Usage (note 3)				
Miscellaneous ODC				
TOTAL ODC				
SUBTOTAL				
G&A				
FCCOM				
TOTAL ESTIMATED COST				
FIXED FEE				
TOTAL COST PLUS FIXED FEE (CPFF)				

COST PER DIRECT PRODUCTIVE LOE HR  
FEE PER DIRECT PRODUCTIVE LOE HR  
CPFF PER DIRECT PRODUCTIVE LOE HR

\* Provide details of each cost element by year on a separate sheet.

NOTES:

- (1) Include fringe benefits in Overhead.
- (2) If this is a composite rate for more than one overhead category, provide a list of the various rates included.
- (3) Explain if indirect charged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGES

1 | 1

2. AMENDMENT/MODIFICATION NO. 1	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY National Aeronautics and Space Administration Langley Research Center Hampton, VA 23665-5225	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TO ALL CONCERNED	(v)	9A. AMENDMENT OF SOLICITATION NO. 1-64-5673-0419
	X	9B. DATED (SEE ITEM 11) 8-7-92
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

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

(v)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: Solicitation No. 1-64-5673-0419; Engineering Design, Development, Installation and Testing of Facility Automation Systems

Provision L. 26 - PREPROPOSAL/PRE-BID CONFERENCE, Paragraph (a), the sentence starting with the words "In order that ... is corrected by inserting the date of "August 18, 1992" in the blank area.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) RICHARD C. SHISLER
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED
(Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)
	16C. DATE SIGNED 8-12-92

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE \_\_\_\_\_ PAGE OF PAGES  
 1 | 2

2. AMENDMENT/MODIFICATION NO. 2 3. EFFECTIVE DATE \_\_\_\_\_ 4. REQUISITION/PURCHASE REQ. NO. \_\_\_\_\_ 5. PROJECT NO. (If applicable) \_\_\_\_\_

6. ISSUED BY \_\_\_\_\_ CODE \_\_\_\_\_ 7. ADMINISTERED BY (If other than Item 6) \_\_\_\_\_ CODE \_\_\_\_\_

National Aeronautics and Space Administration  
 Langley Research Center  
 Hampton, VA 23681-0001

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  
 TO ALL CONCERNED

9A. AMENDMENT OF SOLICITATION NO. 1-64-5673.0419

9B. DATED (SEE ITEM 11) 8/7/92

10A. MODIFICATION OF CONTRACT/ORDER NO. \_\_\_\_\_

10B. DATED (SEE ITEM 13) \_\_\_\_\_

CODE \_\_\_\_\_ FACILITY CODE \_\_\_\_\_

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

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

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

Subject: NASA Solicitation No. 1-64-5673.0419; Engineering Design, Development, Installation and Testing of Facility Automation Systems

This amendment shall provide for a complete record of the Preproposal Conference, make changes to the solicitation and provide answers to vendor questions, as follows:

(CONTINUED ON ATTACHED PAGE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) \_\_\_\_\_ 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)  
 RICHARD C. SHISLER

15B. CONTRACTOR/OFFEROR \_\_\_\_\_ 15C. DATE SIGNED \_\_\_\_\_ 16B. UNITED STATES OF AMERICA  
 BY \_\_\_\_\_ (Signature of Contracting Officer)

16C. DATE SIGNED 8-26-92

(Signature of person authorized to sign)



I. The Preproposal Conference for subject solicitation was held at Langley Research Center on August 21, 1992. In compliance with the requirement of the Federal Acquisition Regulation 15.409, a complete record of the conference is provided. Attachment 1 sets forth a list of the attendees. Attachment 2 is a complete set of viewgraphs including the Introduction, Center Overview, Division Overview, Procurement Synopsis and Technical Presentation, and Attachment 3 are the answers to vendor questions.

II. The following changes are made to the solicitation:

- A. Attachment 5 to the solicitation entitled "Representation Task", Section entitled "Detailed Requirements" Part 3 Math Model Simulation, Subparagraph 3.1 is changed as follows:

The paragraph starting with the words "The dynamic analysis simulation ..." is changed by correcting the first sentence to read "The dynamic analysis simulation shall be developed using a commercially available digital computer language, such as ACSL Block diagrams which identify the transfer function or governing equations for each simulated system element shall be provided."

- B. Clause L.36 "Proposal Preparation and Submission - Special Instructions", Subparagraphs 4 and 5 under Paragraph A "General Information" are deleted from Section L and hereby inserted in Section H "Special Contract Requirements" under clause H.14 "Validation of FIPS Implementation" using the following modified language:

"The Contractor shall certify that all implementations of FIPS, including applicable FIPS options, offered in response to each task have been previously validated and included on the current list of validated products maintained by the Computer Systems Laboratory (CSL). Unless specified elsewhere, proof of validation shall be in the form of a CSL Certificate of Validation.

The Contractor shall correct all implementation nonconformance from the applicable FIPS reflected in the validation summary report not previously covered by a waiver. All areas of nonconformance must be corrected within 12 months from the issuance date of each task unless otherwise specified elsewhere in the contract. If an interpretation of the FIPS is required that will invoke the procedures set forth in FIPS 29-2, such a request for interpretation shall be made within 30 calendar days after contract award. Any corrections that are required as a result of decisions made under the procedures of FIPS 29-2 shall be completed within 12 months of the date of the formal notification to the Contractor of the approval of the interpretation. Proof of correction in either case shall be in the form of a CSL Certificate of Validation or registered validation summary report for the corrected implementation. Failure to make required corrections within the time limits set forth above shall be deemed a failure to deliver required software."

Pre-Proposal Conference  
Engineering Design, Development, Installation, and  
Testing of Facility Automated Systems

RFP 1-64-5673.0419

August 21, 1992

<u>Name</u>	<u>Company</u>
<u>MARZHA HARTZELL</u>	<u>COMPUTER LOGIC INTERNATIONAL</u>
<u>SCOTT BUCK</u>	<u>PRC</u>
<u>Troy F. Middleton</u>	<u>NASA, HPB</u>
<u>Bill Koselich</u>	<u>PRC</u>
<u>Frans Frazier</u>	<u>PRC</u>
<u>Jim Watson</u>	<u>LaBC</u>
<u>DAVE HAGFORD</u>	<u>FLUIDYNE ENGR CORP</u>
<u>Tom Holt</u>	<u>Fluidyne Engr Corp</u>
<u>BOB DINKINS</u>	<u>FLUIDYNE ENGR CORP</u>
<u>ERIC KNIGHT</u>	<u>LORD AND COMPANY</u>
<u>Bill CABRERA</u>	<u>LORD &amp; COMPANY INC</u>
<u>Charlotte T. Hurdy</u>	<u>NASA - A.D.</u>
<u>CHARLES NILES</u>	<u>NASA - FENFD</u>
<u>RANDOLPH LINDALL</u>	<u>TERRATECH RICHARDSON</u>
<u>Art Boggard</u>	<u>Tetra Tech Richardson</u>
<u>BINC Van Dyke</u>	<u>TERRATECH RICHARDSON</u>
<u>ARVIND PATEL</u>	<u>TAURUS TECH, INC, N.N. VA.</u>

Pre-Proposal Conference  
Engineering Design, Development, Installation, and  
Testing of Facility Automated Systems

RFP 1-64-5673.0419

August 21, 1992

<u>Name</u>	<u>Company</u>
<u>ROSS L. COBLE</u>	<u>Engineering Develop Lab, Inc</u>
<u>GREGORY R COBLE</u>	<u>ENGINEERING DEVELO LAB, INC.</u>
<u>PAUL SENSMEIER</u>	<u>SVERDRUP TECHNOLOGY</u>
<u>James Taylor</u>	<u>Sverdrup Technology</u>
<u>JOHN WARD</u>	<u>WYLE LABS</u>
<u>BOB EVEREITH</u>	<u>WYLE LAB</u>
<u>Bill Roberts</u>	<u>Wyle Labs</u>
<u>RON CRAWFORD</u>	<u>SAIC</u>
<u>MARK ANSTEY</u>	<u>MICROCRAFT INC</u>
<u>VIJAY MENON</u>	} <u>DIVERSIFIED ENGG.</u>
<u>SAH BARRON</u>	
<u>W.H. Comer</u>	<u>Calspan Corp.</u>
<u>M.N. Smotherman</u>	<u>Calspan Corp.</u>
<u>R.T. CROSIER</u>	<u>CALSPAN CORP.</u>
<u>Tom Iffulikan</u>	<u>Jonathan Corp</u>
<u>JIM DIXON</u>	<u>ISE,</u>
<u>JEFF NEWTON</u>	<u>SELF</u>



**Pre-Proposal Conference**

**for**

**Engineering Design, Development, Installation, and  
Testing of Facility Automation Systems**

**1-64-5673.0419**

**August 21, 1992**

**NASA Langley Research Center**

**Hampton, VA 23681**

# **Agenda**

<b>Introduction</b>	<b>Henry L. Livas, Jr.</b>
<b>Center Overview</b>	<b>Henry L. Livas, Jr.</b>
<b>Division Overview</b>	<b>Henry L. Livas, Jr.</b>
<b>Procurement Synopsis</b>	<b>Charlotte T. Hardy</b>
<b>Technical Presentation</b>	<b>James F. Watson, Jr.</b>
<b>Facility Tour</b>	<b>James F. Watson, Jr.</b>
<b>Response to Questions</b>	<b>James F. Watson, Jr.</b>

# Introduction

## **Source Evaluation Committee (SEC) Membership**

**Chairman:**

Henry L. Livas, Jr., Facilities Engineering Division

**Other Voting Members:**

James F. Watson, Jr., Facilities Engineering Division  
Charles E. Niles, Facilities Engineering Division  
David A. Gwaltney, Facilities Engineering Division  
Aubrey M. Cary, Facilities Planning Office, Aero Dir.

**Non-Voting Member:**

Charlotte T. Hardy, Acquisition Division

**SEC Recorder:**

Barbara A. Yeager, Facilities Engineering Division

**Legal Advisor:**

Joseph L. Connors, Office of Chief Counsel

**Ex-Officio Members:**

Michael F. Cavelli, Acquisition Division  
Everette S. Ketchum, Acquisition Division  
Richard C. Shisler, Acquisition Division



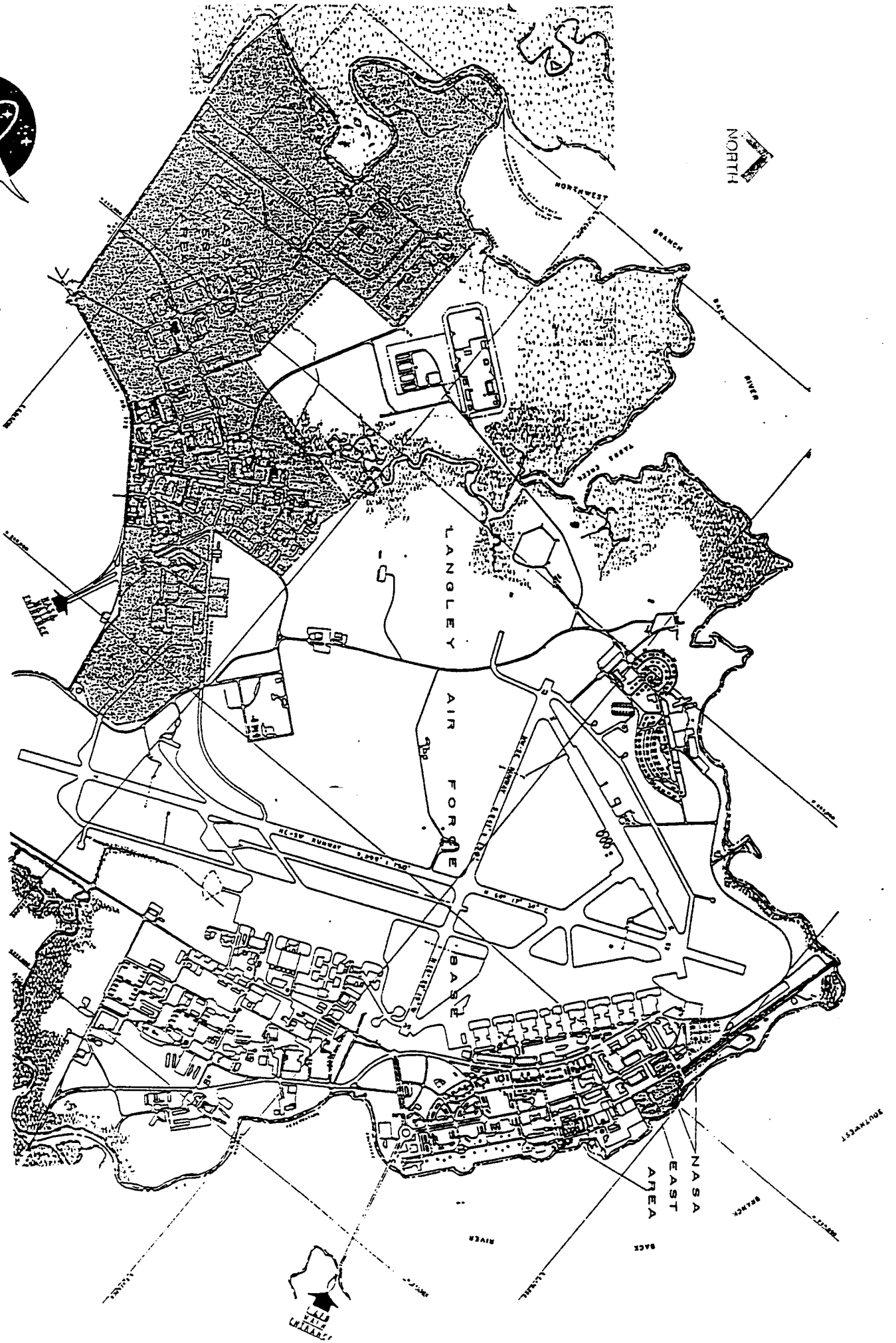
## **Questions and Answers**

- General questions pertaining to LaRC operations will be taken from the floor. Questions pertaining to RFP and proposal preparation instructions should be submitted in writing.
- Submit written questions on the forms provided. Please use a separate form for each question.
- Questions and answers, preparation material, and attendee list will be provided in Amendment Number 2 to the RFP.
- Information provided at the Pre-Proposal Conference should not be construed as a revision to the RFP unless confirmed by subsequent written amendment.

# Center Overview



Nasa Langley Research Center  
East and West Area Map



# **NASA Langley Research Center**

## **Vital Statistics**

- Located on 807 Acres in Hampton, Virginia
- Contiguous with the Langley AFB  
(Headquarters Air Combat Command)
- Facility Replacement Value - Approximately  
\$1.8 Billion
- Employs a Work Force of Approximately 5,700  
(NASA Civil Service, NPS Contractor, University,  
Other Government Agencies, and Others)

# **NASA Langley Research Center**

## **Organization**

- **Nine Directorates**  
(Seven Technical - Aeronautics, Electronics, Flight Systems, Space, Structures, National Aerospace Plane, and Systems Engineering and Operations)  
(Two Administrative - Management Operations and Comptroller)
- **Four Staff Offices**  
(Chief Scientist, Equal Opportunity, External Affairs, and Chief Counsel)

# Langley Research Center

**National Aerospace  
Plane Office**  
Lana M. Couch

- Oversight for All NASA Tech Activity
- Tech Eval of X-30 Veh Des
- Adv Comp Fluid Dyn Appl

**Director**  
Paul F. Holloway

**Deputy Director**  
H. Lee Beach

**Chief Engineer**  
Darrell Branscome

**Associate Director**  
Sidney F. Pauls

**Chief Scientist**  
M. F. Card

- Research Quality/Content
- University Programs

**Aeronautics**  
R. V. Harris, Jr.

- Aerodynamics
- Propulsion Integration
- Operating Problems
- Aeronautical Sys Studies

**Structures**  
C. P. Blankenship

- Structures and Materials
- Aeroelasticity
- Acoustics

**Flight Systems**  
J. F. Creedon

- Controls and Guidance
- Flight Management
- Information Systems
- Electromagnetics

**Space**  
W. R. Hook

- Aerothermodynamics
- Energetics
- Atmospheric Sciences
- Shuttle/Space Station Spt

**Management  
Operations**  
J. F. Stokes

- Administrative Support
- Contract Award/Admin.

**Systems Eng'g  
and Operations**  
R. L. Swain

- Engineering Support
- Fabrication
- Facility Operations
- Reliability/Qual Assurance
- Safety

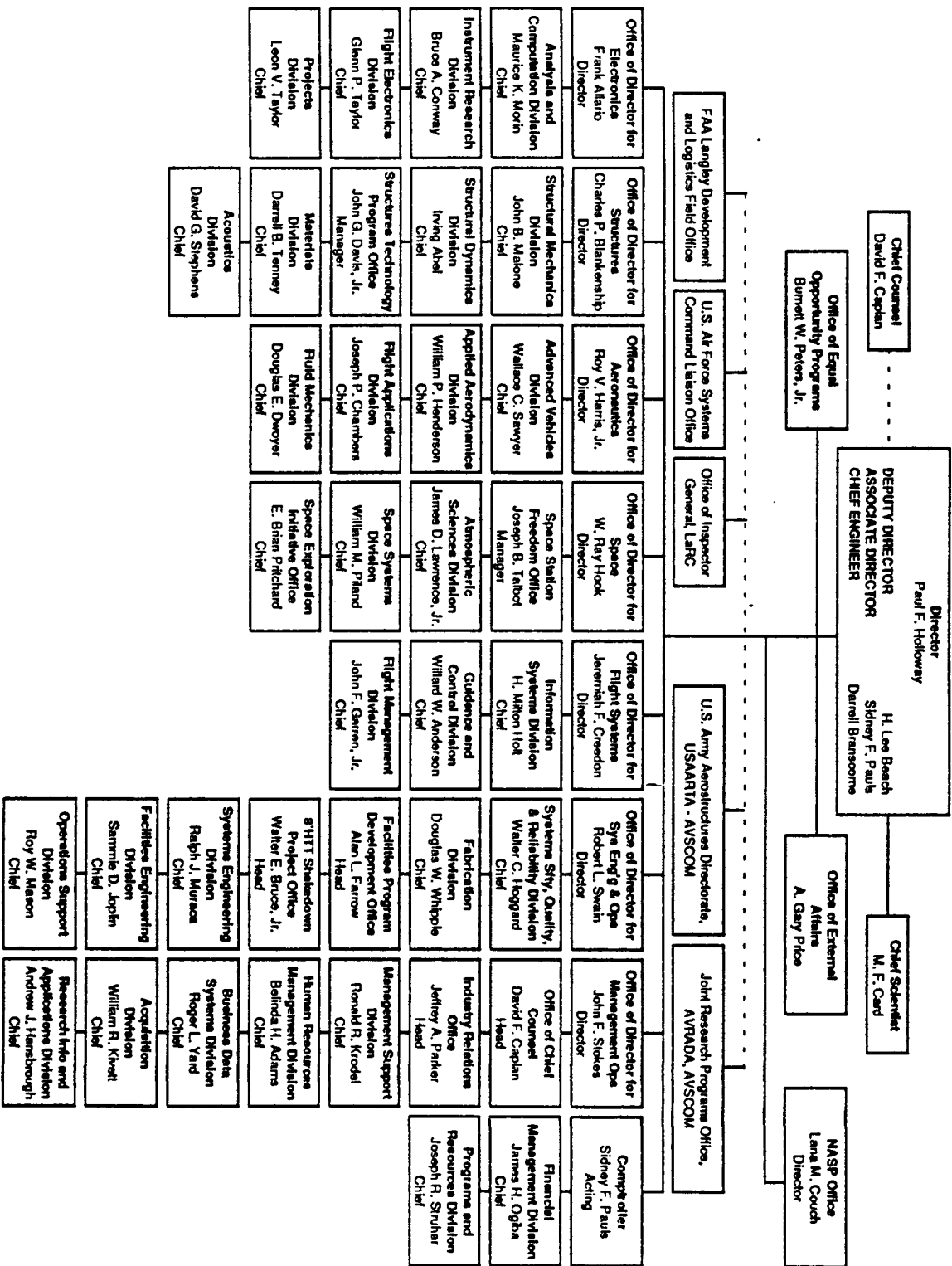
**Electronics**  
F. Allario

- Instrumentation
- Computer/Simulator Spt
- Remote Sensing Technol
- Project Management

**Comptroller**  
S. Pauls, Acting

- Resources Management
- Financial Management

# Langley Research Center Organization Chart



**Office of Director**  
*(Act)*

**Systems Engineering and Operations**  
Director: R. L. Swain  
Deputy Director: Dr. R. T. Wingate  
Chief Engineer: Dr. R. E. Snyder  
Asst. for Mgt. and Resources: J. E. Bostic

**8-Foot HTT Shakedown  
Project Office**  
Head: W. E. Bruce, Jr.

**Facilities Program  
Development Office**  
Head: A. L. Farrow  
Asst. Head: J. M. Inman

**Facilities**

**Engineering Division**  
Chief: S. D. Joplin  
Asst. Chief: Dr. G. W. Ivey  
Chief Engr: R. A. Bruce

- Construction
- Rehabilitation/Repair of Buildings
- Research Facilities
- Research Equipment
- High Pressure Systems
- Electrical Distribution
- Fluid, Thermal, and Dynamic Analysis
- Heating and Air Conditioning
- Construction Management

**Systems**

**Engineering Division**  
Chief: Dr. R. J. Muraca  
Asst. Chief: R. M. Boykin  
Chief Engr: K. D. Hedgepath

- Aeronautical Systems
- Spacecraft Systems
- Wind Tunnel Models
- Spacecraft Experiments
- Dynamic Structural Analysis
- Thermal Analysis
- Flight Project Management
- Environmental Testing
- Cost and Schedules

**Fabrication  
Division**

Chief: D. W. Whipple  
Asst. Chief: S. R. Donadio  
Tech. Asst: Dr. J. D. Buckley

- Advanced Manufacturing Technology
- Aeronautical Models
- Space Flight Hardware
- Research Equipment
- Nondestructive Testing
- Materials Evaluation
- Microelectronics
- Electronics Packaging
- Data Acquisition Instrumentation
- Quality Assurance

**Systems Safety, Quality,  
and Reliability Division**

Chief: W. C. Hoggard  
Asst. Chief: J. L. Vanderve  
Chief Engr: C. E. Cockrell

- Tunnel and Lab Operations Safety
- Spacecraft Safety and Mission Assurance
- Fire Protection
- Safety Engineering Analysis
- Environmental Health/Industrial Hygiene
- Environmental Compliance
- Construction Inspection
- Emergency Preparedness
- Quality Assurance

**Operations Support  
Division**

Chief: R. W. Mason  
Asst. Chief: R. P. Barr

- Wind Tunnels
- Landing Dynamics
- Laboratories:
  - Structures and Materials
  - Noise
  - Heating Plants
  - Compressor Stations
- Electrical and Mechanical Maintenance
- Maintenance and Repair of Buildings and Grounds



# **Procurement Synopsis**

## **Acquisition Overview**

### **Contract Type**

- Cost Plus Fixed Fee.
- Systems to be contracted for on a level-of-effort, task assignment basis.

### **Period of Performance**

- Period for issuance of task assignments is thirty-six (36) months from the effective date of the contract.
- Task assignments issued prior to the expiration of the 36 month period shall be completed provided that the Contractor will not be required to perform any work beyond 12 months after the period for issuing task assignments.

### **Level of Effort**

- Up to 80,000 direct productive labor hours.
- Cumulative minimum of 1,000 direct productive labor hours over the life of the contract.

## **Proposal Submission and Preparation**

### **Due Date**

- 4:00 p.m. local time September 21, 1992.

### **Depository Location**

- NASA Langley Research Center  
9A Langley Boulevard, Building 1195A, Room 103

### **Number of Copies**

- Original plus 10 - Technical.  
Original plus 10 - Business.
- Response to the representative task, although a part of the technical response, should be bound separately and an original plus 10 copies provided.

## **Proposal Submission and Preparation (Continued)**

- It is recommended that your technical proposal be no more than 90 pages inclusive of charts, graphs, tables, diagrams, photographs, and figures.

Note: It is recommended that the response to the representative task, which is part of the technical proposal, be limited to 40 pages.

- Assure that your proposal contains all necessary information, required documentation, and is complete in all respects. Evaluation will be based upon material presented and not on the basis of what is implied.
- Arrange proposal in sequence, format, and content consistent with arrangement of factors and associated subfactors set forth in Provision M-2 of the Solicitation to facilitate evaluation.
- Ensure that your cost proposal is consistent with your technical proposal. Discrepancies may be viewed as a lack of understanding.

## **Cost Proposal**

- Submit cost or pricing data with your proposal including an executed Standard Form 1411.
- For proposal preparation purposes, assume the following:
  - An average level of effort of 26,667 direct productive labor hours for the first and second years and 26,666 direct productive labor hours for the last year.
  - A contract start date of January 1, 1993.
  - Travel costs at an average of \$50,000 for each of the three years.
  - Material components and consumables at an average of \$800,000 for each of the three years.
- Detailed information for cost proposal submission is contained in Section L, Provision L-36, Proposal Preparation and Submission - Special Instructions, Subparagraph G.1, entitled Factor 2 - Cost.

## **Evaluation Factors**

### **Factor 1 - Mission Suitability**

- Subfactor 1 - Understanding the Requirement and Approach
- Subfactor 2 - Resources
- Subfactor 3 - Management

### **Factor 2 - Cost**

### **Factor 3 - Relevant Experience and Past Performance**

### **Factor 4 - Other Considerations**

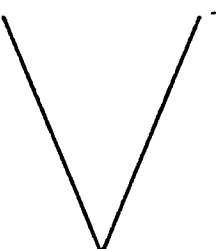
- Subfactor 1 - Financial Condition and Capability
- Subfactor 2 - Contract Terms and Conditions
- Subfactor 3 - Small Business and Small Disadvantaged Business Subcontracting Plan

## Relative Importance of Evaluation Factors

Factor 1 - Mission Suitability

Factor 2 - Cost

Factor 3 - Relevant Experience and  
Past Performance



Considered to be of  
Essentially Equal Importance

Factor 4 - Other Considerations:

Less Important than Each of  
the Other Three Factors

- Weights to be used for the scoring of the mission suitability subfactors are:
  - 50% - Understanding the Requirement and Approach
  - 35% - Resources
  - 15% - Management

## **Method of Evaluation**

- Proposals will be evaluated by a source evaluation committee.
- The Contracting Officer may elect the use of either the standard evaluation procedure or the streamlined procedure.
- Mission suitability will be scored. Cost, relevant experience, past performance, and other considerations will not be scored.
- The Source Selection Official, after consultation with the Source Evaluation Team, will select the offeror (or offerors) for final negotiation.



## **Evaluation Procedures**

### **Standard Procedure**

- Review for Unacceptable Proposals
- Identify Strengths and Weaknesses
- Initial Technical Scoring
- Initial Evaluation of Cost and Other Factors
- Develop Questions
- Establish a Competitive Range
- Conduct Written and/or Oral Discussions
- Best and Final Offers Received
- Final Technical Scoring
- Final Evaluation of Cost and Other Factors
- Prepare and Present Final Report to Selection Official

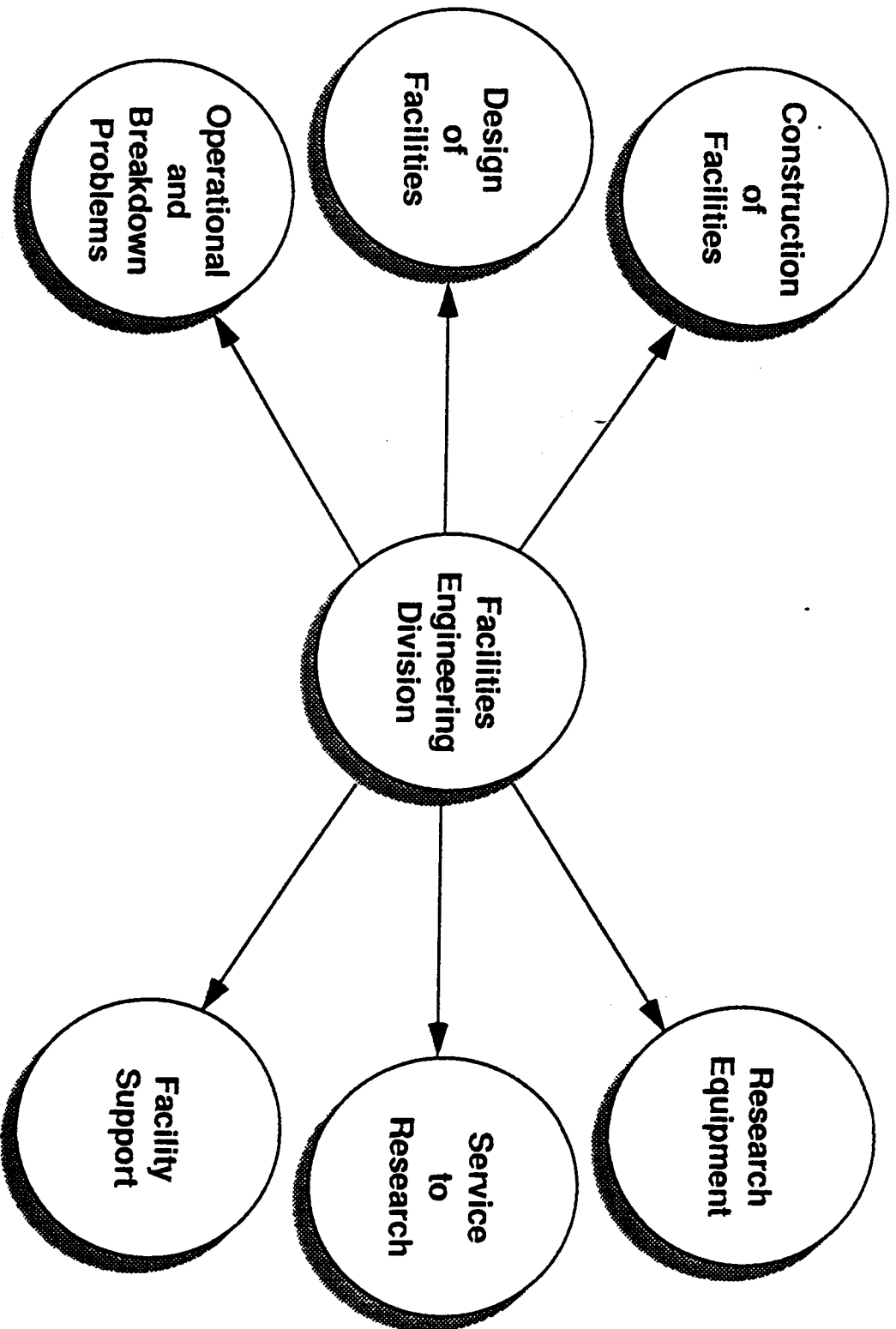
### **Streamlined Procedure**

- Review for Unacceptable Proposals
- Identify Strengths and Weaknesses
- Review Cost and Other Factors
- Develop Questions
- Conduct Written and/or Oral Discussions
- Best and Final Offers Received
- Technical Scoring
- Evaluate Cost and Other Factors
- Prepare and Present Final Report to Selection Official

# Division Overview

# Facilities Engineering Division

## What We Do



# Facilities Engineering Division Organizational Structure

**Facilities Engineering Division**  
**S. D. Joplin, Chief**  
**Dr. G. W. Ivey, Assistant Chief**  
**P. L. Howard, Secretary**

**Chief Engineer**  
**R. A. Bruce**  
**Facility Engineer**  
**C. B. Marushi**  
**Assistant, Program Integration**  
**R. W. Feldhousen**

**Specs and Contract**  
**Coordination Office**  
**H. L. Llys, Jr., Head**  
**M. L. Cooper, Secretary**

**Electronic Systems Branch**  
**K. L. Jacobs, Head**  
**B. A. Yeager, Secretary**

**Facility Systems Branch**  
**Dr. J. R. Rooker, Head**  
**G. F. Fagsdale, Secretary**

**Structural Design Branch**  
**Dr. C. E. Gray, Jr., Head**  
**A. L. Williams, Secretary**

**Facilities Engineering**  
**Support Branch**  
**Dr. G. W. Ivey, Acting Head**  
**Vacant, Secretary**

**Facilities Projects Branch**  
**S. D. Joplin, Acting Head**  
**G. N. Pardue, Secretary**

**Imaging and CADD**  
**Technology Group**  
**W. B. Ball, Group Leader**

**Mechanical Engineering**  
**Section**  
**T. J. Quenville, Head**

**Structural Engineering**  
**Section**  
**D. C. Beals, Head**

**Fracture Mechanics**  
**Engineering Section**  
**Dr. C. M. Hudson, Head**

**Construction Management**  
**Section**  
**R. W. Feldhousen, Acting Head**

**Facility Automated**  
**Controls Section**  
**C. E. Allen, Head**  
COOPR 104-5757-0419

**Process Systems Section**  
**G. C. Firih, Head**

**Civil Engineering and**  
**Architectural Section**  
**R. B. Rountree, Head**

**Engineering Support**  
**Office**  
**Dr. G. W. Ivey, Acting Head**

**Hypersonic Facilities**  
**Project Office**  
**J. A. Osborn, Project Manager**

**Facilities Utilities Section**  
**C. E. Home, Head**

**Engineering Lab Unit**  
**W. C. Kellher, Unit Leader**

**Advanced Control Test**  
**Facility Project Office**  
**J. F. Watson, Project Manager**  
**N. A. Holmberg, LGMSS Mgr**

**Engineering Measurements**  
**Office**  
**J. T. Taylor, Group Leader**

**High Pressure Air System**  
**Project Office**  
**G. A. Gates, Project Manager**

# **Technical Presentation**

## **Technical Overview**

- Contractor shall Provide FENGD Non Personal Services to:
  - Support Research Equipment/Systems Projects
    - Conceptual and Special Studies
    - Preliminary Engineering Reports
    - Final Designs
    - Construction/Installation
  - Specific Automation Development Areas
    - Design
    - Simulation
    - Electronic Fabrication
    - Software Generation/Implementation
    - System Validation
    - System Installation and Checkout

## **Contract Task Philosophy**

- Issue/Negotiate task in one or more of the six Automation Development areas with deliverables specified.
- Some facilities may require all six areas over contract period.
  - Some facilities may require none.
  - Some facilities may require some of the six for specific sub-systems.
- **BROAD RESEARCH FACILITY AUTOMATION SYSTEMS CAPABILITY.**

## **RFP Representative Task**

- Propose HOW you would accomplish this task (six items).
  - Resources, time frames, levels of effort, manhours, etc.
- **YOU SHOULD ASSUME THAT YOU HAVE BEEN AWARDED THE TASK CONTRACT AND THIS IS THE FIRST TASK RECEIVED.**
- You will not be able to visit site, talk to anyone, etc. relative to this task for proposal purposes.
- The written requirements, drawings, deliverables specified are representative of what is required/available at LaRC.



# **Response to Questions**

**RFP 1-64-5673.0419**  
**Questions and Answers**

- (1) Q: Is H.3 Procurement Authority (201-39.5202-3) (Oct 90 FIRMR) correctly included in Section H - Special Contract Requirements? If yes, please explain the significance of this requirement for the contractor.
- A: NASA Langley Research Center has been issued a specific delegation of procurement authority by the General Services Administration (GSA). Due to the nature of the requirements, it is subject to the Federal Information Resources Management Regulations and the Federal Acquisition Regulations. The appropriate clauses and provisions have been included in the solicitation. The clause itself is informational only in that it states the specific Case No. assigned to the procurement by GSA.
- (2) Q: (Re: Page 2, Section B.2, Para C) We question why procurement personnel hours are not an allowable direct contract charge in light of the essential contract support they provide in obtaining quotes; statusing procurements; and supporting receiving, shipping, and quality assurance functions?
- A: Clause B-2, Level-of-Effort, defines direct productive labor hours as those expended by PRIME personnel in the performance of the contract. These hours are charged against the level of effort hours of the contract. If the normal accounting practice is to charge procurement personnel as a direct contract charge, it is permissible; however, these hours are considered other direct labor hours and are not counted against the level of effort.
- (3) Q: (Re: Page 77, Section L.36, Para 4) Is a copy of the current list of validated products, maintained by the Computer Systems Laboratory, available to support proposal preparation?
- A: A current list of validated products can be obtained from:
- National Institute of Standards and Technology  
Computer Systems Laboratory  
Attn: FIPS Validations  
Building 225, Room A266  
Gaithersburg, MD 20899
- (301) 975-3274
- (4) Q: (Re: Page 79, Section L.36, Para E.5.b) The leading requirement presented asks for 12 on 16 point typesetting terminology. Word processing programs commonly allow for single, space-and-a-half, and double spacing parameters (or 12 on 12, 12 on 18, or 12 on 24, respectively). With this in mind, is space-and-a-half (or 12 on 18) spacing acceptable?
- A: Space-and-a-half (or 12 on 18) spacing is acceptable.

- (5) Q: Will a resource library be established for this procurement?
- A: No -- Please contact Charlotte T. Hardy per Section L.28 to obtain any reference documents (without source for order) that are indicated in this solicitation.
- (6) Q: (Re: Section K.9 through K.11) Does a contract pursuant to this RFP contain, or may it contain, small business, small/disadvantaged, and/or woman-owned business set asides?
- A: The procurement is being solicited on a full and open competition basis. No portion has been set aside for small business, small/disadvantaged, and/or woman-owned business.
- (7) Q: (Re: Part IV, Section K) Please allow time to discuss interpretation of forms.
- A: If an offeror has difficulty in executing the provisions of Section K entitled "Representations, Certifications, and Other Statements of Offerors," he or she may contact the Government Representative as shown in Provision L.28 of the solicitation documents for assistance.
- (8) Q: (Re: Section M.2) Do experience and past performance data need to be restricted to that performed for the respondent, rather than for another company or entity by a staff member proposed?
- A: Factor 3 - Relevant Experience and Past Performance includes the evaluation of overall corporate or offeror experiences and past performance, including major subcontractors, but not the experience and performance of individuals who are proposed to be involved in the required work.
- (9) Q: The representative task specifies a maximum construction cost in Attachment 5, Scope and Description, Section 8.1, of \$950,000. Does this cost include development costs?
- Q: What costs are included in the construction cost estimate? (Hardware, Installation, Software, etc.)
- A: The \$950,000 construction cost estimate includes **ALL** costs associated with automation system implementation, installation, and acceptance. This cost does not include any design cost. (The offeror shall submit their representative task estimated design cost on Figure 1 Solicitation, Page 99.) Please note that the offeror's response to Section L.36, F1a(2) shall be based on a maximum construction cost of \$950,000.
- (10) Q: Part 3 of the representative task detailed requirements list, in the last paragraph, the development of a simulation for the model positioning system in addition to a simulation of the flow control system. However, no specific requirements to upgrade, replace, or otherwise modify the model positioning system are given. Is a simulation of the model positioning system required?
- A: No. The solicitation will be amended.

- (11) Q: Are any of the facility drawings available on AutoCAD Version 11, or should the contractor assume that all drawings which must be modified will have to be redrawn from scratch?
- A: Some Facilities have drawings which are currently on AutoCAD. There are no AutoCAD drawings for the facility associated with the representative task.
- (12) Q: Explain in detail the requirement for "fabrication of printed circuit boards" listed in Section C.1, Paragraph III.C.
- A: This includes electrical circuit design and layout of circuit boards, fabrication of bread-board prototypes using wire-wraps, verification of design, and implementation of industrial quality printed wiring board final products. Examples might include one-of-a-kind expansion modules, extended precision analog input boards, and high speed digital I/O boards.
- (13) Q: (Re: Sec. C.III.A, Page 4, Passim) Will NASA provide symbol libraries for AutoCAD drawings necessitated under a contract pursuant to this RFP?
- A: No. NASA Langley Research Center is in the process of standardizing on symbols sets for various disciplines.
- (14) Q: (Page 77, Section L.36.A.4) The Government requests that Certification of Compliance with all implementation of FIPS be made in the bidder's response. The request for certification seems to be premature since no certified software components are required until task orders have been issued and actual deliverables are made to the Government. Please clarify how FIPS certification is intended to be used for a response to the solicitation.
- A: The successful offeror shall submit the Certification of Compliance after receipt of the first software oriented task. The solicitation will be amended.
- (15) Q: Do you anticipate that one or more task orders will require full-time person on-site for all or most of the 3 year period? Also, off-site nearby?
- A: Since the solicitation does not have any Contractor geographic location requirement, we do not anticipate a requirement for full-time persons on-site or nearby off-site for any significant period of time.
- (16) Q: What relationship if any exists between work orders issued for separate facilities with respect to commonality in hardware and software?
- A: Commonality of hardware and software will evolve depending upon tasks issued and specific facilities upgraded during the contract period.
- (17) Q: Can you supply the system safety hazard analysis for the representative task hardware/software?
- A: A Safety Analysis Report (SAR) exists for Building 1221C (the location of the representative task) as well as all major research facilities at LaRC.

(17) A: (Continued)

However, these SARs reflect the current state and risk assessment of a facility, and do not reflect or attempt to assess any proposed or suggested modifications. The proposed modifications get reviewed as a part of the normal design review process of an actual task. It is in concert with these reviews that potential changes would be assessed for safety impact.

In view of the above, the system safety analysis for the representative task does not exist.

(18) Q: Do you expect commonality in the User-System Interface across facilities developed under this contract?

A: Yes, to the extent that the facilities have common functions.

(19) Q: Who will be the source selection official?

A: NASA Langley Research Center's Procurement Officer, Mr. W. R. Kivett will be the Source Selection Officer.

(20) Q: Is there a preferred bus architecture widely in use at this time?

A: No preference, numerous bus architectures are currently in use.

(21) Q: For the representative task, is providing the electrical and mechanical labor to install valves, piping, etc., included in the project scope?

A: All labor required for construction is included in project scope and construction cost.

(22) Q: If a contractor assists in preparing a task (technical scope, estimated man-hours, cost, etc.) and the task is never authorized, what will the contractor's effort be charged to?

A: It should be charged as a direct cost to the contract. It may be distributed to include both direct and indirect personnel. These hours should not be charged to the contract level of effort hours.

(23) Q: Please clarify the comment earlier about non-personnel services?

A: The technical overview view graph as presented in the Pre-proposed conference stated: "Contractor shall provide FENG D Non-Personnel Services to: . . . . ."  
This was a general statement only and not to be interpreted to mean that the contract will be subject to the Service Contract Act. The contract will be subject to the Walsh-Healy Public Contracts Act and subject to the requirements of Section I Clause No. 52.222-20 entitled "Walsh-Healy Public Contracts Act (APR 1984).

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE \_\_\_\_\_ PAGE OF PAGES  
 1 2

2. AMENDMENT/MODIFICATION NO. 3	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-0001		7. ADMINISTERED BY (If other than Item 6)	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  TO ALL CONCERNED	(Y)	9A. AMENDMENT OF SOLICITATION NO. 1-64-5673.0419
	X	9B. DATED (SEE ITEM 11) 8/7/92
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.  
 Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

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

(W)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

Subject: NASA Solicitation No. 1-64-5673.0419; Engineering Design, Development, Installation and Testing of Facility Automation Systems

A. Direct productive labor hours as defined in Clause B.2, "Level-of-Effort," Paragraph C are defined as those hours expended by prime personnel..., which does not include subcontracts and consultants. Therefore, the following changes are made to

(CONTINUED ON ATTACHED PAGE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) RICHARD C. SHISLER
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA BY	16C. DATE SIGNED 8-27-92

Subparagraphs c and e of Provisions L.36, "Proposal Preparation and Submission - Special Instructions," Paragraph G.1 as follows:

"c. Both you and your interdivision/subcontracts/consultants, if any, should propose direct/indirect labor in a manner that is consistent with your established accounting practices."

e. For any subcontracting/consulting effort proposed, provide a detailed cost breakdown, the degree of competition and the extent of evaluation, and the type of contractual arrangement. Insure the applicable SF 1411 forms and the written statements of intent from your subcontractors/consultants (if proposed) are included. You must explain any adjustments that you make to the subcontractor's proposed amounts."

B. Attachment 6 - Summary of Program Cost (Form A) is deleted and substituted with a corrected Form A - Program Cost - Level-of-Effort/Task Assignment Contract which is attached hereto.

Attachment

**FORM A – PROGRAM COST  
LEVEL OF EFFORT/TASK ASSIGNMENT CONTRACT**

RFP 1-64-5673.0419  
COMPANY NAME: \_\_\_\_\_

CONTRACT YEAR 1 – 3

DESCRIPTION	TOTAL	YEAR 1	YEAR 2	YEAR 3
Direct Productive LOE Hours				
Prime				
Engineering				
Technician				
Other				
Interdivision				
<b>TOTAL DIRECT PRODUCTIVE LOE HOURS</b>	<b>80,000</b>	<b>26,667</b>	<b>26,667</b>	<b>26,666</b>
Prime Costs				
Direct Productive Labor				
Engineering				
Technician				
Other				
Interdivision				
<b>TOTAL DIRECT LABOR COSTS</b>				
OVERHEAD (notes 1,2)				
SUBCONTRACT				
CONSULTANT				
MATERIAL	2,400,000	800,000	800,000	800,000
Other Direct Costs (ODC)				
Travel	150,000	50,000	50,000	50,000
Computer Usage (note 3)				
Miscellaneous ODC				
<b>TOTAL ODC</b>				
<b>SUBTOTAL</b>				
G&A				
FCCOM				
<b>TOTAL ESTIMATED COST</b>				
FIXED FEE				
<b>TOTAL COST PLUS FIXED FEE (CPFF)</b>				

COST PER DIRECT PRODUCTIVE LOE HR  
FEE PER DIRECT PRODUCTIVE LOE HR  
CPFF PER DIRECT PRODUCTIVE LOE HR

\* Provide details of each cost element by year on a separate sheet.

**NOTES:**

- (1) Include fringe benefits in Overhead.
- (2) If this is a composite rate for more than one overhead category, provide a list of the various rates included.
- (3) Explain if indirect charged.



AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT

1. CONTRACT ID CODE PAGE OF PAGES

1 2

2. AMENDMENT/MODIFICATION NO. 4	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-0001	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  TO ALL CONCERNED	(Y)	9A. AMENDMENT OF SOLICITATION NO. 1-64-5673.0419
	X	9B. DATED (SEE ITEM 11) 8/7/92
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

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	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

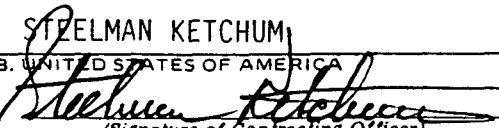
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Subject: Solicitation No. 1-64-5673.0419; Engineering Design, Development, Installation and Testing of Facility Automation Systems

The purpose of this amendment is to change the definition of direct productive labor hours, make editorial changes, and extend the time for receipt of offers. Therefore, the solicitation is changed as follows:

(CONTINUED ON ATTACHED PAGE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STRELMAN KETCHUM
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA BY:  (Signature of Contracting Officer)	16C. DATE SIGNED 9-3-92

A. Amendment No. 3 is cancelled in its entirety.

B. Section B - Supplies or Services and Price/Costs, Clause B.2 Level of Effort, Paragraph C is changed by deleting the first sentence and substituting the following two sentences:

"C. Direct productive labor hours are defined as those hours expended by personnel in the performance of the effort set forth in Section C - Description/ Specifications/Work Statement. Direct productive labor hours are also defined as those hours associated with subcontracting/consultant arrangements and teaming agreements when those hours are expended under any contract arrangements other than a firm-fixed-price arrangement."

C. Exhibit A - Contract Documentation Requirements is changed by deleting the elements listed as "g. Subcontract and h. Consultants" under subparagraph I.B.3.

D. Section L - Instructions, Conditions, and Notices to Offerors, Provision L.36, Paragraph G.1, subparagraph b is changed by deleting the first sentence and substituting the following:

"Your pricing proposal must detail all hours over the 36 month task assignment issuance period."

E. Attachment 6 - Summary of Program Cost (Form A) is deleted and substituted with the attached revised Form A - Program Cost - Level-of-Effort/Task Assignment Contract.

F. On Page 2 of Amendment No. 2, in the second paragraph of subparagraph II.A place a period after "ACSL."

G. The hour and date specified for receipt of offers is extended from 4:00 PM local time, September 21, 1992 to 4:00 PM local time, October 5, 1992.

Attachment

**FORM A – PROGRAM COST  
LEVEL OF EFFORT/TASK ASSIGNMENT CONTRACT**

RFP 1-64-5673.0419

CONTRACT YEAR 1 – 3

COMPANY NAME: \_\_\_\_\_

DESCRIPTION *	TOTAL	YEAR 1	YEAR 2	YEAR 3
Direct Productive LOE Hours				
Prime				
Engineering				
Technician				
Other				
Interdivision				
Subcontract				
Consultant				
<b>TOTAL DIRECT PRODUCTIVE LOE HOURS</b>	<b>80,000</b>	<b>26,667</b>	<b>26,667</b>	<b>26,666</b>
Prime Costs				
Direct Productive Labor				
Engineering				
Technician				
Other				
Interdivision				
Subcontract				
Consultant				
<b>TOTAL DIRECT LABOR COSTS</b>				
<b>OTHER DIRECT LABOR (NOTE 1)</b> (Other than LOE Hours)				
<b>OVERHEAD (Notes 2,3)</b>				
<b>MATERIAL</b>	<b>2,400,000</b>	<b>800,000</b>	<b>800,000</b>	<b>800,000</b>
Other Direct Costs (ODC)				
Travel	150,000	50,000	50,000	50,000
Computer Usage (Note 4)				
Miscellaneous ODC				
<b>TOTAL ODC</b>				
<b>SUBTOTAL</b>				
<b>G&amp;A</b>				
<b>FCCOM</b>				
<b>TOTAL ESTIMATED COST</b>				
<b>FIXED FEE</b>				
<b>TOTAL COST PLUS FIXED FEE (CPFF)</b>				
<b>COST PER DIRECT PRODUCTIVE LOE HR</b>				
<b>FEE PER DIRECT PRODUCTIVE LOE HR</b>				
<b>CPFF PER DIRECT PRODUCTIVE LOE HR</b>				

\* Provide details of each cost element by year on a separate sheet.

**NOTES:**

- (1) Provide details on a separate sheet
- (2) Include fringe benefits in Overhead.
- (3) If this is a composite rate for more than one overhead category, provide a list of the various rates included.
- (4) Explain if indirect charged.