

**INFORMATION TO OFFERORS OR QUOTERS  
SECTION A - COVER SHEET**

1. SOLICITATION NUMBER

2. (X one)

N00173-98-R-RS04

a. SEALED BID

b. NEGOTIATED (RFP)

c. NEGOTIATED (RFQ)

**INSTRUCTIONS**

NOTE THE AFFIRMATIVE ACTION REQUIREMENT OF THE EQUAL OPPORTUNITY CLAUSE WHICH MAY APPLY TO THE CONTRACT RESULTING FROM THIS SOLICITATION.

You are cautioned to note the "Certification of Non-Segregated Facilities" in the solicitation. Failure to agree to the certification will render your reply nonresponsive to the terms of solicitations involving awards of contracts exceeding \$25,000 which are not exempt from the provisions of the Equal Opportunity clause.

"Fill-ins" are provided on the face and reverse of Standard Form 18 and Parts I and IV of Standard Form 33, or other solicitation documents and Sections of Table of Contents in this solicitation and should be examined for applicability.

See the provision of this solicitation entitled either "Late Bids, Modifications of Bids or Withdrawal of Bids" or "Late Proposals, Modifications of Proposals and Withdrawals of Proposals."

When submitting your reply, the envelope used must be plainly marked with the Solicitation Number, as shown above and the date and local time set forth for bid opening or receipt of proposals in the solicitation document.

If NO RESPONSE is to be submitted, detach this sheet from the solicitation, complete the information requested on reverse, fold, affix postage, and mail. NO ENVELOPE IS NECESSARY.

Replies must set forth full, accurate, and complete information as required by this solicitation (including attachments). The penalty for making false statements is prescribed in 18 U.S.C. 1001.

3. ISSUING OFFICE (Complete mailing address, including ZIP Code)

PROCURING CONTRACT OFFICE (CODE 3235.RS)  
NAVAL RESEARCH LABORATORY  
DEPARTMENT OF THE NAVY  
STENNIS SPACE CENTER, MS 39529-5004

4. ITEMS TO BE PURCHASED (Brief description)

SYNTHETIC SCENE GENERATION MODEL PHASE FOUR RESEARCH AND DEVELOPMENT

5. PROCUREMENT INFORMATION (X and complete as applicable)

a. THIS PROCUREMENT IS UNRESTRICTED

b. THIS PROCUREMENT IS A 100 % SET-ASIDE FOR ONE OF THE FOLLOWING (X one). (See Section I of the Table of Contents in this solicitation for details of the set-aside.)

(1) Small Business

(2) Labor Surplus Area Concerns

(3) Combined Small Business/Labor Area Concerns

6. ADDITIONAL INFORMATION

THE NAVAL RESEARCH LABORATORY CONTRACTING DIVISION ISSUES SOLICITATIONS AND AMENDMENTS TO SOLICITATIONS ELECTRONICALLY VIA THE INTERNET AT THE FOLLOWING WEBSITE:

HTTP://HERON.NRL.NAVY.MIL/CONTRACTS/HOME.HTM.

ANY AMENDMENTS TO THIS SOLICITATION WILL BE POSTED AT THE WEBSITE REFERENCED ABOVE. AMENDMENTS WILL NOT BE DISTRIBUTED BY ANY OTHER MEANS. IT IS THE RESPONSIBILITY OF POTENTIAL OFFERORS TO PERIODICALLY REVIEW THE WEBSITE FOR AMENDMENTS TO THIS SOLICITATION.

7. POINT OF CONTACT FOR INFORMATION

a. NAME (Last, First, Middle Initial)

Sewell, Richard D.

b. ADDRESS (Include Zip Code)

PROCURING CONTRACT OFFICE (CODE 3235)  
NAVAL RESEARCH LABORATORY  
STENNIS SPACE CENTER, MS 39529-5004

c. TELEPHONE NUMBER (Include Area Code and Extension) (NO

COLLECT CALLS) (228) 688-5784

<b>8. REASONS FOR NO RESPONSE (X all that apply)</b>			
<input type="checkbox"/>	<b>a. CANNOT COMPLY WITH SPECIFICATIONS</b>	<input type="checkbox"/>	<b>b. CANNOT MEET DELIVERY REQUIREMENT</b>
<input type="checkbox"/>	<b>c. UNABLE TO IDENTIFY THE ITEM(S)</b>	<input type="checkbox"/>	<b>d. DO NOT REGULARLY MANUFACTURE OR SELL THE TYPE OF ITEMS INVOLVED</b>
<input type="checkbox"/>	<b>e. OTHER (Specify)</b>		
<b>9. MAILING LIST INFORMATION (X one)</b>			
<input type="checkbox"/>	<b>YES</b>	<input type="checkbox"/>	<b>NO</b>
<b>WE DESIRE TO BE RETAINED ON THE MAILING LIST FOR FUTURE PROCUREMENT OF THE TYPE OF TIME(S) INVOLVED.</b>			
<b>10. RESPONDING FIRM</b>			
<b>a. COMPANY NAME</b>		<b>b. ADDRESS (Include Zip Code)</b>	
<b>c. ACTION OFFICER</b>			
<b>(1) Typed or Printed Name (Last, First, Middle Initial)</b>	<b>(2) Title</b>	<b>(3) Signature</b>	<b>(4) Date Signed (YYMMDD)</b>

DD FORM 1707 REVERSE, MAR 90

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**FROM** Contracting Officer  
Code 3235.RS  
Naval Reseach Lab-SSC  
Stennis Space Ctr, MS 39529

**AFFIX  
STAMP  
HERE**

<b>SOLICITATION NUMBER</b>	
N00173-98-R-RS04	
<b>DATE (YYMMDD)</b>	<b>LOCAL TIME</b>
98 DEC 07	3:30PM

**TO**



**PART I - THE SCHEDULE**

**SECTION B**

**SUPPLIES OR SERVICES AND PRICES/COSTS**

**B-1 SUPPLIES/SERVICES AND COSTS**

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0001	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0002	Data in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP
TOTAL ESTIMATED COST PLUS FIXED FEE		\$	\$	\$

**OPTION ONE (YEAR TWO)**

0003	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0004	Data in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP

**OPTION TWO (YEAR THREE)**

0005	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0006	Data in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP

**OPTION THREE (YEAR FOUR)**

0007	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0008	Data in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP

**OPTION FOUR (YEAR FIVE)**

0009	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0010	Data in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP

TOTAL ESTIMATED COST PLUS FIXED FEE: \$ \$ \$

\* Not Separately Priced

**SECTION C**

**DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**

**C-1 STATEMENT OF WORK -**

The Contractor shall furnish the necessary personnel and facilities to perform the required efforts in accordance with (a) Attachment 1.1-The Statement of Work; (b) Attachment 1.2-Workforce Requirements; (c) Attachment 1.3-Contract Data Requirements List (DD Form 1423) with enclosures; (d) the Contractor's technical proposal which may be incorporated by reference in any resulting contract, and (e) any and all other Attachments or Exhibits cited in Section J, which are incorporated by reference into Section C.

**C-2 REQUIREMENTS FOR ON-SITE CONTRACTORS**

For those portions of the work under this contract performed at any NRL site, the contractor shall comply with the Requirements for On-Site Contractors dated 02 February 1998 which are hereby incorporated by reference. The full text is available at <http://heron.nrl.navy.mil/contracts/home.htm>.

**SECTION D**

**PACKAGING AND MARKING**

**D-1** Preservation, packaging, packing and marking of all deliverable contract line items must conform to normal commercial packing standards to assure safe delivery at destination.



**SECTION F  
DELIVERIES OR PERFORMANCE**

**F-1 DELIVERIES OR PERFORMANCE CLAUSES INCORPORATED BY REFERENCE:**

**FAR CLAUSE    TITLE**

52.242-15    -    Stop-Work Order (AUG 1989) - Alternate I (APR 1984)  
52.247-34    -    F.O.B. Destination (NOV 1991)

**F-2 PERIOD AND PLACE OF PERFORMANCE**

(a) The term of this contract is from the date of contract award through twelve (12) months. The period of performance for each option, if exercised, shall be for a period of twelve (12) months.

(b) The principal place of performance of this contract shall be the contractor's facilities and the Government's facilities at NRL-DC.

(c) All deliverables required under this Contract shall be shipped FOB Destination, consigned to:

Contracting Officer's Representative: \_\_\_\_\_\*\*  
Naval Research Laboratory  
Contract Number: \_\_\_\_\_\*\*  
Building Number: \_\_\_\_\_ Code No.: \_\_\_\_\_  
4555 Overlook Ave., SW  
Washington, DC 20375-5326

\*\* = (To be provided at time of award)

**F.4 ENGINEERING CHANGES AND TECHNOLOGY REFRESHMENT CHANGES**

a. After Contract/Delivery Order award, the Government may solicit, and the Contractor is encouraged to propose independently, engineering changes and technology refreshment changes to the requirements of Contract/Delivery Order. These changes may be proposed to save money, to improve performance, to save energy, or to improve potential use of required deliverables. If the proposed changes are acceptable to both parties, the Contractor shall submit a proposal to the Government for evaluation. Those proposed engineering or technology refreshment changes that are acceptable to the Government will be processed as modifications to the Contract/Delivery Order.

b. This Contract/Deliver Order engineering change/technology refreshment change applies only to those proposed changes identified by the Contractor as a proposal submitted pursuant to the provisions of this Section. As a minimum, the following information shall be submitted by the Contractor with each engineering change and technology refreshment proposal:

- (1) A description of the difference between the existing Contract/Delivery Order requirements and the proposed change, and the comparative advantages and disadvantages of each;
- (2) Itemized requirements of the Contract/Delivery Order which must be changed if the proposal is adopted, and the proposed revision to the Contract/Delivery Order for each such change;
- (3) An estimate of the changes in performance and cost, if any, that will result from adoption of the proposal;

(4) An evaluation of the effects the proposed change would have on collateral costs to the Government, such as Government-furnished property costs, costs of related items, and costs of maintenance and operation; and

(5) A statement of the time by which the change order adopting the proposal must be issued so as to obtain the maximum benefits of the changes during the remainder of this contract. Also, any effect on the Contract/Delivery Order completion time or delivery schedule shall be identified.

c. Engineering change or technology refreshment proposals submitted to the Contracting Officer will be processed expeditiously. The Government will not be liable for proposal preparation costs or any delay in acting upon any proposal submitted pursuant to this provision. The Contractor has the right to withdraw, in whole or in part, any engineering or technology refreshment change proposal not accepted by the Government within the period specified in the change proposal. The decision of the Contracting Officer as to the acceptance of any such proposal under this Contract/Delivery Order shall be final.

d. The Contracting Officer may accept any engineering or technology change proposal submitted pursuant to this clause by giving the Contractor written notice thereof. This written notice may be given by issuance of a modification to this Contract/Delivery Order. Unless and until a modification is executed to incorporate an engineering or technology refreshment change proposal under this Contract/Delivery Order, the Contractor shall remain obligated to perform in accordance with the terms of the existing contract.

e. If an engineering or technology refreshment change proposal submitted pursuant to this clause is accepted and applied to this Contract/Delivery Order, an equitable adjustment in the Contract/Delivery Order cost/price and in any other affected provisions of this Contract/Delivery Order may be made in accordance with this clause and other applicable clauses of this Contract. When the cost of performance of this Contract/Delivery Order is increased or decreased as a result of the change, the equitable adjustment increasing or decreasing the Contract/Delivery Order cost shall be in accordance with the "Changes" clause rather than under this clause; but, the resulting Contract/Delivery Order modification shall state that it is made pursuant to this clause.

f. The Contractor is requested to identify specifically any information contained in the engineering change or technology refreshment proposal which the Contractor considers confidential and/or proprietary and which the Contractor prefers not be disclosed to the public.

**SECTION G****CONTRACT ADMINISTRATION DATA****G-1 PROCURING OFFICE REPRESENTATIVE**

In order to expedite administration of this contract, the Administrative Contracting Officer (ACO) will direct inquiries to the appropriate office listed below. Please do not direct routine inquiries to the person listed in Item 20A on Standard Form 26.

Contract Matters - Richard D. Sewell, Code 3235, (228) 688-5784, DSN 485-5784 or Telecopier (228)688-6055

Security Matters - Mr. Charles Rogers, Code 1221, (202) 767-2240, DSN 297-2240

Safety Matters - Mr. Kirk J. King, Code 1240, (202) 767-2232, DSN 297 2232

Patent Matters - Mr. Thomas McDonnell, Code 3008.2, (202) 767-3427, DSN 297-3427

Release of Data - Mr. Richard L. Thompson, Code 1230 (202) 767-2541, DSN 297-2541

The ACO will forward invention disclosures and reports directly to the Associate Counsel for Patents, Code 3008.2, Naval Research Laboratory, Washington DC 20375-5320. The Associate Counsel for Patents will return the reports along with a recommendation to the Administrative Contracting Officer. The Associate Counsel for Patents will represent the Contracting Officer with regard to invention reporting matters arising under this contract.

**G-2 CONTRACTING OFFICER'S REPRESENTATIVE (COR) - FUNCTIONS AND LIMITATIONS**

\* \_\_\_\_\_ is hereby designated the cognizant COR who will represent the Contracting Officer in the administration of technical details within the scope of this contract and inspection and acceptance. The COR is not otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Government. The COR does not have the authority to alter the Contractor's obligations or change the specifications in the contract. If, as a result of technical discussions, it is desirable to alter contract obligations or statements of work, a modification must be issued in writing and signed by the Contracting Officer. The COR is responsible for reviewing the bills and charges submitted by the Contractor and informing the ACO of areas where exceptions are to be taken. ( \* To be filled in at time of award)

**G-3 TECHNICAL DIRECTION MEMORANDUM (TDM)**

(a) For the purposes of this clause, technical direction includes the following:

- (1) Direction to the Contractor which shifts work emphasis between work areas or tasks,

requires pursuit of certain lines of inquiry, fills in details or otherwise describes work which will accomplish the objectives described in the statement of work;

- (2) Guidelines to the Contractor which assist in interpretation of drawings, specifications or technical portions of work description.

(b) Technical instructions must be within the scope of work stated in the contract. Technical instructions may not be used to:

- (1) Assign additional work under the contract;
- (2) Direct a change as defined in the contract clause entitled "Changes";
- (3) Increase or decrease the estimated contract cost, the fixed fee, or the time required for contract performance; or
- (4) Change any of the terms, conditions or specifications of the contract

(c) The TDM shall be written by the Contracting Officer's Representative (COR), with the original given to the Contractor and a copy retained in the CORs file. Technical direction may be issued orally only in emergency situations. If technical direction is issued orally, a TDM must follow within two (2) working days from the date of the oral direction. Amendments, corrections, or changes to TDMs shall also be in written format and shall include all the information set forth in e. Below.

(d) A TDM shall be considered issued when the Government deposits it in the mail, or if transmitted by other means, when it is physically delivered to the contractor.

(e) TDMs shall include, but not be limited to, the following information:

- (1) Date of TDM,
- (2) Contract Number,
- (3) Reference to the relevant portion or item in the Statement of Work,
- (4) The specific technical direction or clarification, and
- (5) The signature of the COR.

(f) CORs shall retain all files containing TDMs for a period of two (2) years after the final contract completion date.

(g) The only individual authorized in any way to amend or modify any of the terms of this contract shall be the Contracting Officer. When, in the opinion of the Contractor, any technical direction calls for effort outside the scope of the contract or inconsistent with this special provision, the Contractor shall notify the Contracting Officer in writing within ten (10) working days after its receipt.

#### **G.4 NAPS 5252.232-9001 - SUBMISSION OF INVOICES (COST-REIMBURSEMENT, TIME-AND-MATERIALS, LABOR-HOUR, OR FIXED PRICE INCENTIVE (JUL 1992)**

a) "Invoice" as used in this clause includes contractor requests for interim payments using public vouchers (SF 1034) but does not include contractor requests for progress payments under fixed price incentive contracts.

(b) The Contractor shall submit invoices and any necessary supporting documentation, in an original and 4 copies, to the contract auditor at the following address

(To be provided at time of award)

unless delivery orders are applicable, in which case invoices will be segregated by individual order and submitted to the address specified in the order. In addition, an information copy shall be submitted to [See Section G for designated COR]. Following verification, the contract auditor will forward the invoice to the designated payment office for payment in the amount determined to be



should be paid from available ACRNs in the following order:

- (a) ACRNs cited on the contractor's invoice.
- (b) On a proportional basis from any ACRNs assigned to funds which will cancel at the end of the current fiscal year.
- (c) The ACRN assigned to the following line of accounting:  
97X4930.NH4A 000 77777 0 000173 2F 000000 N00173Z45000.
- (d) If funds appropriated in more than one fiscal year are allotted to the contract, the ACRN assigned to the oldest allotment of funds.
- (e) On a proportional basis from all ACRNs assigned to allotments of funds appropriated in a single fiscal year.

**G.6 (RESERVED)**

**G.7 ACCOUNTING AND APPROPRIATION DATA**

(To be provided at time of award)

**SECTION H****SPECIAL CONTRACT REQUIREMENTS****H-1 TYPE OF CONTRACT**

(To be filled in at time of award)

**H-2 ONR 5252.237-9705 - KEY PERSONNEL (DEC 88)**

(a) The Contractor agrees to assign to the contract tasks those persons whose resumes were submitted with its proposal and who are necessary to fulfill the requirements of the contract as "key personnel". No substitutions may be made except in accordance with this clause.

(b) The Contractor understands that during the first ninety (90) days of the contract performance period, no personnel substitutions will be permitted unless these substitutions are unavoidable because of the incumbent's sudden illness, death or termination of employment. In any of these events, the Contractor shall promptly notify the Contracting Officer and provide the information described in paragraph (c) below. After the initial ninety (90) day period the Contractor must submit to the Contracting Officer all proposed substitutions, in writing, at least fifteen (15) days in advance (thirty (30) days if security clearance must be obtained) of any proposed substitution and provide the information required by paragraph (c) below.

(c) Any request for substitution must include a detailed explanation of the circumstances necessitating the proposed substitution, a resume for the proposed substitute, and any other information requested by the Contracting Officer. Any proposed substitute must have qualifications equal to or superior to the qualifications of the incumbent. The Contracting Officer or his/her authorized representative will evaluate such requests and promptly notify the Contractor of his/her approval or disapproval thereof.

(d) In the event that any of the identified key personnel cease to perform under the contract and the substitute is disapproved, the contract may be immediately terminated in accordance with the Termination clause of the contract.

The following are identified as key personnel: \* (\*To be filled in at time of award)

**H-3 CONTRACTOR'S PROGRAM MANAGER**

(a) The Contractor's Program Manager is \_\_\_\_\_\* and is the contractor's authorized supervisor for technical and administrative performance of all work hereunder. The program manager shall provide the single point of contact between the contractor and the Government's Contracting Officer's representative (COR). All administrative support of technical personnel required to fulfill the work stated in the contract shall be the responsibility of the contractor.

(b) The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the Government's COR may issue within the terms and conditions of the contract.

**H-4 ONR 5252.216-9706 - LEVEL OF EFFORT (DEC 88)**

(a) The Contractor agrees to provide the total level of effort specified in the next sentence in performance of the work described in this contract. The maximum total level of effort for performance of this contract shall be 45,600 total hours of direct labor for the base year and 45,600 total hours of direct labor for each of the options years. The total shall include subcontractor direct labor for those subcontractors specifically identified in the Contractor's proposal as having hours included in the proposed level of effort. A breakdown of labor categories and hours is set forth in paragraph (k) below.

(b) The level of effort for this contract shall be expended at an average rate of 3,800 hours per month. It is understood and agreed that the rate of hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total hours of effort prior to the expiration of the term of the contract. (c) The Contractor is required to notify the Contracting Officer when any of the following situations occur, or are anticipated to occur: If during any three consecutive months the monthly average is exceeded by 25% or, if at any time it is forecast that during the last three months of the contract less than 50% of the monthly average will be used during any given month; or, when 85% of the total level of effort has been expended.

(d) If, during the term of the contract, the Contractor finds it necessary to accelerate the expenditure of direct labor to such an extent that the total hours of effort specified would be used prior to the expiration of the term, the Contractor shall notify the Contracting Officer in writing, setting forth the acceleration required, the probable benefits which would result, and an offer to undertake the acceleration at no increase in the estimated cost or fixed fee together with an offer setting forth a proposed level of effort, cost breakdown, and proposed fixed fee for continuation of the work until expiration of the term hereof. The offer shall provide that the work proposed will be subject to the terms and conditions of this contract and any additions or changes required by then current law, regulations, or directives, and that the offer, with a written notice of acceptance by the Contracting Officer, shall constitute a binding contract. The Contractor shall not accelerate any effort until receipt of such written approval by the Contracting Officer. Any agreement to accelerate will be formalized by contract modification.

(e) The Contracting Officer may, by written order, direct the Contractor to accelerate the expenditure of direct labor such that the total hours of effort specified in paragraph (a) above would be used prior to the expiration of the term. This order shall specify the acceleration required and the resulting revised term. The Contractor shall acknowledge this order within five days of receipt.

(f) If the total level of effort specified in paragraph (a) above is not provided by the Contractor during the term of this contract, the Contracting Officer shall either (i) reduce the fixed fee of this contract as follows:

$$\text{Fee Reduction} = \text{Fixed Fee} \times \frac{(\text{Required LOE Hours} - \text{Expended LOE Hours})}{\text{Required LOE Hours}}$$

or (ii) subject to the provisions of the clause of this contract entitled "Limitation of Cost," require the Contractor to continue to perform the work until the total number of hours of direct labor specified in

paragraph (a) shall have been expended, at no increase in the fixed fee of this contract.

(g) In the event the government fails to fully fund the contract in a timely manner, the term of the contract may be extended accordingly with no change to cost or fee. If the government fails to fully fund the contract, the fee will be adjusted in direct proportion to that effort which was performed.

(h) Notwithstanding any of the provisions in the above paragraphs, the Contractor may furnish hours up to five percent in excess of the total hours specified in paragraph (a) above, provided that the additional effort is furnished within the term hereof, and provided further that no increase in the estimated cost or fixed fee is required, and no adjustment in the fixed fee shall be made provided that the Contractor has delivered at least 95% of the level of effort required in paragraph (a) above.

(i) It is understood that the mix of labor categories provided by the Contractor under the contract, as well as the distribution of effort among those categories, may vary considerably from the initial mix and distribution of effort which was estimated by the government or proposed by the Contractor.

(j) Nothing herein shall be construed to alter or waive any of the rights or obligations of either party pursuant to the Clause entitled "Limitation of Costs" or "Limitation of Funds," either of which clauses as incorporated herein applies to this contract.

(k) The anticipated breakdown by labor category of the total level of effort for the base year and each option year thereafter is as follows:

<u>LABOR CATEGORY</u>	<u>HOURS</u>
PROGRAM MANAGER	1,900
CHIEF SCIENTIST	1,900
PLUME PHENOMENOLOGIST	1,900
STAFF SCIENTIST	1,900
PROGRAMMER/SCIENTIST	3,800
HARDBODY PROGRAMMER/SCIENTIST	1,900
ATMOSPHERIC PROGRAMMER/SCIENTIST	1,900
CELESTIAL BACKGROUND PROGRAMMER/SCIENTIST	1,900
NUCLEAR STAFF SCIENTIST	1,900
NUCLEAR COMPONENT COMPUTER SCIENTIST	1,900
HARDBODY PHENOMENOLOGIST	1,900
HARDBODY STAFF SCIENTIST	1,900
HARDBODY PROGRAMMER	1,900
HARDBODY PROGRAMMER/ANALYST	1,900
APPLICATIONS TASK MANAGER	1,900
RADAR PROGRAMMER/SCIENTIST	1,900
KINETIC KILL PHENOMENON SPECIALIST	1,900
SCIENTIST/PROGRAMMER	1,900
SOFTWARE ENGINEER	3,800
APPLICATION AND UTILITIES SOFTWARE ENGINEER	1,900
SOFTWARE TEST ENGINEER	1,900

ADMINISTRATIVE ASSISTANT

1,900

**H-5 ONR 5252.235-9714 - REPORT PREPARATION (FEB 97)**

Scientific or technical reports prepared by the Contractor and deliverable under the terms of this contract will be prepared in accordance with format requirements contained in ANSI/NISO Z39.18-1995, "Scientific and Technical Reports: Elements, Organization, and Design."

[NOTE: ANSI Z39.18 may be obtained from NISO Press Fulfillment Center, P. O. Box 338, Oxon Hill, MD. 20750-0338. Telephone 1-800-282-6476]

**H-6 ON-SITE USE OF GOVERNMENT PROPERTY**

Government facilities and equipment specified or approved for use in the performance of any portion of the contract at the U.S. Naval Research Laboratory (NRL) or any of its field sites may be used by the contractor's personnel on a rent free basis. All such property shall be considered to remain in the possession and control of the NRL for property responsibility and accountability purposes.

**H-7 YEAR 2000 COMPLIANT INFORMATION TECHNOLOGY**

Information technology acquired with funds provided hereunder shall be Year 2000 compliant as defined at FAR 39.002. "Information technology" is defined at FAR 2.101.

**H-8 REPRESENTATIONS AND CERTIFICATIONS**

The Contractor's completed Representations, Certifications, and Other Statements of Offerors or Respondents will be incorporated herein by reference in any resultant award.

**H-9 SUBCONTRACTORS/CONSULTANTS**

a. The following subcontractors/consultants have been identified in the Contractor's proposal as necessary for performance of this contract:

<u>Subcontractor/Consultant Name</u>	<u>Time or Unit</u>	<u>Estimated Cost</u>
--------------------------------------	---------------------	-----------------------

(To be filled in at time of award)

b. The Contracting Officer's consent required by paragraph (c) of the contract clause entitled "Subcontracts (Cost-Reimbursement and Letter Contracts)" is hereby given for the listed subcontracts/consultants unless (i) they are of the cost-reimbursement, time-and-materials, or labor-hour type and are estimated to exceed \$10,000, including any fee (ii) are proposed to exceed \$100,000.00; or (iii) are one of a number of subcontracts with a single subcontractor, under this contract, for the same or related supplies or services that, in the aggregate, are expected to exceed \$100,000.00. In such cases consent shall be requested from the Administrative Contracting officer.

c. Any changes to the above list shall be authorized by the Administrative Contracting Officer (ACO).

**H-10 OPTION TO EXTEND TERM**

This Contract shall be renewable at the unilateral option of the Government by the Contracting Officer's notice of renewal to the Contractor within the existing term of the Contract.

**H-11 GOVERNMENT-FURNISHED PROPERTY**

The following Government property will be furnished to the contractor on a rent-free basis for use in performing the contract:

(See Attachment 1.5 to this Solicitation)

**PART II - CONTRACT CLAUSES****SECTION I****CONTRACT CLAUSES****I-1 52.252-2 - CLAUSES INCORPORATED BY REFERENCE (FEB 1998)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

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

<http://heron.nrl.navy.mil/contracts/home.htm>

**a. FEDERAL ACQUISITION REGULATION CLAUSES****FAR CLAUSE    TITLE**

52.202-1	-	Definitions (OCT 1995)
52.203-3	-	Gratuities (APR 1984)
52.203-5	-	Covenant Against Contingent Fees (APR 1984)
52.203-6	-	Restrictions On Subcontractor Sales To The Government (JUL 1995)
52.203-7	-	Anti-Kickback Procedures (JUL 1995)
52-203-8	-	Cancellation, Rescission, And Recovery Of Funds For Illegal Or Improper Activity (JAN 1997)
52.203-10	-	Price Or Fee Adjustment For Illegal Or Improper Activity (JAN 1997)
52.203-12	-	Limitation On Payments To Influence Certain Federal Transactions (JUN 1997)
52.204-2	-	Security Requirements (AUG 1996)
52.204-4	-	Printing/Copying Double-Sided On Recycled Paper (JUN 1996)
52.209-6	-	Protecting The Government's Interest When Subcontracting With Contractors Debarred, Suspended, Or Proposed For Debarment (JUL 1995)
52.211-15	-	Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	-	Audit And Records-Negotiation (AUG 1996)
52.215-8	-	Order of Precedence - Uniform Contract Format (OCT 1997)
52.215-14	-	Integrity of Unit Prices (OCT 1997)
52.215-15	-	Termination of Defined Benefit Pension Plans (OCT 1997)
52.215-17	-	Waiver of Facilities Capital Cost of Money (OCT 1997)
52.215-18	-	Reversion or Adjustment of Plans for Post-retirement Benefits (PRB) Other than Pensions (OCT 1997)
52.215-19	-	Notification of Ownership Changes (OCT 1997)
52.215-21	-	Requirements for Cost and Pricing Data or Information Other Than Cost or Pricing Data - Modifications (OCT 1997) - Alternate IV (OCT 1997)
52.216-7	-	Allowable Cost And Payment (APR 1998)
52.216-8	-	Fixed-Fee (MAR 1997)
52.219-6	-	Notice Of Total Small-Business Set-Aside (JUL 1996)
52.219-8	-	Utilization Of Small, Small Disadvantaged And Women-Owned Small Business

- Concerns (JUN 1997)
- 52.219-14 - Limitations On Subcontracting (DEC 1996)
- 52.219-16 - Liquidated Damages-Subcontracting Plan (AUG 1998)
- 52.222-1 - Notice To The Government Of Labor Disputes (FEB 1997)
- 52.222-2 - Payment For Overtime Premiums (JUL 1990) -The Use Of Overtime Is Authorized Under This Contract If The Overtime Premium Does Not Exceed \_"0" \_
- 52.222-3 - Convict Labor (AUG 1996)
- 52.222-20 - Walsh-Healey Public Contracts Act (DEC 1996)
- 52.222-21 - Prohibition of Segregated Facilities (APR 1984) (DEVIATION)
- 52.222-26 - Equal Opportunity (APR 1984)(DEVIATION)
- 52.222-35 - Affirmative Action For Disabled Veterans And Veterans Of The Vietnam Era (APR 1998)
- 52.222-36 - Affirmative Action For Workers With Disabilities (JUN 1998)
- 52.222-37 - Employment Reports On Disabled Veterans And Veterans Of The Vietnam Era (APR 1998)
- 52.223-2 - Clean Air And Water (APR 1984)
- 52.223-3 - Hazardous Material Identification And Material Safety Data (JAN 1997)
- 52.223-5 - Pollution Prevention and Right-To-Know Information (APR 1998)
- 52.223-6 - Drug-Free Workplace (JAN 1997)
- 52.223-14 - Toxic Chemical Release Reporting (OCT 1996)
- 52.225-11 - Restrictions On Certain Foreign Purchases (AUG 1998)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-10 - Filing of Patent Application- Classified Subject Matter (APR 1984)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.230-2 - Cost Accounting Standards (APR 1998)
- 52.230-3 - Disclosure And Consistency Of Cost Accounting Practices (APR 1998)
- 52.230-6 - Administration Of Cost Accounting Standards (APR 1996)
- 52.232-9 - Limitation On Withholding Of Payments (APR 1984)
- 52.232-17 - Interest (JUN 1996)
- 52.232-20 - Limitation Of Cost (APR 1984) (Applicable when the contract or task order is fully funded)
- 52.232-22 - Limitation Of Funds (APR 1984) (Applicable when the contract or task order is not fully funded)
- 52.232-23 - Assignment Of Claims (JAN 1986) Alternate I (APR 1984)
- 52.232-25 - Prompt Payment (JUN 1997)
- 52.233-1 - Disputes (OCT 1995)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.237-3 - Continuity Of Services (JAN 1991)
- 52.237-10 - Identification of Uncompensated Overtime (OCT 1997)
- 52.242-1 - Notice Of Intent To Disallow Costs (APR 1984)
- 52.242-3 - Penalties For Unallowable Costs (OCT 1995)
- 52.242-4 - Certification of Final Indirect Costs (JAN 1997)
- 52.242-13 - Bankruptcy (JUL 1995)

- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate V (APR 1984)
- 52.243-7 - Notification Of Changes (APR 1984)fill in 30
- 52.244-2 - Subcontracts (AUG 1998) - Alternate I (AUG 1996)
- 52.244-5 - Competition In Subcontracting (DEC 1996)
- 52.244-6 - Subcontracts for Commercial Items and Commercial Components (APR 1998)
- 52.245-5 - Government Property (Cost-Reimbursement, Time-And-Material, Or Labor-Hour Contracts) (JAN 1986) (DEVIATION)
- 52.245-9 - Use And Charges (APR 1984) (DEVIATION)
- 52.245-18 - Special Test Equipment (FEB 1993)
- 52.245-19 - Government Property Furnished "As-Is" (APR 1984)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.247-1 - Commercial Bill Of Lading Notations (APR 1984)
- 52.247-63 - Preference For U. S. Flag Carriers (JAN 1997)
- 52.249-6 - Termination (Cost-Reimbursement) (SEP 1996)
- 52.249-14 - Excusable Delays (APR 1984)
- 52.251-1 - Government Supply Sources (APR 1984)
- 52.252-6 - Authorized Deviations in Clauses (APR 1984)( fill in Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2))
- 52.253-1 - Computer Generated Forms (JAN 1991)

## **b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION CLAUSES**

### **DFARS CLAUSE    TITLE**

- 252.201-7000 - Contracting Officer's Representative (DEC 1991)
- 252.203-7001 - Special Prohibition On Employment (JUN 1997)
- 252.203-7002 - Display Of DoD Hotline Poster (DEC 1991)
- 252.204-7000 - Disclosure of Information (DEC 1991)
- 252.204-7003 - Control Of Government Personnel Work Product (APR 1992)
- 252.204-7004 - Required Central Contractor Registration (MAR 1998)
- 252.205-7000 - Provision Of Information To Cooperative Agreement Holders (DEC 1991)
- 252.209-7000 - Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate-Range Nuclear Forces (INF) Treaty (NOV 1995)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.211-7005 - Substitutions For Military Or Federal Specifications And Standards (AUG 1997)
- 252.215-7002 - Cost Estimating System Requirements (OCT 1998)
- 252.223-7001 - Hazard Warning Labels (DEC 1991)
- 252.223-7004 - Drug-Free Work Force (SEP 1988)
- 252.225-7001 - Buy American Act And Balance Of Payments Program (MAR 1998)
- 252.225-7002 - Qualifying Country Sources As Subcontractors (DEC 1991)
- 252.225-7009 - Duty Free Entry- Qualifying Country Supplies (End Products and Components) (MAR 1998)
- 252.225-7010 - Duty Free Entry - Additional Provisions (MAR 1998)
- 252.225-7012 - Preference For Certain Domestic Commodities (SEP 1997)
- 252.225-7021 - Trade Agreements (MAR 1998)

- 252.225-7025 - Restriction On Acquisition Of Forgings (JUN 1997)
- 252.225-7026 - Reporting Of Contract Performance Outside The United States (MAR 1998)
- 252.225-7031 - Secondary Arab Boycott Of Israel (JUN 1992)
- 252.225-7043 - Antiterrorism/Force Protection Policy For Defense Contractors Outside The United States (JUN 1998) (fill in : Naval Criminal Investigative Service (NCIS), Code 24, telephone, DSN 228-9113 or commercial (202)433-9113)
- 252.227-7000 - Non Estoppel (OCT 1966)
- 252.227-7001 - Release Of Past Infringement (AUG 1984)
- 252.227-7013 - Rights In Technical Data -- Noncommercial Items (NOV 1995)
- 252.227-7014 - Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)
- 252.227-7016 - Rights In Bids or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7025 - Limitations On The Use Or Disclosure Of Government-Furnished Information Marked With Restrictive Legends (JUN 1995)
- 252.227-7026 - Deferred Delivery Of Technical Data Or Computer Software (APR 1988)
- 252.227-7027 - Deferred Ordering Of Technical Data Or Computer Software (APR 1988)
- 252.227-7030 - Technical Data--Withholding Of Payment (OCT 1988)
- 252.227-7034 - Patents--Subcontracts (APR 1984)
- 252.227-7036 - Declaration Of Technical Data Conformity (JAN 1997)
- 252.227-7037 - Validation Of Restrictive Markings On Technical Data (NOV 1995)
- 252.227-7039 - Patents--Reporting of Subject Inventions (APR 1990)
- 252.231-7000 - Supplemental Cost Principles (DEC 1991)
- 252.232-7009 - Payment By Electronic Funds Transfer (CCR) (JUN 1998)
- 252.235-7010 - Acknowledgment of Support and Disclaimer (MAY 1995)
- 252.235-7011 - Final Scientific Or Technical Report (MAY 1995)
- 252.242-7000 - Post Award Conference (DEC 1991)
- 252.243-7002 - Requests for Equitable Adjustment (MAR 1998)
- 252.245-7001 - Reports of Government Property (MAY 1994)
- 252.246-7001 - Warranty Of Data (DEC 1991)
- 252.247-7023 - Transportation Of Supplies By Sea (NOV 1995)
- 252.247-7024 - Notification Of Transportation Of Supplies By Sea (NOV 1995)
- 252.251-7000 - Ordering From Government Supply Sources (MAY 1995)

## **I-2 FAR 52.223-11 - OZONE-DEPLETING SUBSTANCES (JUN 1996)**

### **(a) Definitions.**

“Ozone-depleting substance”, as used in this clause, means any substance designated as Class I by the Environmental Protection Agency (EPA) (40 CFR Part 82), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or any substance designated as Class II by EPA (40 CFR Part 82), including but not limited to

hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

"WARNING: Contains (or manufactured with, if applicable) \_\_\_\_\_\*, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere."

\* The Contractor shall insert the name of the substance(s).

**PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**

**SECTION J**

**LIST OF ATTACHMENTS**

- J-1** Attachment (1): (1.1) Statement Of Work - 9 Pages; (1.2) Workforce Requirements – 10 Pages; (1.3) Exhibit A - DD Form 1423, Contract Data Requirements List – 3 Pages, with Enclosure (1) - Instructions For Distribution – 2 Pages, and Enclosure (2) – Monthly Cost/ Performance Reporting Requirements – 1 Page; (1.4) DD Form 254 – Contract Security Classification Specification – 2 Pages; and (1.5) List of Government Furnished Equipment - 1 Page.

**PART IV - REPRESENTATIONS AND INSTRUCTIONS****SECTION - K****REPRESENTATIONS, CERTIFICATIONS  
AND OTHER STATEMENTS OF OFFERORS OR RESPONDENTS**

**K-1** The following Representations, Certifications, and Other Statements Of Offerors or Respondents are incorporated by reference with the same force and effect as if they were given in full text.

**FAR CLAUSE    TITLE**

52.203-11    -    Certification And Disclosure Regarding Payments To Influence Certain Federal Transactions (APR 1991)

**DFARS CLAUSE    TITLE**

252.209-7001    -    Disclosure Of Ownership Or Control By The Government Of A Terrorist Country (MAR 1998)

**K-2** FAR 52.204-3 - TAXPAYER IDENTIFICATION (JUN 1997)

(a) *Definitions.*

"Common parent," as used in the 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 corporation providing medical and health care services.

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

(b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to reporting requirements described in FAR 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) *Taxpayer Identification Number (TIN).*

TIN: \_\_\_\_\_.

TIN has been applied for.

TIN is not required because:

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

Offeror is an agency or instrumentality of a foreign government;

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

Other. State basis. \_\_\_\_\_

(d) *Corporate Status.*

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

Other corporate entity;

Not a corporate entity;

Sole proprietorship

Partnership

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

(e) *Common Parent.*

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

Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

**K-3 FAR 52.204-5 -WOMAN-OWNED BUSINESS (OCT 1995)**

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

(b) *Definition.* "Women-owned business concern," as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

**K-4 FAR 52.209-5 - CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (MAR 1996)**

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

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

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

(B) Have  have not , within a 3-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

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

(ii) The Offeror has  has not , within a 3-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 non-responsible.

(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 FAR 52.215-4 -TYPE OF BUSINESS ORGANIZATION (OCT 1997)**

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

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

(b) If the offeror or respondent 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 FAR 52.215-6 -PLACE OF PERFORMANCE (OCT 1997)**

(a) The offeror or respondent, 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 respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks "intends" in paragraph (a) of this provision, it shall insert in the following spaces the required information:

PLACE OF PERFORMANCE  
(STREET ADDRESS, CITY,  
STATE, COUNTY, ZIP CODE)

NAME AND ADDRESS OF OWNER  
AND OPERATOR OF THE PLANT  
OR FACILITY IF OTHER THAN  
OFFEROR OR RESPONDENT

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**K-7 FAR 52.219-1 - SMALL BUSINESS PROGRAM REPRESENTATIONS (OCT 1998)**

(a) (1) The standard industrial classification (SIC) code for this acquisition is\_\_\_\_\_.  
[insert SIC code]

(2) The small business size standard is \_\_\_\_\_.[insert size standard]

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

(b) *Representation.*

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

(2) (Complete only if offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it  is,  is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

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

(c) *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 in CFR Part 121 and the size standard in paragraph (a) of this provision.

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

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

(2) Whose management and daily business operations are controlled by one ore more women.

(d) *Notice.*

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

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

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

*Alternate I (OCT 1998)*

(4) (Complete if offeror represented itself as disadvantaged in paragraph (b) (2) of this provision). [*The offeror shall check the category in which its ownership falls*]:

\_\_\_\_ Black American.

\_\_\_\_ Hispanic American.

\_\_\_\_ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

\_\_\_\_ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marchall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

\_\_\_\_ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, SriLanka, Bhutan, the Maldives Islands, or Nepal).

\_\_\_\_ Individual/concern, other than one of the preceding.

**K-8 FAR 52.219-22 - SMALL DISADVANTAGED BUSINESS STATUS (OCT 1998)**

(a) *General.* This provision is used to assess an offeror's small disadvantaged business status for the purpose of obtaining a benefit on this solicitation. Status as a small business and status as a small disadvantaged business for general statistical purposes is covered by the provision at FAR 52.219-1, Small Business Program Representation.

(b) *Representations.* (1) *General.* The offeror represents, as part of its offer, that it is a small business under the size standard applicable to this acquisition; and either--

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

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

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

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

(ii) It has submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(2)  *For Joint Ventures.* The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements at 13 CFR 124.1002(f) and that the representation in paragraph (b)(1) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [*The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture:\_\_\_\_\_.*]

(c) *Penalties and Remedies.* Anyone who misrepresents any aspects of the disadvantaged status of a concern for the purposes of securing a contract or subcontract shall--

(1) Be punished by imposition of a 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 Small Business Act.

**K-9 FAR 52.222-22 - PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (APR 1984)  
(DEVIATION)**

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,

(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-10 FAR 52.222-25 - AFFIRMATIVE ACTION COMPLIANCE (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-11 FAR 52.223-1 - CLEAN AIR AND WATER CERTIFICATION (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-12 FAR 52.223-13 - CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)**

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

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

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

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

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

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

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

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

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

**K-13 FAR 52.226-2 - HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION REPRESENTATION (MAY 1997)**

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

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

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

(b) *Representation.* The offeror represents that it--

is  is not a Historically Black College or University;

is  is not a Minority Institution.

**K-14 FAR 52.227-6 - ROYALTY INFORMATION (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.

**K-15 FAR 52.230-1 - COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (APR 1998) ALTERNATE I (APR 1996)**

Note: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

**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 the Cost Accounting Standards Board (48CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, 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 practices 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) or cognizant Federal agency official authorized to act in that capacity (Federal Official), as applicable, and (ii) one copy to the cognizant Federal auditor.

(Disclosure must be on Form No. CASB DS-1 or CASB DS-2, as applicable. Forms may be obtained from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)

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

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

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 or Federal Official 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 national defense prime contracts and subcontracts subject to CAS totaling more than \$25 million (of which at least one award exceeded \$1 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 Office 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) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 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 revised a 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 completed Disclosure Statement.

CAUTION: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$25 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 - ELIGIBILITY FOR MODIFIED CONTRACT COVERAGE

If the offeror is eligible to use the modified provisions of 48 CFR 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 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$25 million in awards of CAS-covered prime contracts and subcontracts, or the offeror did not receive a single CAS-covered award exceeding \$1 million. 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 \$25 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 \$25 million or more.

III. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS.

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

YES       NO

(5) Certificate of Disclosure Statement Due Date by Educational Institution. If the offeror is an educational institution that, under the transition provisions of 48 CFR 9903.202-1(f), is or will be required to submit a Disclosure Statement after receipt of this award, the offeror hereby certifies that (check one and complete):

(i) A disclosure Statement Filing Due Date of \_\_\_\_\_ has been established with the cognizant Federal agency.

(ii) The Disclosure Statement will be submitted within the 6-month period ending \_\_\_\_\_ months after receipt of this award.

Name and Address of Cognizant ACO or Federal Official Where Disclosure Statement is to be Filed: \_\_\_\_\_

**K-16** DFARS 252.209-7002 DISCLOSURE OF OWNERSHIP OR CONTROL BY A FOREIGN GOVERNMENT (SEP 1994)

(a) *Definitions.*

As used in this provision --

(1) "Effectively owned or controlled" means that a foreign government or any entity controlled by a foreign government has the power, either directly or indirectly, whether exercised or exercisable, to control or influence the election, appointment, or tenure of the Offeror's board of directors by any means, e.g., ownership, contract, or operation of law (or equivalent power for unincorporated organizations).

(2) "Entity controlled by a foreign government" --

(i) Means --

(A) Any domestic or foreign organization or corporation that is effectively owned or controlled by a foreign government; or

(B) Any individual acting on behalf of a foreign government.

(ii) Does not include an organization or corporation that is owned, but is not controlled, either directly or indirectly, by a foreign government of the ownership of that organization or corporation by that foreign government was effective before October 23, 1992.

(3) "Foreign government" includes the state and the government of any country (other than the United States and its possessions and trust territories) as well as any political subdivision, agency, or instrumentality thereof.

(4) "Proscribed information" means --

(i) Top Secret information;

(ii) Communications Security (COMSEC) information, except classified keys used to operate secure telephone units (STU IIIs);

(iii) Restricted Data as defined in the U.S. Atomic Energy Act of 1954, as amended;

(iv) Special Access Program (SAP) information; or

(v) Sensitive Compartmented Information (SCI).

(b) *Prohibited on award.*

No contract under a national security program may be awarded to an entity controlled by a foreign government if that company requires access to proscribed information to perform the contract, unless the Secretary of Defense or a designee has waived application of 10 U.S.C. 2536(a).

(c) *Disclosure.*

The Offeror shall disclose any interest a foreign government has in the Offeror when that interest constitutes control by a foreign government as defined in this provision. If the Offeror is a subsidiary, it shall also disclose any reportable interest a foreign government has in any entity that owns or controls the subsidiary, including reportable interest concerning the Offeror's immediate parent, intermediate parents, and the ultimate parent. Use separate paper as needed, and provide the information in the following format:

Offeror's Point of Contact for Questions about Disclosure (Name and Phone Number with Country Code, City Code and Area Code, as applicable)

Name and Address of Offeror

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Name and Address of Entity  
Controlled by a Foreign  
Government

Description of Interest, Ownership  
Percentage, and Identification  
of Foreign Government

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**K-17 DFARS 252.209-7003 - COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (MAR 1998)**

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 37 U.S.C. 4212(d) (i.e., the VETS-100 report required by Federal Acquisition Regulation clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era), it has submitted the more recent report required by 37 U.S.C. 4212(d).

**K-18 DFARS 252.225-7018 - NOTICE OF PROHIBITION OF CERTAIN CONTRACTS WITH FOREIGN ENTITIES FOR THE CONDUCT OF BALLISTIC MISSILE DEFENSE RDT&E.(JAN 1997)**

(a) Definitions.

(1) "Competent" means the ability of an offeror to satisfy the requirements of the solicitation. This determination is based on a comprehensive assessment of each offeror's proposal including consideration of the specific areas of evaluation criteria in the relative order of importance described in the solicitation.

(2) "Foreign firm" means a business entity owned or controlled by one or more foreign nationals or a business entity in which more than 50 percent of the stock is owned or controlled by one or more foreign nationals.

(3) "U.S. firm" means a business entity other than a foreign firm.

(b) This provision implements Section 222 of the Defense Authorization Act for FYs 1988 and 1989 (Pub. L. 100-180) prohibiting the award of certain contracts, for the conduct of Ballistic Missile Defense (BMD) Program research, development, test, or of Ballistic evaluation (RDT&E), to foreign governments or firms.

(c) Except as provided in paragraph (d) of this provision, any funds appropriated to, or for the use of, the DoD, may not be used to enter into or carry out any contract, including any contract awarded as a result of a broad agency announcement (BAA), with a foreign government or firm if the contract provides for the conduct of RDT&E in connection with the BMD. Foreign governments and firms, however, are

encouraged to submit offers since this provision is not intended to restrict BMD access to unique foreign expertise when contract performance requires a level of competency unavailable in the United States.

(d) The prohibition does not apply to a foreign government or firm if—

(1) The contract will be performed within the United States;

(2) The contract is exclusively for RDT&E in connection with antitactical ballistic missile systems;

(3) The foreign government or firm agrees to share a substantial portion of the total contract cost. The foreign share is considered substantial where it is equitable with respect to the relative benefits to be derived from the contract by the United States and the foreign parties. For example, if the contract is more beneficial to the foreign party, its share of the costs should be correspondingly higher; or

(4) The U.S. Government determines that the contract cannot be competently performed by a U.S. firm at a price equal to or less than the price at which the RDT&E can be performed by a foreign government or firm.

(e) The offeror (\_\_\_\_\_) is (\_\_\_\_\_) is not a U.S. firm.

**K-19 DFARS 252.225-7020 - TRADE AGREEMENT CERTIFICATE (MAR 1998)**

(a) Definitions. Caribbean Basin country end product, designated country end product, NAFTA country end product, nondesignated country end product, qualifying country end product, and U. S. made end product have the meanings given in the Trade Agreements clause of this solicitation.

(b) Evaluation. Offers will be evaluated in accordance with the policies and procedures of part 225 of the Defense Federal Acquisition Regulation Supplement. Offers of foreign end products that are not U.S. made, qualifying country, designated country, Caribbean Basin country, or NAFTA country end products will not be considered for award, unless the Contracting Officer determines that there are not offers of such end products; or the offers of such end products are insufficient to fulfill the requirements; or a national interest exception to the Trade Agreements Act is granted.

(c) Certifications. (1) The offeror certifies that each end product to be delivered under this contract, except those listed in paragraph (c) (2) of this provision, is a U.S. made, qualifying country, designated country, Caribbean Basin country, or NAFTA country end product.

(2) The following supplies are other nondesignated country end product:

Insert Line item number

Insert country of origin

**K-20 DFARS 252.226-7001 - HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION STATUS(JAN 1997)**

(a) *Definitions.*

"Historically black colleges and universities," as used in this provision, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2.

"Minority institutions," as used in this provision, means institutions meeting the requirements of paragraphs (3), (4), and (5) of Section 321(b) of the Higher Education Act of 1965 (20 U.S.C. 1058). The term also means any nonprofit research institution that was an integral part of a historically black college or university before November 14, 1986.

(b) *Certification.*

The Offeror certifies that it is--

\_\_\_\_\_A historically black college or university

\_\_\_\_\_A minority institution

(c) *Notification.*

Notify the Contracting Officer before award if your status as a historically black college or university or minority institution changes.

**K-21** DFARS 252.247-7022 - REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph(b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) *Representation.*

The Offeror represents that it--

\_\_\_\_\_Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

\_\_\_\_\_Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notice of Transportation of Supplies by Sea.

**K-22** COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING

The Offeror's CAGE Code is\_\_\_\_\_.

See DFARS 252.204-7001 in Section L for procedures on requesting a CAGE Code.

## SECTION L

INSTRUCTIONS CONDITIONS AND NOTICES  
TO OFFERORS OR RESPONDENTS**L-1 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)**

This solicitation incorporates one or more solicitation provisions 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. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>  
<http://heron.nrl.navy.mil/contracts/home.htm>

**FAR CLAUSE    TITLE**

52.204-6	-	Data Universal Numbering System (DUNS) Number (APR 1998)
52.211-2	-	Availability of Specifications Listed in the DOD Index of Specifications and Standards (DODISS) and Descriptions Listed in the Acquisition Management Systems and Data Requirements Control List, DOD 5010.12-L (AUG 1998)
52.214-34	-	Submission Of Offers In The English Language (APR 1991)
52.214-35	-	Submission Of Offers In U.S. Currency (APR 1991)
52.215-1	-	Instructions to Offerors- Competitive Acquisition (OCT 1997)
52.215-1	-	Instructions to Offerors- Competitive Acquisition (OCT 1997) Alternate II (OCT 1997)
52.215-16	-	Facilities Capital Cost Of Money (OCT 1997)
52.222-24	-	Preaward On-Site Equal Opportunity Compliance Evaluation (APR 1984)(DEVIATION)
52.252-5	-	Authorized Deviations in Provisions (APR 1984)

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

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

**L-3 FAR 52.215-20 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (OCT 1997)ALTERNATE IV (OCT 1997)**

(a) Submission of cost or pricing data is not required.

(b) Provide information described below :

The Offeror shall provide information as required in Section L.15 of this solicitation entitled "Instructions for Submission and Information Required to Evaluate Proposals" FAR 52.216-1 - TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Cost Plus Fixed Fee, Research and Development Term type contract resulting from this solicitation.

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

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the Control Desk, Code 3200, Bldg. 222, Rm. 115, Naval Research Laboratory, 4555 Overlook Ave., S.W., Washington DC 20375-5326.

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

**L-6 DFARS 252.204-7001 - COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING (DEC 1991)**

(a) The Offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter CAGE Before the number.

(b) If the Offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Services Center (DLSC). The Contracting Officer will--

(1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of the Commercial and Government Entity (CAGE) Code;

(2) Complete section A and forward the form to DLSC; and

(3) Notify the Contractor of its assigned CAGE code.

(c) Do not delay submission of the offer pending receipt of a CAGE code.

**L-7 DFARS 252.227-7017 - IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS (JUN 1995)**

(a) The terms used in this provision are defined in following clause or clauses contained in this

solicitation--

- (1) If a successful offeror will be required to deliver technical data, the Rights in Technical Data--Noncommercial Items clause, or, if this solicitation contemplates a contract under the Small Business Innovative Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovative Research (SBIR) Program clause.
- (2) If a successful offeror will not be required to deliver technical data, the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause, or, if this solicitation contemplates a contract under the Small Business Innovative Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovative Research (SBIR) Program clause.
- (b) The identification and assertion requirements in this provision apply only to technical data, including computer software documents, or computer software to be delivered with other than unlimited rights. For contracts to be awarded under the Small Business Innovative Research Program, the notification requirements do not apply to technical data or computer software that will be generated under the resulting contract. Notification and identification is not required for restrictions based solely on copyright.
- (c) Offers submitted in response to this solicitation shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Offeror, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure.
- (d) The Offeror's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually obligate the Offeror:

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software.

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion**	Asserted Rights Category***	Name of Person Asserting Restrictions****
(LIST)*****.	(LIST)	(LIST)	(LIST)

\* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such items, component, or process. For computer software or

computer software documentation identify the software or documentation.

\*\* Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

\*\*\* Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

\*\*\*\* Corporation, individual, or other person, as appropriate.

\*\*\*\*\* Enter "none" when all data or software will be submitted without restrictions.

Date \_\_\_\_\_

Printed Name and Title \_\_\_\_\_

Signature \_\_\_\_\_

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

**L-8 DFARS 252.227-7028 - TECHNICAL DATA OR COMPUTER SOFTWARE PREVIOUSLY DELIVERED TO THE GOVERNMENT (JUN 1995)**

The Offeror shall attach to its offer an identification of all documents or other media incorporating technical data or computer software it intends to deliver under this contract with other than unlimited rights that are identical or substantially similar to documents or other media that the Offeror has produced for, delivered to, or is obligated to deliver to the Government under any contract or subcontract. The attachment shall identify - -

- (a) The contract number under which the data or software were produced;
- (b) The contract number under which, and the name and address of the organization to whom, the data or software were most recently delivered or will be delivered; and
- (c) Any limitations on the Government's rights to use or disclose the data or software, including, when applicable, identification of the earliest date the limitations expire.

**L-9 GOVERNMENT-FURNISHED PROPERTY**

No material, labor, or facilities will be furnished by the Government unless provided for in the solicitation.

**L-10 INQUIRIES CONCERNING THE RFP**

Any questions concerning the RFP must be submitted in writing to the Contracting Officer at the location noted in blocks 7 and 9 of the Standard Form 33, "Solicitation, Offer and Award," no less than fifteen (15) days before closing. The Government will not consider questions received after this date. Offerors are cautioned against directing any questions concerning this RFP to technical personnel at the Naval Research Laboratory.

**L-11 INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS**

**PART L.11.A – GENERAL**

- (1) Offerors are advised of the possibility that award may be made on the basis of initial proposals without written or oral discussions. Therefore, proposals should be submitted on the most favorable terms from a price and technical standpoint.
- (2) Offerors shall submit a completed solicitation document.
- (3) In addition to a completed solicitation document, proposals shall be submitted in two readily separable volumes, one original and five copies of Volume I – Technical/Management Proposal, and one original and two copies of Volume II – Cost/Price proposal. Volume I shall include all data and information required for evaluation, excluding all references to cost and pricing data (see Section L 11.B below). Volume II shall include the completed solicitation document and a complete and detailed cost/price breakdown (see Section L 11.C below).
- (4) Proposal Identification/Mailing - The proposal should be packaged for delivery to permit safe and timely arrival at destination. The proposal package should be sent to the address shown in Block 7 of the RFP face page and marked:

**RFP No. N00173-98-R- RS04**  
**Closing Date: (As specified in Block 9, RFP face page)**  
**Naval Research Laboratory (NRL-SSC)**  
**Attn: Code 3235**  
**Stennis Space Center, MS 39529-5004**

PART L.11.B - **TECHNICAL PROPOSAL REQUIREMENTS**

PART L.11.B.0- **GENERAL PROPOSAL CONTENT:**

- (i) Offerors are required to furnish an original and five copies of a detailed TECHNICAL PROPOSAL with sufficient detail to show compliance with the requirements stated in each subparagraph of Section C of this solicitation. Specific cost or pricing details shall be omitted from the Technical Proposal.
- (ii) The technical proposal shall include a narrative in the same sequence as the items set out in Section C hereof. The narrative shall describe how each item offered will not meet, will meet, or will exceed the respective stated need of the Government for each subparagraph of Section C. Conclusions such as “meets or exceeds,” or “yes,” or “o.k.” are not technically acceptable. Each response shall furnish the Government with sufficient detail to enable the technical evaluation panel to independently evaluate each item offered against the respective stated need of the Government for each item in Section C and Section M.
- (iii) The technical proposal shall include any drawings, including schematic drawings, which will enable independent technical evaluation of the proposal.
- (iv) The technical proposal shall clearly and concisely identify and discuss the Offeror’s technical and managerial qualifications and approaches to accomplishing the requirements outlined in Section C. Further, the technical proposal shall be subdivided into a “Proposal Summary” section, a “Workforce Qualifications and Experience” section, a “Technical Approach” section, and a “Corporate Past Performance Information” section in that order. The technical proposal shall also contain responses to each of the individual requirements listed in Section C.3.1 – C.3.5 of Attachment 1.1, Attachment 1.2, and Attachment 1.3.
- (v) The technical proposal (including summary, charts, tables, etc.) shall not exceed 60 single-sided pages of text in length. Drawings, as required in paragraph (iii) above, will not be counted in determining proposal length. Proposal shall be typed with a minimum type size of 12 pitch. Excess pages will not be read or evaluated.
- (vi) You are advised to closely examine the evaluation criteria set forth below prior to preparation of a technical proposal. Your technical proposal will be rated solely against the following criteria.

PART L.11.B.1- **PROPOSAL SUMMARY**

The proposal summary is an unevaluated requirement. The Offeror shall provide a concise summary, exclusive of cost information, of its proposal. This summary should be complete, stand on its own, and provide executive level reviewers with an understanding of the content of the proposal. The summary should summarize the highlights, plans and qualifications contained in the body of the technical proposal.

**PART L.11.B.2- WORK FORCE QUALIFICATION AND EXPERIENCE**

The Offeror shall document the experience, education, and other qualifications of all personnel proposed to accomplish the technical requirements stated in Section C of this solicitation. As a minimum, the Offeror shall provide the following information for each proposed individual: (a) name of proposed personnel; (b) proposed labor category, as stated in Attachment 1.2; (c) educational qualifications; (d) technical or managerial qualifications and experience as they relate to the Statement of Work and the requirements in Attachment 1.2; (e) length of experience; (f) previous work history; and (g) status of current security clearance. Key Personnel shall be identified as such.

In addition to the requirements stated above, the Offeror shall (a) describe their plan to retain key personnel throughout the term of any resulting contract, (b) demonstrate their ability to attract additional trained personnel, and (c) describe their strategy for and ability to respond to surges in effort.

**PART L.11.B.3- TECHNICAL APPROACH**

The Offeror shall discuss in detail its proposed technical approach for performance of the Infrastructure, Phenomenology Upgrade and Initiatives, Measurement Assimilation, Application Enhancement, and Architecture Evaluation tasks required in Section C of this solicitation. This discussion shall be in sufficient detail to (a) demonstrate the Offeror's compliance with the requirements specified in Section C of this solicitation; (b) demonstrate the Offeror's technical competence and understanding of the purpose, objectives and scope of the required work; (c) demonstrate the Offeror's understanding of the specific technical issues dealt with in the requirements; (d) present the Offeror's proposed procedures and solutions developed to address the requirements in Section C of this solicitation; and (e) discuss all other pertinent issues.

The Offeror shall also describe and document those resources which the firm will make available to this project, including, but not limited to, (a) financial resources, (b) research, development and production facilities and equipment, and (c) any other technical resources offered to meet the Government's requirements as stated in Section C of this solicitation.

**PART L.11.B.4- CORPORATE PAST PERFORMANCE INFORMATION**

(i) Offerors shall submit the following information as part of their proposal. (Offerors are encouraged to submit the information prior to other parts of the proposal to assist the Government in reducing the length of the evaluation period.) List the last five contracts or subcontracts completed during the past three years for supplies or services similar in nature to this requirement. Include in the five any current contract or subcontracts for similar supplies/services that were awarded at least one year prior to the date of this solicitation. Offerors that have no similar previous or current contracts should provide the requested information for proposed subcontractors that will perform

major or critical aspects of the requirement of for the proposed project manager or key personnel responsible for major or critical aspects of the requirement.

1. Name of contracting organization
2. Contract number
3. Contract type
4. Total Contract Value
5. Description of the contract work
6. Contracting Officer and telephone number
7. Contracting officer's representative, program manager, or similar Official and telephone number

(ii) Offerors shall contact the contracting organizations identified pursuant to paragraph (a) as soon as possible and request them to send past performance information on the identified contracts to the address in Block 7 of the face page of this solicitation. The past performance report, which is available at <http://heron.nrl.navy.mil/contracts/home.htm> is to be provided to the contracting organization for this purpose. If the contracting organization has already collected past performance information on the contract pursuant to FAR Subpart 42.15, the format used to collect the information may be used instead of the past performance report.

(iii) Offerors may include in their proposals specific information relating to problems encountered in performing the identified contracts and any corrective actions by the offeror. Offerors should not provide general information on their performance on the identified contracts as this will be obtained from the contracting organizations.

#### PART L.11.C - COST/PRICE PROPOSAL REQUIREMENTS

The Offeror shall submit a Cost/Pricing Proposal, which shall include such explanatory data as is necessary to establish that proposed costs are reasonable, allocable, appropriate and allowable pursuant to both Part 31 of the Federal Acquisition Regulation (FAR) and Part 231 of the Defense Federal Acquisition Regulation Supplement (DFARS). More specifically, the Cost/Pricing proposals shall provide the following information:

- (a)
  - (i) Labor to include categories of labor, individuals proposed within each category; hours proposed for each individual, and hourly rate for each individual;
  - (ii) Indirect or Overhead Rate(s);
  - (iii) Any Direct Materials proposed;
  - (iv) Any Other Direct Costs proposed;
  - (v) General and Administrative Rate(s);
  - (vi) Facilities Capital Cost of Money Rate(s);
  - (vii) Any other applicable rates;
  - (viii) Other supporting costs;
  - (ix) Fee

(b) Any information reasonably required to explain the Offeror's estimating process, including mathematical algorithms and judgmental factors used in formulating the estimate; and any contingency assumptions employed in arriving at the proposed price

(c) Consultants/Subcontractors: Offerors shall describe subcontracting arrangements proposed for completing the work required herein. Sub-Contractors shall be identified as well as the portion of the work to be subcontracted. Documents establishing a subcontracting relationship shall be submitted with the cost proposal. Offerors may arrange for proposed subcontractors to submit supporting cost data directly to the Government. Any such submission shall not be deemed to establish privity of contract between the Government and the proposed sub-contractor. With respect to Independent Contractors or Consultants, the Offeror shall document direct labor rates proposed by providing the Government with copies of either letters of intent or Consultant or Independent Contractor Agreements executed between the Offeror and the Independent Contractor. Offerors who intend to include subcontracted effort as part of their proposal are responsible for ensuring that complete information as described above is provided from each subcontractor as part of their response to this solicitation.

(d) Material and Travel: FOR PROPOSAL PURPOSES ONLY, the offerors will use the following estimates ( with applicable indirect costs added to the estimate) for required material and travel costs. If subcontractors propose material or travel costs, these must also be burdened and that burden added to the estimates.

(i) The "Material" estimate of \$1,000,000.00 for the total period of performance (an estimated average of \$ 200,000.00 for each of the five years included in the period of performance) includes those directly associated items which are expected to be incorporated into end products or expended during performance and minor direct equipment expense.

(ii) The "Travel" estimate of \$250,000.00 for the total period of performance (an estimated \$50,000.00 for each of the five years included in the period of performance) includes travel and subsistence for work at alternative sites, and for allowable local travel per the Joint Travel Regulations.

#### **L-12 MULTIPLE AWARDS**

The Government may make multiple awards resulting from this solicitation.

#### **L-13 SECURITY REQUIREMENTS**

The following is a MANDATORY REQUIREMENT which must be fulfilled:

- (1) All Contractor personnel proposed for this effort shall possess, or be capable of acquiring, at least a SECRET security clearance (unless otherwise specified) and be a U.S. citizen.
- (2) The Contractor shall possess, or be capable of acquiring, at least a SECRET facility clearance.

## SECTION M - EVALUATION FACTORS FOR AWARD

## M.1. EVALUATION

Award will be made to that responsible offeror whose proposal is determined to be the best value to the Government, proposed cost and other factors considered. The Government reserves the right to make award to other than the low offeror. Although technical considerations are more important than cost, the closer the technical scores of the various proposals are to one another, the more important cost considerations become.

## M.2. EVALUATION FACTORS FOR AWARD

Proposals received in response to this solicitation will be evaluated in accordance with the criteria stated in Sections L.11(B)(2), L.11(B)(3), and L.11(B)(4), which together comprise the Technical Category; and Section L.11.(C), which comprises the Cost/Pricing category.

M.2.1. – Technical Category

The technical evaluation will consider the Offeror's overall approach to, understanding of, and capability to adequately perform and provide the requirements listed in the Statement of Work, as reflected in the Offeror's responses to the evaluation criteria listed in Sections L.11.B.2, L.11.B.3, and L.11.B.4. Technical scores will be based on evaluative determinations of whether the Offeror's proposal meets, does not meet, or exceeds the Government's minimum requirements. Pursuant to FAR 15.306(c), proposals which are found to contain unrealistic technical or schedule terms, which fail to comply with the requirements stated in this RFP, or which are found to be unrealistically high or low in cost/price, may be significantly downgraded or removed from further consideration. Areas within the Offeror's technical proposal which are found to offer technical solutions or effort exceeding the Government's minimum requirements may receive maximum technical scores.

Evaluated Components within the Technical area include "Workforce Qualifications and Experience", "Technical Approach", and "Corporate Past Performance Information". Within the Technical category, the component "Workforce Qualifications and Experience" is weighted significantly higher than the component "Technical Approach", which carries more weight than the component "Corporate Past Performance Experience".

Past Performance – Past performance will be evaluated on the basis of quality of work performed, timeliness of performance, cost control, and business relations. The evaluation will be based on the information provided pursuant to Contract Section L.11.B.(4) and other sources, if available. Offerors that have no relevant performance history or for which past performance information is not available will not be evaluated favorably or unfavorably on past performance. The Government may begin proposal evaluation prior to receipt of past performance information. If, after completion of proposal evaluation except evaluation of past performance, the contracting officer determines that evaluation of past performance will not affect the outcome of competitive selection, the contracting officer may waive its evaluation in accordance with FAR 15.304(c)(3)(iii).

### M.2.2 - Cost/Price Proposal-RFP Requirements

(a) Cost/Price considerations are weighted less than the combined Technical factors. The degree of Cost/Price importance will increase with the degree of equality of the proposals in relation to Technical capability, or when it is so significantly high as to diminish the value of the technical superiority to the Government.

(1) If the Cost Proposal should be so unreasonably high or unrealistically low that meaningful discussions with the offeror are precluded, further evaluation will be discontinued and the overall proposal may be considered unacceptable.

(b) Each Offeror's cost proposal will be evaluated to calculate a most-probable cost. The Government will conduct a cost realism analysis on each proposal in accordance with DFARS 215.801 to determine if the proposed cost (a) represents the most-probable cost, (b) are realistic for the work to be performed, (c) reflect a clear understanding of the requirements, and (d) are consistent with the various elements of the Offeror's technical proposal. The Government may adjust the proposed cost for purposes of evaluation based upon the results of the cost realism evaluation.

In conducting the cost realism analysis, the Government will assess all elements of proposed cost and fee, and supporting data, including the following: (1) Realism of all costs associated with all proposed labor categories, including rates per hour, number of hours proposed, and labor escalation rates; (2) Realism of the cost of indirect cost, proposed travel, per diem, other direct costs, consultant and subcontracting costs, other costs proposed and fee; (3) Realism of any other costs necessary to fulfill the requirements of the work described in the solicitation; (4) Reasonableness of the maximum cost-plus-fixed-fee stated in Section B measured against the technical effort proposed by the offeror.

### M.3 EVALUATION OF OPTIONS

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interest, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

### M.4 BASIS FOR AWARD

The basis for award will be an integrated assessment, using the above stated evaluation factors, of the potential contractor's prospect for providing the Government's needs. The Government may make award without discussions with the offeror. The Government reserves the right to reject any or all proposals. The Government also reserves the right to award to other than the lowest offeror. The Government anticipates award to a single offeror; however, multiple awards may be made if determined more advantageous to the Government, cost and other factors considered.

# **Attachment 1:**

**RFP NUMBER: N00173-98-R-RS04**

## **TABLE OF CONTENTS**

**ATTACHMENT 1.1 – SECTION C: WORK STATEMENT**

**ATTACHMENT 1.2 – WORKFORCE REQUIREMENTS**

**ATTACHMENT 1.3 – DD FORM 1423-CONTRACT DATA REQUIREMENTS LISTS  
WITH ENCLOSURES (1) AND (2)**

**ATTACHMENT 1.4 – DD FORM 254-CONTRACT SECURITY CLASSIFICATION SPEC.**

**ATTACHMENT 1.5 – GOVERNMENT FURNISHED DATA/EQUIPMENT/FACILITIES**

**ATTACHMENT 1.1:**  
**SECTION C: DESCRIPTIONS/SPECIFICATIONS/WORK STATEMENT**

**C.1            BACKGROUND**

C.1.1 Introduction

The Space Sciences Division of the Naval Research Laboratory (NRL) conducts research in the fields of astronomy and astrophysics, solar-terrestrial physics, and atmospheric science. Satellites, rockets, and ground-based facilities are used to obtain information on radiation from the Sun and celestial sources, and to study the behavior of the ionosphere and high atmosphere. Research resulting from the Division's efforts are of importance in radio communications, in weather prediction, and in the understanding of natural radiation and geophysical phenomenon.

The focus of the research effort required herein is the Synthetic Scene Generation Model (SSGM), which is being developed by the Space Sciences Division for the Ballistic Missile Defense Organization (BMDO). The mission of the SSGM program is to serve the phenomenology modeling needs of the BMDO community, with applications to system engineering, test and evaluation, mission planning, and data analysis. SSGM achieves this by supplying software that generates time sequences of radiometric images of composite target and background components. Target and background radiances are computed from a variety of government and industry standard codes that are incorporated within the SSGM software architecture. The SSGM phenomenology components typically cover the spectral range of 2 to 25 microns, but they may include visible/ultraviolet and radar bands.

The SSGM has been developed in phases. In the initial phase, a "Prototype SSGM" was developed that used a limited set of pre-computed databases for each phenomenology component. In Phase II, a "Baseline SSGM" was developed that incorporated additional phenomenology components, a number of government standard phenomenology codes, and expanded databases. The Baseline SSGM included on-line phenomenology codes for terrain, cloud, horizon, earthlimb, space, nuclear, missile plumes, fuel vents, and mid-course objects. In the third phase, an "Operational SSGM" is being completed that is characterized by increased code speed and robustness, new and upgraded phenomenology components, expanded background and target databases, and enhanced usability.

C.1.2 Objective

The objective of this Request for Proposals (RFP) and Statement of Work (SOW) is (a) to acquire the necessary personnel, equipment and facilities to accomplish the tasks described herein that will lead to the successful development of a Phase Four SSGM.

### C.1.3 Scope of Work

In general, the successful Contractor shall perform research and development efforts for the design, development, performance, analysis, and documentation of Space Science Division projects and experiments. This work shall include, but may not be limited to, design, creation, integration, testing, operation and documentation of software packages of various levels of sophistication that will result in (a) incorporation of current phenomenology upgrades into the SSGM; (b) addition of new codes that address target and background modeling requirements, including data-driven models; (c) updating and expanding SSGM capabilities to seek out and address user requirements; (d) making the code more accessible by enhancing its ease of use and expanding its hardware options; and (e) increasing the SSGM's flexibility and execution speed by restructuring the code's architecture and optimizing algorithms.

This SOW defines specific tasks to be performed by the successful Contractor. The scope of this statement of work will include tasks in the following areas:

(a) **Infrastructure:** Which includes, but may not be limited to, code maintenance, configuration and release coordination, user support, and the conduct and coordination of customer meetings.

(b) **Phenomenology Upgrades and Initiatives:** Which include, but may not be limited to, expansion and enhancement of the current phenomenology models and databases.

(c) **Measurement Assimilation:** which includes, but may not be limited to, incorporation of target and background measurements to validate models, improve output fidelity, and sustain relevance to the phenomenology community;

(d) **Application Enhancement:** which includes, but may not be limited to, improvement and expansion of the SSGM software utility to meet user requirements and enhance ease of use; and

(e) **Architecture Evolution:** which includes, but may not be limited to evolution of the SSGM code's basic architecture to enhance efficiency in the development process, improve fidelity in the products, and enhance speed. This task may also include software activities that improve hardware flexibility, such as remote executions and use on non-SGI platforms.

## C.2 APPLICABLE DOCUMENTS

(RESERVED)

## C.3 SPECIFIC REQUIREMENTS

This section contains the detailed requirements for this effort. The Contractor shall accomplish these requirements using the guidelines and directions referenced in Section C.2 entitled Applicable Documents, unless use of these guidelines is modified by the Contracting Officer's Representative

(COR) pursuant to Contract Section G-4 entitled Technical Direction Memorandum. The Contractor shall not incorporate proprietary hardware or software in any deliverable developed under this contract without prior written approval of the COR.

### **C.3.1 TASK 1 – INFRASTRUCTURE**

The contractor shall provide the personnel, equipment and facilities necessary to perform the infrastructure efforts required under this SOW. The work required under this task shall include, but may not be limited to: (a) code maintenance, (b) code integration and testing, (c) configuration and release coordination, (d) component and technical user support, (e) user symposia and training coordination, (f) technical review and meeting conduct and coordination, and (g) submission of deliverables.

#### **C.3.1.1 Subtask 1.1 – Code Maintenance**

The Contractor shall maintain those portions of the SSGM Code that are not developed directly by NRL. The Contractor shall also (a) collect reported problems with the SSGM code, ancillary codes and utilities, databases, and corresponding documentation, and (b) solicit requests for changes to the SSGM model from the user community. In response to receipt of problem reports and requests for change, the Contractor shall (a), collect and review problem reports and suggested changes, (b) establish problem report and change request solutions and test plans for the Contracting Officer's Representative (COR) to review, (c) execute problem report and change request solutions and test plans at the COR's direction, and (d) document problem fixes and change requests when they are implemented. The Contractor shall track the status of each problem report and change request using the GNATS software program. The Contractor shall also coordinate with the Independent Verification and Validation (IV&V) contractor to identify and correct problem areas.

#### **C.3.1.2 Subtask 1.2 – Code Integration and Test**

Pursuant to technical direction from the COR, the Contractor shall integrate all approved modification and additions to the SSGM code and databases. The Contractor shall also develop a plan for (a) testing all model components and (b) performing integration testing. Contractor will implement this plan upon approval by the COR.

#### **C.3.1.3 Subtask 1.3 – Configuration and Release Management**

The Contractor shall institute a configuration management system to organize, manage and control the separate phenomenology models and databases, different ancillary units, and various internal and external code releases. The resulting system shall perform several code roll-ups and releases each year. The Government anticipates at least one release annually to the SSGM user community, and at least one additional internal release to NRL and developers.

The Contractor shall deliver upgrades of the SSGM to the User community. The Contractor shall perform the code roll-ups which precede each major delivery. The Contractor shall also release new CD-ROM sets containing the SSGM software suite and phenomenological databases in accordance with technical direction. Distribution of classified databases to users who specifically request them shall be coordinated through the COR. The Contractor shall also provide interim code and database patches, as required by the COR, to users via the NRL SSGM ftp site.

#### C.3.1.4 Subtask 1.4 – Component and Technical User Support

The Contractor shall, as directed, provide technical assistance and support for established technical users of the phenomenology components and models. This support shall include, but may not be limited to, (a) answering user questions, (b) resolving user problems, and (c) providing technical expertise in applicable areas as required by the COR.

#### C.3.1.5 Subtask 1.5 – User Symposia and Training

The Contractor shall plan, organize, coordinate, manage and conduct at least one user symposium per year. The purpose of the symposium shall be to foster interest in the SSGM with the primary goals of both expanding the user community and increasing use of the SSGM among established users. The symposium shall also serve as a forum for soliciting, discussing and exploring (a) problems encountered with the SSGM, (b) changes requested to the SSGM, and (c) additional user requirements for the SSGM.

The Contractor shall also provide technical expertise in areas related to the phenomenology components in the SSGM system for training classes conducted by NRL for both new and experienced users.

#### C.3.1.6 Subtask 1.6 – Reviews and Meetings

The Contractor shall plan, organize, and conduct at least three internal reviews per year, which shall include contractor team personnel, NRL personnel, and IV&V contractor personnel.

The Contractor shall also participate in briefings, reviews, and meeting with organizations other than NRL in order to promote, improve or enhance the SSGM program. Meetings with external organizations may be initiated by either NRL or the Contractor, but shall be coordinated with the COR.

### C.3.1.7 Subtask 1.7 – Reports and Other Deliverables

In addition to the code and database releases required in Section C.3.1.3 above, the Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

## C.3.2 TASK 2 – PHENOMENOLOGY UPGRADES AND INITIATIVES

Phenomenology models are the foundation of the SSGM, and the goal of this program is to provide the most up-to-date codes for modeling the phenomena critical to the BMDO user community. Given this, the component phenomenology codes within SSGM require constant updating, upgrading and expansion. New phenomenology codes and upgrades to existing codes are frequently developed outside the SSGM program and NRL. For this reason, the Contractor shall coordinate its efforts with NRL and code-developing organizations to maximize the incorporation of new and upgraded phenomenology codes into the SSGM.

### C.3.2.1 Subtask 2.1 – Component Upgrades

In accordance with COR direction, the Contractor shall (a) incorporate upgrades, updates and expansions of phenomenology models into the SSGM as they become available; and (b) develop radiometric error estimates for each component, and report them as part of the SSGM output.

Examples of the applicable components and the codes upon which they are based include, but may not be limited to, (a) Natural Background components such as aurora (Rad\_A), clouds (CLDSIM), earth limb (Rad\_E), space (CBSD), and earth terrain (GENESSIS); (b) Atmospheric codes such as MOSART, MODTRAN, and SAMM, which compute transmission and path radiance; (c) Target phenomenology components and codes such as boosting missile plumes (SPF, SIRR, CAMERA, and CHARM), missile hardbodies with ascent heating (OSC), debris (KIDD), fuel vents, midcourse objects (OSC and OPTISIG), laser hardbody (DELTAS), and hardbody radar cross section (XPATCH); and (d) nuclear background phenomena in the infrared and radio spectra.

The Government anticipates that recent and ongoing collections programs, such as the Midcourse Space Experiment (MSX), MSTI, and Willow Dune, will result in substantial improvement of the predictive capabilities of the present codes.

### C.3.2.2 Subtask 2.2 – Component Additions

The Contractor shall add new phenomenology models to the SSGM program as they are developed to improve scene generation fidelity and address new and changing requirements with the BMDO and SSGM user community. Potential new phenomenology models include, but may not be limited

to, hypervelocity impact phenomenon, resident space objects, astrometric star catalogs, post-boost vehicle plume and hardbody, midcourse debris models, and synthetic aperture radar.

### C.3.2.3 Subtask 2.3 – Database Upgrades and Additions

Many phenomenology codes used by SSGM require databases that define geometries and material properties. For example, the cloud component accesses files describe various types of clouds and cloud formations, such as cirrus, cumulonimbus, and stratus clouds. The terrain component accesses files describe different types of terrain features, such as sea ice, open water, mountains, desert, and tundra at different spatial resolutions and extent. Target components also use databases to define the basic specifications required to model given missile plumes and midcourse objects. For example, SSGM currently has over 20 different boosting targets including theater, strategic ballistic missiles, and cruise missiles, as well as an extensive collection in its midcourse object libraries for OSC, OPTISIG, DELTAS, and XPATCH.

Given this information, and in accordance with COR direction, the Contractor shall, (a) develop and host background and target databases in response to BMDO requests and user community requirements; (b) upgrade existing databases, especially target databases; and (c) modify SSGM target databases that contain inaccurate or obsolete specifications to ensure the fidelity of signatures and acceptance by both the user community and the government.

### **C.3.3 TASK 3 – MEASUREMENT ASSIMILATION**

Phenomenological measurements play a fundamental role in improving models and in verification and validation. The credibility of the SSGM component models and the SSGM in general depends on the program keeping pace with the current and planned data collection and analysis activities of the greater phenomenology community.

For this reason, the Contractor shall (a) assimilate phenomenological measurements into the SSGM models and databases in coordination with both NRL and the other various government organizations responsible for component phenomenology codes; (b) perform data analyses to determine the fidelity of SSGM output; (c) integrate new phenomenology models as they become available; (d) use the results of data measurement analyses to identify the strengths and deficiencies of models and to assess model uncertainties.

The Government also has a requirement to compare measurements (images and one dimensional time series) to the equivalent SSGM output. Pursuant to this requirement, the Contractor shall design and develop a software utility to perform this function. The required utility shall include basic image processing and signal processing functions.

The Contractor shall also validate databases and develop validated databases for as many phenomenological regimes as data is available.

#### **C.3.4 TASK 4 – APPLICATION ENHANCEMENT**

The SSGM program has a requirement to increase code and constituent model accessibility to the phenomenology and system design communities by increasing the SSGM's ease of use and range of applicability. Examples of how this requirement may be accomplished include, but may not be limited to: (a) Expansion of certain SSGM features which are not directly related to the phenomenology components; (b) Developing separate, stand-alone utilities to assist the user in setting up and defining scenarios and creating or modifying targets and trajectories; and (c) By designing customized versions of the SSGM to satisfy the particular needs of a user group and to facilitate their use of the code.

Pursuant to this requirement and in accordance with the needs stated in greater detail below, the Contractor shall analyze, develop, and recommend methods to increase the SSGM's ease of use and expand the SSGM's applicability in four broad areas: (a) Utility upgrades, (b) development of new utilities, (c) Core SSGM enhancements, and (d) Fast SSGM. The Contractor shall submit these recommendations to the COR for review and concurrence prior to implementation.

##### **C.3.4.1 Subtask 4.1 – Utility Upgrades**

The Contractor shall upgrade the various stand-alone utilities included in the SSGM delivery on an as-needed basis, as required by user demand for new or different features, or by the necessity to keep the utilities current with community standards.

The Contractor shall also upgrade other utilities during the course of the contract which shall include, but may not be limited to, (a) the Target Builder Tool, (b) the Prism Sensor Model, (c) the Powered Flight Tool, and (d) The Parametric Analysis Tool

##### **C.3.4.2 Subtask 4.2 – New Utilities**

The Contractor shall research, design, recommend, develop, and implement new utilities and tools that will enhance the SSGM's ease of use and increase the areas in which the SSGM can be applied. The Contractor shall submit all new utilities and tools to the COR for evaluation and acceptance prior to implementation, in accordance with Attachment 1.3, CDRL A004. Examples of these new utilities include, but may not be limited to, tailored toolkits and new routines to assist users in developing new trajectories for both targets and observers and engagement geometries for missile interceptors.

#### C.3.4.3 Subtask 4.3 – Core SSGM Enhancements

The Government anticipates that modifications may be required to the core SSGM code to increase the SSGM's ease of use and range of applicability. Pursuant to this, the Contractor shall research, design, recommend, develop, and implement new features to the Core SSGM code that will enhance the code's usability and applicability. The Contractor shall solicit inputs from the SSGM user community and consider BMDO system requirements in performing this task. The Contractor shall submit all Core SSGM Code enhancements to the COR for evaluation and acceptance prior to implementation, in accordance with Attachment 1.3, CDRL A004. Examples of core SSGM enhancements include, but may not be limited to, new observer modes and the addition of multiple observers.

#### C.3.4.4 Subtask 4.4 – Fast SSGM

The Contractor shall investigate, design, recommend, develop, and implement algorithmic, software, and hardware methodologies to significantly enhance the SSGM's speed, with a goal of approaching real-time speed (at least 10 hertz). The purpose of this task is to make physics-based models available to a wider range of simulations, including hardware-in-the-loop simulations and training systems. Examples of methodologies to be investigated may include, but may not be limited to, (a) code and component restructuring, (b) parallel processing, and (c) distributed processing. The Contractor shall submit all recommendations for enhancing the SSGM's speed to the COR for evaluation and acceptance prior to implementation, in accordance with Attachment 1.3, CDRL A004.

### **C.3.5 TASK 5 – ARCHITECTURAL EVOLUTION**

Much of the code currently imbedded within the SSGM was designed and written in the early 1990's, and many of the incorporated phenomenology components pre-date this. Given the notable advancements in hardware and software engineering capabilities since that time, the Government has a current requirement for research and development activities directed toward evolving the SSGM model. The Architectural Evolution task will address requirements for those activities that will improve the SSGM code's capability and flexibility by making fundamental changes in the software architecture, methodology, and language.

Pursuant to this requirement and in accordance with the needs stated in greater detail below, the Contractor shall analyze, develop, and recommend methods to improve the SSGM's capabilities and flexibility (a) through rehosting the SSGM to different hardware platforms, and (b) through re-engineering. The Contractor shall submit these recommendations to the COR for review and concurrence prior to implementation.

#### C.3.5.1 Subtask 5.1 – Rehost for Other Hardware Platforms

The current SSGM is designed to operate exclusively Silicon Graphics Unix workstations. Given the increased computational capability of high end personal computers using Windows NT, the Government anticipates that PC-based hardware is now capable of running the SSGM. Pursuant to this requirement, the Contractor shall plan, recommend, and execute SSGM code changes necessary to port the SSGM to a high-end PC running Windows NT. The Contractor shall also plan, recommend, and execute changes required to run SSGM on other UNIX platforms, specifically SUN Microsystem workstations running the Solaris operating system. The Contractor shall submit all recommendations for re-hosting revisions to the COR for evaluation and acceptance prior to implementation.

#### C.3.5.2 Subtask 5.2 – Re-Engineering

The Contractor shall investigate, design, recommend, develop and implement changes to the SSGM software architecture, methodology, and languages that will (a) improve code capability, interoperability, and flexibility; (b) result in greater development productivity; (c) result in expanded software capability; (d) improve fidelity; and (e) result in faster code execution. The required changes shall also ease addition and implementation of new phenomenology components, models, and databases. The Contractor shall submit all recommendations for re-engineering revisions to the COR for evaluation and acceptance prior to implementation

**ATTACHMENT 1.2:**  
**WORKFORCE REQUIREMENTS**

GENERAL:

As stated previously (See Section H.4), the Government estimates that approximately 980,000 labor hours will be required across the 60-month period of performance. The yearly hourly usage will generally be spread evenly over each year of the contract. It is anticipated that the following labor categories will be required under any resulting contract: (a) Program Manager, (b) Chief Scientist, (c) Plume Phenomenologist, (d) Staff Scientist, (e) Programmer/Scientist, (f) Hardbody Programmer/Scientist, (g) Atmospheric Programmer/Scientist, (h) Celestial Background Programmer/Scientist, (i) Nuclear Staff Scientist, (j) Nuclear Component Computer Scientist, (k) Hardbody Phenomenologist, (l) Hardbody Staff Scientist, (m) Hardbody Programmer, (n) Hardbody Programmer/Analyst, (o) Applications Task Manager, (p) Radar Programmer/Scientist, (q) Kinetic Kill Phenomena Specialist, (r) Scientist/Programmer, (s) Software Engineer, (t) Application and Utilities Software Engineer, (u) Software Test Engineer, and (v) Administrative Assistant. The following paragraphs address educational and experience requirements and describe typical duties required for each of the labor categories listed above.

**(1) PROGRAM MANAGER**

(a) Educational Requirements - The Project Manager shall as a minimum possess a Ph.D. degree in a Physical Science.

(b) Experience - The Program Manager shall possess a minimum of five (5) years of demonstrable relevant experience in (i) managing and directing scientific and software development efforts; (ii) infrared target and background phenomenology and its application to NMD and TMD programs; and (iii) managing and coordinating work efforts for at least 20 professional, including subcontractors, if applicable.

(c) Typical Duties - The Project Manager shall serve as the Contractors overall manager on this development effort, and shall act as the single point of contract with the Governments Contracting Officer and the Contracting Officer's Representative (COR). The Project Manager's responsibilities shall include, but may not be limited to, (i) managing the SSGM's technical and programmatic aspects, including software design and development, scientific modeling, and data analysis; (ii) managing contractor personnel; (iii) managing any subcontracts that may be negotiated under any resultant contract and coordinating subcontractor efforts; and (iv) implementing COR technical direction, including ensuring completion and timely delivery of CDRLs.

**(2) CHIEF SCIENTIST**

(a) Educational Requirements - Each Chief Scientist shall, as a minimum, possess a Ph.D. in a Physical Science.

(b) Experience - Each Chief Scientist shall possess a minimum of five (5) years of demonstrable relevant experience in infrared target and background phenomenology. The Government prefers a nationally-recognized phenomenology expert.

(c) Typical Duties – The Chief Scientist's duties shall include, but may not be limited to: (i) overseeing integration of SSGM components and models; (ii) monitoring technical quality of SSGM outputs; and (iii) addressing issues of common phenomenological concern.

**(3) PLUME PHENOMENOLOGIST**

(a) Educational Requirements - Each Plume Phenomenologist shall, as a minimum, possess a Ph.D. in a Physical Science or Engineering.

(b) Experience - Each Plume Phenomenologist shall possess demonstrable relevant experience in fluid mechanics, gas dynamics, and radiative transfer, and shall be a nationally-recognized expert in plume phenomenology and related technical disciplines. Each Plume Phenomenologist shall possess a minimum of five (5) years of demonstrable experience in (i) plume phenomenology, including data analysis and model development; and (ii) managing technical tasks and professional staff.

(c) Typical Duties – The Plume Phenomenologist's tasks shall include, but may not be limited to: (i) coordinating and leading development of new exhaust plume components; (ii) coordinating and leading the enhancement and upgrade of existing SSGM plume components; (iii) supervising analysis of plume measurements and their application to plume model validation; (iv) monitoring and reporting on ongoing and future model development and exhaust plume measurement programs within the plume phenomenology community; and (v) presenting the SSGM plume capability at internal and external reviews.

**(4) STAFF SCIENTIST**

(a) Educational Requirements - Each Staff Scientist shall, as a minimum, possess a Bachelor's degree in Engineering or Physics.

(b) Experience - Each Staff Scientist shall possess a minimum of five (5) years of demonstrable experience in (i) computational fluid dynamics and radiative transfer/imaging, applied to exhaust plume phenomenology and data analysis; and (ii) working knowledge of standard plume codes such as CHARM, SIRRM, SPF, and CHAMP.

(c) Typical Duties – The Staff Scientist’s tasks shall include, but may not be limited to: (i) designing and developing plume phenomenology components; (ii) developing and implementing plume databases; (iii) testing and verifying plume components; and (iv) analyzing relevant plume data for model development and validation.

#### **(5) PROGRAMMER/SCIENTIST**

(a) Educational Requirements - Each Programmer/Scientist shall, as a minimum, possess a Bachelor’s degree in Engineering or Physics.

(b) Experience - Each Programmer/Scientist shall possess (i) a minimum of two (2) years of demonstrable experience in plume model development and infrared plume data analysis; (ii) a minimum of five (5) years of demonstrable programming experience which shall include Fortran, C, and C++; (iii) demonstrable working knowledge of standard plume codes such as CHARM, SIRRM, SPF, and CHAMP; and (d) demonstrable knowledge of numerical methods and computational tools.

(c) Typical Duties – The Programmer/Scientists tasks shall include, but may not be limited to: (i) developing and maintaining software for plume components; (ii) developing and implementing test plans for plume components; and (iii) assisting in plume data analysis and plume model validation.

#### **(6) HARDBODY PROGRAMMER/SCIENTIST**

(a) Educational Requirements - Each Hardbody Programmer/Scientist shall, as a minimum, possess a Bachelor’s degree in Engineering or Physics.

(b) Experience - Each Hardbody Programmer/Scientist shall possess (i) a minimum of two (2) years of demonstrable experience in active and passive hardbody signature model development and data analysis ; (ii) a minimum of five (5) years of demonstrable programming experience which shall include Fortran, C, and C++; (iii) demonstrable working knowledge of DELTAS; and (d) demonstrable knowledge of numerical methods and computational tools.

(c) Typical Duties – The Hardbody Programmer/Scientists tasks shall include, but may not be limited to: (i) developing and maintaining software for active and passive missile hardbody signature components; (ii) developing and implementing test plans for active and passive hardbody signature components; and (iii) assisting in hardbody data analysis and hardbody model validation.

**(7) ATMOSPHERIC PROGRAMMER/SCIENTIST**

(a) Educational Requirements - Each Atmospheric Programmer/Scientist shall, as a minimum, possess a Masters degree in a Physical Science.

(b) Experience - Each Atmospheric Programmer/Scientist shall possess (i) a minimum of five (5) years of demonstrable experience in atmospheric physics and chemistry ; (ii) a minimum of five (5) years of demonstrable experience in modeling atmospheric phenomena; (iii) demonstrable working knowledge of MOSART, MODTRAN,SAMM,SHARC, and SIGS; and (d) a minimum of four (4) years of demonstrable experience in Fortran programming.

(c) Typical Duties – The Atmospheric Programmer/Scientists tasks shall include, but may not be limited to: (i) designing and developing software for earthlimb and aurora SSGM components; (ii) developing and implementing test plans for earthlimb and aurora components; and (iii) assisting in analysis of atmospheric measurements.

**(8) CELESTIAL BACKGROUND PROGRAMMER/SCIENTIST**

(a) Educational Requirements - Each Atmospheric Programmer/Scientist shall, as a minimum, possess a Masters degree in a Physical Science.

(b) Experience - Each Celestial Background Programmer/Scientist shall possess (i) a minimum of five (5) years of demonstrable experience in astronomy; (ii) a minimum of five (5) years of demonstrable experience in modeling celestial phenomena; (iii) demonstrable working knowledge of CBSD; and (iv) a minimum of three (3) years of demonstrable experience in Fortran programming.

(c) Typical Duties – The Celestial Background Programmer/Scientists tasks shall include, but may not be limited to: (i) designing and developing SSGM software components for galactic stars, HII regions, InfraRed Cirrus, Solar System objects such as asteroids, moons, and planets; and diffuse and structural zodiacal radiation; (ii) developing and implementing test plans for the celestial components; and (iii) assisting in analysis of astronomical measurements.

**(9) NUCLEAR STAFF SCIENTIST**

(a) Educational Requirements - Each Nuclear Staff Scientist shall, as a minimum, possess a Ph.D. in a Physical Science.

(b) Experience - Each Nuclear Staff Scientist shall possess (i) a minimum of five (5) years of demonstrable experience in nuclear weapons effects and atmospheric physics and chemistry; (ii) a demonstrable working knowledge of the Defense Special Weapons Agency nuclear codes –

NORSE, IRSim and PEM; and (iii) demonstrable expertise in radiative transport, image processing, and numerical methods.

(c) Typical Duties – The Nuclear Staff Scientists tasks shall include, but may not be limited to technical efforts and assistance in developing and improving the SSGM nuclear effects components.

#### **(10) NUCLEAR COMPONENT COMPUTER SCIENTIST**

(a) Educational Requirements - Each Nuclear Component Computer Scientist shall, as a minimum, possess a Bachelors Degree in Computer Science or Mathematics.

(b) Experience - Each Nuclear Component Computer Scientist shall possess (i) a minimum of three (3) years of demonstrable programming experience in Fortran; (ii) a demonstrable working familiarity with several of the Defense Special Weapons Agency nuclear codes; and (iii) a minimum of one (1) year demonstrable experience in C++.

(c) Typical Duties – The Nuclear Component Computer Scientist tasks shall include, but may not be limited to (i) designing and developing software for nuclear SSGM components; and (ii) developing and implementing test plans for nuclear components.

#### **(11) HARDBODY PHENOMENOLOGIST**

(a) Educational Requirements - Each Hardbody Phenomenologist shall, as a minimum, possess a Masters Degree in Engineering or a Physical Science.

(b) Experience - Each Hardbody Phenomenologist shall possess (i) a minimum of five (5) years of demonstrable experience in thermal, fluid, and optical analysis applied to optical signatures and trajectory analysis; (ii) a minimum of five (5) years of demonstrable experience with signature prediction codes, such as OSC and OPTISIG; (iii) demonstrable knowledge of aeroprediction codes, such as USAF Missile DATCOM, and powered-flight codes, such as ATTACK (PFP/PFAST), STAMP, and/or DICE; (iv) a minimum of five (5) years of demonstrable experience with signature prediction codes, such as OSC and OPTISIG, to model a variety of objects, including re-entry vehicles, satellites, and penaids; (v) a minimum of five (5) years of programming experience with Fortran; and (vi) a minimum of two (2) years of programming experience with C/C++.

(c) Typical Duties – The Hardbody Phenomenologist’s tasks shall include, but may not be limited to (i) overseeing the technical and programmatic aspects of the development of new mid-course hardbody components and the refining for existing ones; (ii) keeping current with ongoing and future model development in the hardbody phenomenology and threat intelligence communities; (iii) designing and developing new hardbody signature and trajectory components; (iv) enhancing current SSGM hardbody and trajectory components; (v) supervising and assisting software personnel in implementing the component designs; (vi) developing new hardbody target model libraries and matching aerodynamic and gravimetric tables for signature and trajectory modeling; (vii) testing and verifying midcourse components.

## **(12) HARDBODY STAFF SCIENTIST**

(a) Educational Requirements - Each Hardbody Staff Scientist shall, as a minimum, possess a Masters Degree in Physics or Engineering.

(b) Experience - Each Hardbody Staff Scientist shall possess (i) a minimum of five (5) years of demonstrable experience in thermal, fluid, and optical analysis applied to optical signatures; and (ii) a minimum of five (5) years of demonstrable experience working with signature prediction codes (OSC and OPTISIG) to model a variety of objects, including re-entry vehicles and penairds.

(c) Typical Duties – The Hardbody Staff Scientist’s tasks shall include, but may not be limited to (i) developing new midcourse target model libraries for use in the missile hardbody and midcourse components of SSGM; and (ii) testing and verifying models using OSC and available measurement data.

## **(13) HARDBODY PROGRAMMER**

(a) Educational Requirements - Each Hardbody Programmer shall, as a minimum, possess a Bachelors Degree in Physical Science, Engineering, or Computer Science.

(b) Experience - Each Hardbody Programmer shall possess (i) a minimum of three (3) years of demonstrable experience in modeling hardbody phenomenology; (ii) a minimum of three (3) years of demonstrable programming experience with Fortran and C/C++; and (iii) demonstrable familiarity with the OSC and OPTISIG signature prediction codes.

(c) Typical Duties – The Hardbody Programmer’s tasks shall include, but may not be limited to (i) designing and developing new SSGM hardbody signature components and associated utilities/tools; (ii) assisting in the development of target model libraries and related databases necessary for SSGM execution; and (iii) developing and implementing test plans for the same.

**(14) HARDBODY PROGRAMMER/ANALYST**

(a) Educational Requirements - Each Hardbody Programmer/Analyst shall, as a minimum, possess a Bachelors Degree in Physical Science, Engineering, or Computer Science.

(b) Experience - Each Hardbody Programmer/Analyst shall possess (i) a minimum of two (2) years demonstrable experience in hardbody model development and infrared hardbody data analysis; (ii) a minimum of two (2) years demonstrable programming experience with Fortran and C++; and (iii) demonstrable familiarity with the OSC and OPTISIG signature prediction codes.

(c) Typical Duties – The Hardbody Programmer/Analyst’s tasks shall include, but may not be limited to (i) designing and developing SSGM hardbody signature components and associated utilities/tools; (ii) assisting in the development of target model libraries and related databases necessary for SSGM execution; and (iii) developing and implementing test plans for the same.

**(15) APPLICATIONS TASK MANAGER**

(a) Educational Requirements - Each Applications Task Manager shall, as a minimum, possess a Ph. D. in a Physical Science, Engineering, or Mathematics.

(b) Experience - Each Application Task Manager shall possess (i) a minimum of five (5) years demonstrable experience in infrared target and background phenomenology; and (ii) a minimum of five (5) years demonstrable experience in managing technical tasks and professional staff.

(c) Typical Duties – The Application Task Manager’s tasks shall include, but may not be limited to (i) coordinating and leading efforts to increase SSGM’s ease of use and range of applicability, including enhancing and upgrading existing SSGM utilities and the development of new SSGM stand-alone utilities; and (ii) designing utilities and supervising their development and implementation among scientific and software personnel.

**(16) RADAR PROGRAMMER/SCIENTIST**

(a) Educational Requirements - Each Radar Programmer/Scientist shall, as a minimum, possess a Bachelor’s degree in a Physical Science with four years experience.

(b) Experience - Each Radar Programmer/Scientist shall possess (i) a minimum of three (3) years demonstrable experience in radar; (ii) a minimum of three (3) years demonstrable experience in modeling radar phenomenon; (iii) a demonstrable working knowledge of XPATCH; (iv) a minimum of three years demonstrable programming experience with Fortran; and (v) a minimum of two (2) years of demonstrable programming experience with C/C++.

(c) Typical Duties – The Radar Programmer/Scientist’s tasks shall include, but may not be limited to (i) designing and developing software for radar SSGM components; (ii) developing and implementing test plans for radar components; and (iii) assisting in the analysis of radar measurements.

#### (17) **KINETIC KILL PHENOMENON SPECIALIST**

(a) Educational Requirements - Each Kinetic Kill Phenomenon Specialist shall, as a minimum, possess a Ph.D. in a Physical Science or Engineering.

(b) Experience - Each Kinetic Kill Phenomenon Specialist shall possess (i) a minimum of five (5) years demonstrable experience in thermal, fluid, and optical analysis; and (ii) a minimum of five (5) years demonstrable experience in kinetic impact phenomenon.

(c) Typical Duties – The Kinetic Kill Phenomenon Specialist’s tasks shall include, but may not be limited to (i) Overseeing the technical aspects of the development and refinement of SSGM components dealing with kinetic kill phenomenon, including debris and impact signatures; (ii) remaining current with ongoing and future testing and model development in the kinetic kill phenomenology community; (iii) designing and developing new kinetic kill signature components; (iv) enhancing current SSGM hardbody and trajectory components; (v) supervising and assisting software personnel implementing the component designs; and (vi) testing and verifying kinetic kill components.

#### (18) **SCIENTIST/PROGRAMMER**

(a) Educational Requirements - Each Scientist/Programmer shall, as a minimum, possess a Ph.D. in a Physical Science.

(b) Experience - Each Scientist/Programmer shall possess (i) a minimum of five (5) years demonstrable experience in scattering, heat transfer, and radiative transport; (ii) a minimum of five (5) years demonstrable experience with cloud and terrain background modeling; a minimum of five (5) years demonstrable programming experience with Fortran, C, and C++; and (iv) a demonstrable knowledge of numerical methods and computational tools.

(c) Typical Duties – The Scientist/Programmer’s tasks shall include, but may not be limited to (i) developing and maintaining software for cloud and terrain components; (ii) developing and implementing test plans for cloud and terrain components; and (c) assisting in cloud and terrain data analysis and cloud and terrain model validation.

## (19) SOFTWARE ENGINEER

(a) Educational Requirements - Each Software Engineer shall, as a minimum, possess a Bachelor’s degree in Computer Science.

(b) Experience - Each Software Engineer shall possess (i) a minimum of three (3) years demonstrable experience in software configuration management and configuration control software; (ii) a minimum of two (2) years demonstrable experience with release management; (iii) a minimum of three (3) years demonstrable programming experience with C and C++; (iv) a minimum of three (3) years demonstrable programming experience with UNIX; (v) a demonstrable familiarity with the GNATS software; and (vi) a demonstrable familiarity with Silicon Graphics Workstations.

(c) Typical Duties – The Software Engineer’s tasks shall include, but may not be limited to (i) integrating phenomenology components into the SSGM code architecture; (ii) performing code maintenance on the core SSGM Code; (iii) maintaining configuration control of the code and related databases; (iv) tracking and responding to problem reports and change requests submitted through the GNATS software; and (v) producing code and database roll-ups for annual and interim deliveries.

## (20) APPLICATION AND UTILITIES SOFTWARE ENGINEER

(a) Educational Requirements - Each Application and Utilities Software Engineer shall, as a minimum, possess a Bachelor’s degree in Computer Science.

(b) Experience - Each Application and Utilities Software Engineer shall possess (i) a minimum of three (3) years demonstrable programming experience with C and C++; and (ii) a minimum of three (3) years demonstrable programming experience with UNIX.

(c) Typical Duties – The Application and Utilities Software Engineer’s tasks shall include, but may not be limited to (i) designing and developing software that implements stand-alone utilities and SSGM enhancements which increase SSGM’s ease-of-use and range of applicability; (ii) maintaining existing SSGM utilities; (iii) responding to problem reports and change requests submitted through the GNATS software; and (iv) maintaining configuration control of the utilities.

**(21) SOFTWARE TEST ENGINEER**

(a) Educational Requirements - Each Software Test Engineer shall, as a minimum, possess a Bachelor's degree in Computer Science, Mathematics, or a Physical Science.

(b) Experience - Each Software Test Engineer shall possess (i) a minimum of two (2) years demonstrable experience with infrared target and background actual and synthetic imagery; (ii) a minimum of two (2) years demonstrable experience with developing test plans; (iii) a minimum of two (2) years of demonstrable experience with image processing software; (iv) a demonstrable familiarity with UNIX, and (v) a demonstrable familiarity with the operation of SSGM and its output products.

(c) Typical Duties – The Software Test Engineer's tasks shall include, but may not be limited to (i) developing and executing a software test plan which tests phenomenology component interaction; (ii) examining and analyzing SSGM outputs, especially imagery, for fidelity and consistency; (iii) providing assessments of the components (inputs, operations, and outputs) that are independent of the component developers; (iv) documenting the results of test processes and reporting these results internally and to NRL as required.

**(22) ADMINISTRATIVE ASSISTANT**

(a) Educational Requirements - Each Administrative Assistant shall, as a minimum, possess an Associate Degree.

(b) Experience - Each Administrative Assistant shall possess (i) a minimum of two (2) years demonstrable experience performing administrative, word processing, and graphics support tasks; and (ii) demonstrable knowledge and experience with Windows 95 or MacOS and the following Microsoft Office programs: Word, PowerPoint, Excel, and Project.

(c) Typical Duties – The Software Administrative Assistant's tasks shall include, but may not be limited to (i) providing general administrative, word processing, and graphics support for program management; (ii) assisting in the preparation of technical presentations; and (iii) maintaining a library of briefings and reports.

# CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 220 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Public DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Office for the Contract/PR No. listed in Block E.

<b>A. CONTRACT LINE ITEM NO.</b> 0002		<b>B. EXHIBIT</b> A		<b>C. CATEGORY:</b> TOP _____ TM _____ OTHER _____	
<b>D. SYSTEM / ITEM</b>			<b>E. CONTRACT / PR NO.</b> RFP: N00173-98-R-RS04		<b>F. CONTRACTOR</b> (To be determined at time of award)
<b>1. DATA ITEM NO.</b> A001	<b>2. TITLE OF DATA ITEM</b> Monthly Cost and Performance Reports				<b>3. SUBTITLE</b>
<b>4. AUTHORITY (Data Acquisition Document No.)</b>			<b>5. CONTRACT REFERENCE</b> Sections B, C, & H		<b>6. REQUIRING OFFICE</b> NRL CODE 7604
<b>7. DD 250 REQ</b> LT	<b>8. DIST STATEMENT REQUIRED</b>	<b>9. FREQUENCY</b> MONTHLY	<b>10. DATE OF FIRST SUBMISSION</b> See Blk. 16	<b>11. DISTRIBUTION</b>	
<b>8. APP CODE</b>	<b>11. AS OF DATE</b> See Blk. 16	<b>12. DATE OF SUBSEQUENT SUBMISSION</b> See Blk. 16	<b>13. ADDRESS</b>	<b>14. COPIES</b>	<b>15. TOTAL</b>
<b>14. ADDRESS</b>	<b>15. DRAFT</b>	<b>16. REG</b>	<b>17. REPR</b>	<b>18. TOTAL</b>	<b>19. TOTAL</b>
<b>16. REMARKS</b>					
Written Reports, in accordance with Enclosure (2) - Reporting Requirements Instructions, shall be made monthly.					
Block 12 - 15 days after the end of the first month after contract execution.					
Block 13 - 15 days after the end of each subsequent month.					
For written technical reports and for letter reports containing scientific or technical information, the distribution in Enclosure (1) applies.					
<b>1. DATA ITEM NO.</b> A002	<b>2. TITLE OF DATA ITEM</b> Contract Final Report				<b>3. SUBTITLE</b>
<b>4. AUTHORITY (Data Acquisition Document No.)</b>			<b>5. CONTRACT REFERENCE</b> Sections B, C, & H		<b>6. REQUIRING OFFICE</b> NRL CODE 7604
<b>7. DD 250 REQ</b> DD**	<b>8. DIST STATEMENT REQUIRED</b>	<b>9. FREQUENCY</b> One/R	<b>10. DATE OF FIRST SUBMISSION</b>	<b>11. DISTRIBUTION</b>	
<b>8. APP CODE</b>	<b>11. AS OF DATE</b> See Section F	<b>12. DATE OF SUBSEQUENT SUBMISSION</b>	<b>13. ADDRESS</b>	<b>14. COPIES</b>	<b>15. TOTAL</b>
<b>14. ADDRESS</b>	<b>15. DRAFT</b>	<b>16. REG</b>	<b>17. REPR</b>	<b>18. TOTAL</b>	<b>19. TOTAL</b>
<b>16. REMARKS</b>					
A Final Report is defined as a scientific or technical report which summarizes all work accomplished under the Contract.					
Reprints of published articles may be accepted as technical reports with the concurrence of the COR.					
** DD 250 required only for acceptance by the COR designated in Section G.					
<b>G. PREPARED BY</b> NRL-SSC Code 3235:RDS		<b>H. DATE</b> 18 SEP 98		<b>I. APPROVED BY</b>	
				<b>J. DATE</b>	

<b>17. PRICE GROUP</b>
<b>18. ESTIMATED TOTAL PRICE</b>

<b>17. PRICE GROUP</b>
<b>18. ESTIMATED TOTAL PRICE</b>

# CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 230 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and reviewing the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Printing Office for the Contract PR No. Found in Block E.

<b>A. CONTRACT LINE ITEM NO.</b> 0002		<b>B. EXHIBIT</b> A		<b>C. CATEGORY:</b> YDP _____ TM _____ DTMB _____													
<b>D. SYSTEM / ITEM</b>			<b>E. CONTRACT / PR NO.</b> RFP: N00173-98-R-RS04		<b>F. CONTRACTOR</b> (To be determined at time of award)												
<b>1. DATA ITEM NO.</b> A003	<b>2. TITLE OF DATA ITEM</b> Formal and Informal Technical Reports			<b>3. SUBTITLE</b>													
<b>4. AUTHORITY (Data Acquisition Document No.)</b>			<b>5. CONTRACT REFERENCE</b> Sections B, C, & H		<b>6. REQUIRING OFFICE</b> NRL Code 7604												
<b>7. DD 250 REQ</b> LT	<b>8. DIST STATEMENT REQUIRED</b>	<b>9. FREQUENCY</b> ONE/R	<b>10. DATE OF FIRST SUBMISSION</b> **	<b>14. DISTRIBUTION</b>													
<b>8. APP CODE</b>	<b>11. AS OF DATE</b> 0	<b>12. DATE OF SUBSEQUENT SUBMISSION</b> **	<b>4. ADDRESSEE</b>	<b>h. COPIES</b>													
<b>10. REMARKS</b>			<b>14. DISTRIBUTION</b>	<b>h. COPIES</b>													
Block 12: 30 days after completion of task or end of period of performance, whichever is first  Block 13: Two weeks after notification from Contracting Officer's Representative.  * For written technical reports and for letter reports containing scientific or technical information, the distribution shown in Enclosure (1) to Exhibit (A) applies.			NRL Code 7604	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Draft</th> <th colspan="2">Final</th> </tr> <tr> <th>Reg</th> <th>Pages</th> <th>Reg</th> <th>Pages</th> </tr> <tr> <td></td> <td></td> <td>1</td> <td></td> </tr> </table>		Draft		Final		Reg	Pages	Reg	Pages			1	
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<b>15. TOTAL</b> →				1													
<b>1. DATA ITEM NO.</b> A004	<b>2. TITLE OF DATA ITEM</b> Software, Databases, Models, Algorithms, Documentation, Instructions, Source Code, etc.			<b>3. SUBTITLE</b>													
<b>4. AUTHORITY (Data Acquisition Document No.)</b>			<b>5. CONTRACT REFERENCE</b> Sections B, C, & H		<b>6. REQUIRING OFFICE</b> NRL CODE 7604												
<b>7. DD 250 REQ</b> LT	<b>8. DIST STATEMENT REQUIRED</b>	<b>9. FREQUENCY</b> ONE/R	<b>10. DATE OF FIRST SUBMISSION</b> SEE BLK. 16	<b>14. DISTRIBUTION</b>													
<b>8. APP CODE</b>	<b>11. AS OF DATE</b>	<b>12. DATE OF SUBSEQUENT SUBMISSION</b> SEE BLK. 16	<b>4. ADDRESSEE</b>	<b>h. COPIES</b>													
<b>10. REMARKS</b>			<b>14. DISTRIBUTION</b>	<b>h. COPIES</b>													
Block 12 - 30 days after completion of task or end of the period of performance Block 13 - 2 weeks after notification from the COR. This requirement shall include, but may not be limited to, computer models, data bases; algorithms, documentation, application software, utility software, upgrades, enhancements, updates or expansions to existing models, components or algorithms; computer processes, technical manuals and user's guides; user training manuals; and, as applicable, software component and system design documents and source codes. All deliverables shall be computer compatible and in the format specified by the COR in accordance with the Contract clause entitled "Technical Direction Memorandum"			NRL Code 7604	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Draft</th> <th colspan="2">Final</th> </tr> <tr> <th>Reg</th> <th>Pages</th> <th>Reg</th> <th>Pages</th> </tr> <tr> <td></td> <td></td> <td>1</td> <td></td> </tr> </table>		Draft		Final		Reg	Pages	Reg	Pages			1	
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<b>G. PREPARED BY</b> NRL-SSC Code 3235:RDS		<b>H. DATE</b> 18 SEP 98		<b>I. APPROVED BY</b>													
				<b>J. DATE</b>													

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE



## INSTRUCTIONS FOR REPORT DISTRIBUTION

### DEFINITIONS

Final Technical Report: A final technical report is issued at the completion of the contract and will include (1) a summary of all work accomplished, with references to appropriate technical reports which provide details, (2) an index of all technical reports, and (3) an index of all publications.

Monthly Cost and Performance Reports: Non-technical, administrative report setting forth current progress, predictions and plans for reporting period, and information required in Enclosure Number 2.

### MINIMUM DISTRIBUTION

Technical Reports: The minimum distribution of technical reports and the final report submitted in connection with this contract is as follows:

ADDRESSEE	DODAAD CODE	NUMBER OF COPIES	
		UNCLASSIFIED/ UNLIMITED	CLASSIFIED/ LIMITED AND CLASSIFIED
Contracting Officer's Representative (COR) (See Section F.2)	N00173	1	1
Administrative Contracting Officer (ACO) (Block 6 SF 26)	(****)	1	1
Director, Naval Research Laboratory ATTN: Code 5227, Wash., DC 20375	N00173	1	1
Naval Research Laboratory - SSC, ATTN: Code 7035, SSC, MS 39529-5004	N00173	3	3

(NRL-SSC Code 7035 will provide the required number of copies to Defense Technical Information Center (DTIC)).

If the Contracting Officer directs, the Contractor shall make additional distribution of technical reports in accordance with a supplemental distribution list provided by the Contracting Officer. The supplemental distribution list shall not exceed 250 addresses.

Non-Technical Reports: The minimum distribution for non-technical reports submitted in connection with this contract is as follows:

ADDRESSEE	DODAAD CODE	NUMBER OF COPIES	
		UNCLASSIFIED/ UNLIMITED	CLASSIFIED/ LIMITED AND CLASSIFIED
COR	N00173	1	1
ACO	(****)	1	1

(\*\*\*\*) - To be provided at time of award

ENCLOSURE NUMBER 2 TO DD FORM 1423 (ATTACHMENT 1.3)  
CONTRACT DATA REQUIREMENTS LIST

1. INSTRUCTIONS FOR MONTHLY COST AND PERFORMANCE REPORTING REQUIREMENTS

This report shall specify:

1. Contract Number;
2. Reporting Period Covered by Report;
3. Total Amount Funded for Contract;
4. \*Total Amount Invoiced to Date;
5. \*Total Amount Invoiced for this Reporting Period ;
6. Estimated Cost to complete - with explanation if more than Total Amount Funded for Contract (See # 3, above);
7. Schedule Status - indicate if efforts are on schedule, or if not, indicate reason(s) for delay and how it affects final delivery;
8. Contractor hours expended on NRL property. This portion of the report shall include the following information: (a) employee name; (b) number of hours worked; and (c) specific contract task involved for each employee;
9. Technical Progress - brief narrative indicating technical progress made, significant accomplishments or meetings attended and/or participated in;
10. Briefs/Reports generated;
11. Travel Activity;
12. Plans for next month;
13. Technical problem areas and potential solutions.

\*This shall also include a breakdown by ACRNs prorated in proportion to the unliquidated balance. (See Section G.)

**DEPARTMENT OF DEFENSE**  
**CONTRACT SECURITY CLASSIFICATION SPECIFICATION**  
*(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)*

**1. CLEARANCE AND SAFEGUARDING SER: 059-98**

a. FACILITY CLEARANCE REQUIRED

SECRET

b. LEVEL OF SAFEGUARDING REQUIRED

SECRET

**2. THIS SPECIFICATION IS FOR: (X and complete as applicable)**

a. PRIME CONTRACT NUMBER	
b. SUBCONTRACT NUMBER	
c. SOLICITATION OR OTHER NUMBER	Due Date (YYMMDD)
X 76-0429-98	

**3. THIS SPECIFICATION IS: (X and complete as applicable)**

a. ORIGINAL (Complete date in all cases)	Date (YYMMDD)
X	981013
b. REVISED (Supersedes all previous specs)	Revision No.
c. FINAL (Complete Item 5 in all cases)	Date (YYMMDD)

**4. IS THIS A FOLLOW-ON CONTRACT?**  YES  NO. If Yes, complete the following:  
 Classified material received or generated under \_\_\_\_\_ (Preceding Contract Number) is transferred to this follow-on contract.

**5. IS THIS A FINAL DD FORM 254?**  YES  NO. If Yes, complete the following:  
 In response to the contractor's request dated \_\_\_\_\_, retention of the identified classified material is authorized for the period of \_\_\_\_\_

**6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)**

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
FOR RFP PURPOSES ONLY, NOT VALID FOR ACTUAL CONTRACT AWARD		

**7. SUBCONTRACTOR**

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
N/A		N/A

**8. ACTUAL PERFORMANCE**

a. LOCATION	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
N/A		N/A

**9. GENERAL IDENTIFICATION OF THIS PROCUREMENT**

R&D CONTRACT IN THE AREA OF SYNTHETIC SCENE GENERATION MODELING

10. THIS CONTRACT WILL REQUIRE ACCESS TO:	YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		X	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY		X
b. RESTRICTED DATA	X		b. RECEIVE CLASSIFIED DOCUMENTS ONLY		X
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		X	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	X	
d. FORMERLY RESTRICTED DATA	X		d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE		X
e. INTELLIGENCE INFORMATION:			e. PERFORM SERVICES ONLY		X
(1) Sensitive Compartmented Information (SCI)		X	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES		X
(2) Non-SCI	X		g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	X	
f. SPECIAL ACCESS INFORMATION		X	h. REQUIRE A COMSEC ACCOUNT		X
g. NATO INFORMATION		X	i. HAVE TEMPEST REQUIREMENTS		X
h. FOREIGN GOVERNMENT INFORMATION		X	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS		X
i. LIMITED DISSEMINATION INFORMATION		X	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE		X
j. FOR OFFICIAL USE ONLY INFORMATION		X	l. OTHER (Specify)	X	
k. OTHER (Specify)			AIS AUTHORIZED ON DIS-APPROVED SYSTEMS		

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

Direct  Through (Specify):

Commanding Officer, Naval Research Laboratory, Washington, DC 20375-5320, Code 7604.5.

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

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

Access to classified information is not required for the purpose of submitting a bid/proposal for this statement of work. However, prior to award of contract, the successful contractor will be required to have a SECRET facility clearance, SECRET storage capabilities, and personnel available with DoD granted personnel security clearances commensurate with level of access required for performance of contract.

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

Yes  No

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

Yes  No

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

a. TYPED NAME OF CERTIFYING OFFICIAL <b>TINA SMALLWOOD</b>	b. TITLE <b>Contracting Officer, Security</b>	c. TELEPHONE (Include Area Code) <b>(202)767-2240/2521</b>
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d. ADDRESS (Include Zip Code)  
**Naval Research Laboratory  
 4555 Overlook Ave., SW  
 Washington, DC 20375-5320**

e. SIGNATURE  


**17. REQUIRED DISTRIBUTION**

<input checked="" type="checkbox"/>	a. CONTRACTOR
<input type="checkbox"/>	b. SUBCONTRACTOR
<input checked="" type="checkbox"/>	c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
<input type="checkbox"/>	d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
<input type="checkbox"/>	e. ADMINISTRATIVE CONTRACTING OFFICER
<input checked="" type="checkbox"/>	f. OTHERS AS NECESSARY <b>1221.11, 7604.5, 7602</b>

**ATTACHMENT 1.5:**  
**GOVERNMENT FURNISHED DATA/EQUIPMENT/FACILITIES**

DESCRIPTION	MODEL	QUANTITY
SOFTWARE PACKAGE (SSGM CODE, TECHNICAL & SOFTWARE REFERENCE MANUALS, USER'S MANUAL)		1
GNATS SOFTWARE PROGRAM		1