

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

1. SOLICITATION NUMBER

2. (X one)

N00173-98-R-SE04

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.SE)
NAVAL RESEARCH LABORATORY
DEPARTMENT OF THE NAVY
STENNIS SPACE CENTER, MS 39529-5004

4. ITEMS TO BE PURCHASED (Brief description)

RESEARCH AND DEVELOPMENT SERVICES

5. PROCUREMENT INFORMATION (X and complete as applicable)

a. THIS PROCUREMENT IS UNRESTRICTED

b. THIS PROCUREMENT IS A _____ % 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)

Sogard, Eric J.

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) 688-5980

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

DD FORM 1707 REVERSE, MAR 90

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FROM

AFFIX
STAMP
HERE

SOLICITATION NUMBER	
N00173-98-R-SE04	
DATE (YYMMDD)	LOCAL TIME
98 OCT 13	3:30PM

TO

2. CONTRACT NO. 3. SOLICITATION NO. **N00173-98-R-SE04** 4. TYPE OF SOLICITATION SEALED BID (IFB) NEGOTIATED (RFP) 5. DATE ISSUED **11 SEP 98** 6. REQUISITION/PURCHASE NO.

7. ISSUED BY **Procuring Contracting Officer, Code 3235.EJS** CODE **N68462** 8. ADDRESS OFFER TO (If other than Item 7)
Naval Research Laboratory
Department of the Navy
Stennis Space Center, MS 39529-5004

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

SOLICITATION

9. Sealed offers in original and L-12, 13 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in Bldg 1100, SSC, MS 39529-5004 until 3:30 local time 13 OCT 98
(Hour) (Date)

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

10. FOR INFORMATION CALL: **Eric J. Sogard** A. NAME B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) **(228) 688-5980**

11. TABLE OF CONTENTS

(✓)	SEC.	DESCRIPTION	PAGE(S)	(✓)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
X	A	SOLICITATION/CONTRACT FORM	1	X	I	CONTRACT CLAUSES	15-18
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2-3	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
X	C	DESCRIPTION/SPECS./WORK STATEMENT	4	X	J	LIST OF ATTACHMENTS	19
X	D	PACKAGING AND MARKING	4	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE	4-5	X	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	20-36
X	F	DELIVERIES OR PERFORMANCE	5	X	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	36-43
X	G	CONTRACT ADMINISTRATION DATA	6-10	X	M	EVALUATION FACTORS FOR AWARD	44-45
X	H	SPECIAL CONTRACT REQUIREMENTS	10-14				

OFFER (Must be fully completed by offeror)

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

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the

13. DISCOUNT FOR PROMPT PAYMENT 10 CALENDAR DAYS % 20 CALENDAR DAYS % 30 CALENDAR DAYS % CALENDAR DAYS %

14. ACKNOWLEDGMENT OF AMENDMENTS	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME CODE FACILITY 16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN

15B. TELEPHONE NO. (Include area) 15C. CHECK IF REMITTANCE ADDRESS 17. SIGNATURE 18. OFFER DATE

AWARD (To be completed by Government)

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

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETI- 10 U.S.C. 2304(c) () 41 U.S.C. 253(c) () 23. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM

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

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

(Signature of Contracting Officer)

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

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

*Not Separately Priced

SECTION C**DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK****C-1 STATEMENT OF WORK**

The work and services to be performed hereunder shall be subject to the requirements and standards contained in Attachment (1), Statement of Work, with Exhibit A, Contract Data Requirements List, and all other Attachments cited in Section J, which are incorporated by reference into Section C.

SECTION D**PACKAGING AND MARKING****D-1 PACKAGING AND MARKING**

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 E**INSPECTION AND ACCEPTANCE****E-1 INSPECTION AND ACCEPTANCE CLAUSES INCORPORATED BY REFERENCE:****FAR CLAUSE TITLE**

52.246-9 - Inspection Of Research And Development (Short Form) (APR 1984)

DFARS CLAUSE TITLE

252.246-7000 - Material Inspection And Receiving Report (DEC 1991)

E-2 INSPECTION AND ACCEPTANCE

Inspection and acceptance of the final delivery under this contract must be accomplished by the Contracting Officer's Representative (COR) designated in Section G of this contract within seven (7) days after delivery of final report. Inspection and acceptance will be performed at the Naval Research Laboratory, Washington DC 20375-5326.

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 *

(* To be filled in at time of award)

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 – Mr. Eric J. Sogard, Code 3235, (228) 688-5980, DSN 485-5980, 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 filled in 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 owing, in accordance with the applicable payment (and fee) clause(s) of this contract.

(c) Invoices requesting interim payments shall be submitted no more than once every two weeks, unless another time period is specified in the Payments clause of this contract. For indefinite delivery type contracts, interim payment invoices shall be submitted no more than once every two weeks for each delivery orders. There shall be a lapse of no more than 30 calendar days between performance and submission of an interim payment invoice.

(d) In addition to the information identified in the Prompt Payment clause herein, each invoice shall contain the following information, as applicable:

- (1) Contract line item number (CLIN)
- (2) Subline item number (SLIN)
- (3) Accounting Classification Reference Number(ACRN)
- (4) Payment terms
- (5) Procuring activity
- (6) Date supplies provided or services performed
- (7) Costs incurred and allowable under the contract
- (8) Vessel (e.g., ship, submarine or other craft) or system for which supply/service is provided

(e) A DD Form 250, "Material Inspection and Receiving Report",

** is required with each invoice submittal.

** is required only with the final invoice.

** is not required.

(f) A Certificate of Performance

** shall be provided with each invoice submittal.

** is not required.

(g) The Contractor's final invoice shall be identified as such, and shall list all other invoices (if any) previously tendered under this contract.

(h) Cost of performance shall be segregated, accumulated and invoiced to the appropriate ACRN categories to the extent possible. When such segregation of costs by ACRN is not possible for invoices submitted with CLIN/SLINS with more than one ACRN, an allocation ratio shall be established in the same ratio as the obligations cited in the accounting data so that costs are allocated on a proportional basis.

G-5 INCREMENTAL FUNDING

This contract is incrementally funded pursuant to the Limitation of Funds clause, FAR 52.232-22. Funds are allotted to the contract in the amount of \$ * and it is estimated that they are sufficient for contract performance through *.

(* To be filled in at time of award)

G-6 PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS (COST-REIMBURSEMENT)

The purpose of these instructions is to permit the paying office to charge the accounting classification citations in the contract in a manner that reflects the performance of the contract. These instructions do not create any obligation on the part of the Government or the contractor nor do they in any way alter any obligation created by any other provision of the contract. Invoices 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-7 ACCOUNTING AND APPROPRIATION DATA

(To be filled in 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 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 total level of effort for performance of this contract shall be 30,450 total hours of direct labor for the base year and 30,450 total hours of direct labor for each of the option 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 2,538 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>	<u>NRL</u>	<u>OFF-SITE</u>
Sr Program Manager	950	20%	80%
Project Manager and Project Leader	1900	100%	-
Scientist	2850	40%	60%
Sr System Engineer	1900	20%	80%
Sr Engineer, Software	4750	100%	-
Engineer, Software	4750	100%	-
Sr Engineer, Hardware	1900	20%	80%
Engineer, General Design and Support	3800	100%	-
Mechanical Engineer, General Design and Support	1900	10%	90%
Engineer, Parts Specialist	950	-	100%
Project Analyst/Coordinator	950	-	100%
Sr Engineering Technician	950	100%	-
Sr Technical Writer/Editor	1900	-	100%
Administrative, Clerical and Graphics Support	1000	-	100%

H-4 SUBCONTRACTORS/CONSULTANTS

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

Subcontractor/Consultant Name	Time or Unit	Estimated Cost
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(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 \$25,000, including any fee, (ii) are proposed to exceed \$100,000, 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. In such cases consent shall be requested from the Administrative Contracting Officer.

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

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 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-7 ON-SITE USE OF GOVERNMENT PROPERTY

It is anticipated that Government property will be used by the contractor's personnel in the performance of that portion of the contract performed on-site at the U.S. Naval Research Laboratory (NRL) including any of its field sites. Such use will be on a rent free basis and all such property shall be considered to remain in the possession and control of the NRL for property responsibility and accountability purposes.

H-8 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-9 REPRESENTATIONS AND CERTIFICATIONS

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

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-far.npr.gov/References/References.html>

<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)
- 52.215-14 - Integrity of Unit Prices (OCT 1997)
- 52.215-17 - Waiver of Facilities Capital Cost of Money (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)
- 52.222-1 - 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 Handicapped Workers (APR 1984)
- 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 (OCT 1996)
- 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)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.232-9 - Limitation On Withholding Of Payments (APR 1984)
- 52.232-17 - Interest (JUN 1996)
- 52.232-18 - Availability Of Funds (APR 1984)
- 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)
- 52.242-13 - Bankruptcy (JUL 1995)
- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate V (APR 1984)
- 52.243-6 - Change Order Accounting (APR 1984)
- 52.243-7 - Notification Of Changes (APR 1984)fill in 30
- 52.244-2 - Subcontracts (Cost-Reimbursement And Letter Contracts) (OCT 1997) - 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)
- 52.246-23 - 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)
- 252.209-7003 - Compliance With Veterans' Employment Reporting Requirements (MAR 1998)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.215-7000 - Pricing Adjustments (DEC 1991)
- 252.223-7004 - Drug-Free Work Force (SEP 1988)
- 252.223-7006 - Prohibition On Storage And Disposal Of Toxic And Hazardous Materials (APR 1993)
- 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)
- 252.225-7025 - 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)
- 252.227-7000 - 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)
- 252.247-7023 - 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) - Statement Of Work - 12 Pages, With Exhibit A - DD Form 1423, Contract Data Requirements And Enclosure (1) - Instructions For Distribution- 1Page

- J-2** Attachment (2) - DD 254, Contract Security Classification Specification Form

- J-3** Attachment (3) – Personnel Qualifications, 5 pages.

- J-4** Attachment (4) – Requirements for On-Site Contractors – 5 pages

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 (FEB 1998)

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

(2) The small business size standard is _____.

(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 as part of its offer that it is, is not a small disadvantaged business concern.

(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.

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

"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 or 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.

**K-8 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-9 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-10 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-11 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-12 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-13 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-14 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-15 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

Name and Address of Entity Controlled by a Foreign Government	Description of Interest, Ownership Percentage, and Identification of Foreign Government
---	---

_____	_____
_____	_____
_____	_____
_____	_____

K-16 DFARS 252.219-7000 - SMALL DISADVANTAGED BUSINESS CONCERN REPRESENTATION (DOD CONTRACTS) (JUN 1997)

(a) *Definition.*

Small disadvantaged business concern, as used in this provision, means a small business concern, owned and controlled by individuals who are both socially and economically disadvantaged, as defined by the Small Business Administration at 13 CFR Part 124, the majority of earnings of which directly accrue to such individuals. This term also means a small business concern owned and controlled by an economically disadvantaged Indian tribe or Native Hawaiian organization which meets the requirements of 13 CFR Part 124.112 or 124.113, respectively. In general, 13 CFR Part 124 describes a small disadvantaged business concern as a small business concern--

- (1) Which is at least 51 percent unconditionally owned by one or more socially and economically disadvantaged individuals; or

- (2) In the case of any publicly owned business, at least 51 percent of the voting stock of which is unconditionally owned by one or more socially and economically disadvantaged individuals; and
- (3) Whose management and daily business operations are controlled by one or more such individuals.

(b) *Representations.*

Check the category in which your ownership falls--

Subcontinent Asian (Asian-Indian) American (U.S. citizen with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal)

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

Black American (U.S. Citizen)

Hispanic American (U.S. Citizen with origins from South America, Central America, Mexico, Cuba, the Dominican Republic, Puerto Rico, Spain, or Portugal)

Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians including Indian tribes or Native Hawaiian organizations)

Individual/concern, other than one of the preceding, currently certified for participation in the Minority Small Business and Capital Ownership Development Program under Section 8(a) of the Small Business Act

Other

(c) *Certifications.*

Complete the following--

(1) The Offeror is ___ is not ___ a small disadvantaged business concern.

(2) The Small Business Administration (SBA) has ___ has not ___ made a determination concerning the offeror's status as a small disadvantaged business concern. If the SBA has made a determination, the date of the determination was _____ and the Offeror--

___ Was found by SBA to be socially and economically disadvantaged and no circumstances have changed to vary that determination.

_____ Was found by SBA not to be socially and economically disadvantaged but circumstances which caused the determination have changed.

(d) *Penalties and Remedies.*

Anyone who misrepresents the status of a concern as a small disadvantaged business for the purpose 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 authority of the Small Business Act.

K-17 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-18 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-19 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-far.npr.gov/References/References.html>

<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) (JUN 1997)
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)
52.215-16	-	Facilities Capital Cost Of Money (OCT 1997)
52.222-24	-	Preaward On-Site Equal Opportunity Compliance Evaluation (APR 1984)(DEVIATION)
52.237-1	-	Site Visit (APR 1984)
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.

(a) Provide information described below. (See Section L- 13, Instructions For Submission and Information required to Evaluate Proposals.)

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

The Government contemplates award of a Cost Plus Fixed Fee –Term 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

(1) Information for the technical and management proposal shall be placed in Volume I and be completely separate from the cost proposal (Volume II).

(2) Proposal Identification/Mailing - The proposal should be packaged for delivery so as 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:

Solicitation No. N00173-98-R-SE04

Closing Date: (As specified in Block 9, RFP face page)

Attn: Code 3235

(3) Proposal Format and Length - No attempt is made to restrict the proposal format and style. However, the proposal should be written and organized so as to be compatible with the RFP, the Statement of Work, company's organization and accounting structure, and proposed cost estimate. Offerors are encouraged to use recycled paper and maximize the use of double sided copying when preparing responses to solicitations.

(4) Include a matrix indicating proposed labor hours by skill category required to perform the statement of work. This matrix shall not contain labor rates or any other indication of price. The Contractor shall propose labor hours in accordance with level of effort breakdown identified in Section H.3.

(5) 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.

(6) The following information is required for evaluation of your technical/management and cost proposal. Any additional information may be provided.

L-12VOLUME I - TECHNICAL/MANAGEMENT PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 5 COPIES

(a) Personnel Qualifications

The offeror shall provide evidence that is has, or has the ability to obtain, personnel with relevant experience in the scientific and technical areas described in the Statement of Work and Attachment (3). The offeror shall document the experience, education and other qualifications of all personnel proposed to accomplish the technical requirements. As a minimum, the offeror shall provide for each proposed individual (i) name of the proposed individual; (ii) proposed labor category, coinciding with labor categories listed in Section H.3.; (iii) resume, and (iv) status of current or ability to obtain a security clearance. Key personnel shall be identified as such.

(b) Past Performance

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 services similar in nature to this requirement. Include in the 5 any current contracts or subcontracts for similar 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 or 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

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.

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.

(c) Company Experience

The offeror shall provide a narrative description of company experience on providing research and technical effort similar to the requirements in the Statement of Work. This narrative shall discuss in detail the relationship between the company's experience and the tasks required under the Statement of Work and the particular sciences involved. Specifically, this narrative shall include scientific and technical tasks involving multidisciplinary approaches to research, discover, model and apply knowledge and technologies to models and simulations, space-flight payloads, flight experiments and their related instrumentation; design, development, fabrication, integration, test, calibration and operation of flight instrumentation and ground support equipment (GSE) that are required to collect, analyze, archive and distribute scientific data. Prior company experience should be identified by citing the contracting agency, period of performance of the contract and a summary of the nature of the work.

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 or scientific resources offered to meet the Government's requirements as stated in Section C of this solicitation.

L-13

VOLUME II - COST PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 2 COPIES

(a) The offeror shall submit a cost proposal with supporting information for each cost element consistent with offeror's cost accounting system. The supporting breakdown should include such elements as materials, direct labor, indirect cost, other costs such as travel/consultants/subcontractors, G&A, facilities capital cost of money, fee and any other supporting costs. The offeror shall provide exhibits as necessary to substantiate the cost elements. Should rates be used in the proposal which are not DCAA approved, the offeror shall provide complete documentation and the rationale for their use at time of proposal submission.

(b) MATERIALS – FOR EVALUATION PURPOSES ONLY

The offeror shall include a "Material" estimate of \$850,000.00, unburdened, per year for materials supplies and equipment to be procured in performance of this contract. This "Materials" estimate includes parts, components and supplies which are expected to be incorporated into end products or expended during performance and minor direct equipment expense.

(c) TRAVEL – FOR EVALUATION PURPOSES ONLY

The offeror shall include a "Travel" estimate of \$90,000.00, unburdened, per year for travel and subsistence involved in performance of this effort.

L-14 MULTIPLE AWARDS

The Contracting Officer may make multiple awards resulting from this solicitation.

L-15 SECURITY REQUIREMENTS

The following is a MANDATORY REQUIREMENT which must be fulfilled:

- (a) 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.
- (b) 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 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. The Government anticipates awarding a contract without discussions, but reserves the right to conduct discussions if it is determined by the Contracting Officer to be necessary. Discussions will be conducted following evaluations only with those offerors determined to have a reasonable chance of award.

M-2 EVALUATION FACTORS FOR AWARD

Proposals will be evaluated in accordance with the following criteria. The technical factor is more important than the cost factor. The technical sub-factors are listed in descending order of importance.

(a) TECHNICAL**(1) PERSONNEL QUALIFICATIONS**

The proposals will be evaluated on the offeror's demonstrated ability to provide personnel with (i) the appropriate qualifications set forth in Attachment (3), Personnel Qualifications; (ii) actual relevant experience in the scientific and technical areas set forth in the Statement of Work, these are highly specialized fields and personnel without actual experience in these areas will not be considered acceptable; and (iii) the ability to obtain a SECRET clearance prior to commencing work.

(2) PAST PERFORMANCE

Past performance will be evaluated on the basis of the quality of the work performed, timeliness of performance, cost control, and business relations. The evaluation will be based on the information provided pursuant to Section L 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).

(3) COMPANY EXPERIENCE

The proposal will be evaluated on the offeror's demonstrated company experience in performing projects requiring scientific and technical efforts which are similar or related to the effort required by the Statement of Work and company resources available. The proposal will be evaluated on the offeror's ability to demonstrate a minimum of (5) five years experience in each of the following areas: upper atmospheric, solar and astronomical research with specific scientific and technical experience as identified in Section L-12(c).

II. COST

(1) PROPOSED OVERALL COST

Proposed estimated cost and fixed-fee.

(2) THE REALISM OF THE PROPOSED COST

Cost Realism means that the costs in an offeror's proposal are realistic for the work to be performed; reflect a clear understanding of the requirements; and 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.

M-3 FAR 52.217-5 - EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, 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).

Statement of Work

1 INTRODUCTION

1.1 Background

The Naval Research Laboratory (NRL) is the Navy's corporate laboratory for conducting basic research and development in the space sciences. NRL supports a number of space experiments in the areas of upper atmospheric, solar, and astronomical research aboard Department of Defense (DoD), National Aeronautics and Space Administration (NASA), and other space platforms. NRL's scientists are involved with major research thrusts that include ultraviolet remote sensing of the upper atmosphere, spectrographic studies of the solar atmosphere, and astronomical radiation ranging from the ultraviolet through cosmic rays. To support this work, NRL maintains the resources and facilities required to design, construct, assemble, and calibrate space experiments and their ground support equipment (GSE). NRL also maintains a significant network of computer workstations, image-processing hardware and software, and special processors that are used to analyze and interpret data obtained from space observations. Among NRL's instrument development, data acquisition, analysis, modeling and simulations (M&S) efforts are the following activities:

- ◆ Selected observations in the ultraviolet and X-ray bands for the Space Test Program's Advanced Research and Global Observation Satellite (ARGOS) spaceflight mission. Experiments include the Global IMaging of the Ionosphere (GIMI), the High-Resolution Atmospheric and Auroral Spectroscopy (HIRAAS), the Low-Resolution Atmospheric and Auroral Spectroscopy (LORAAS), and the Unconventional Stellar Aspect (USA) flight instruments.
- ◆ An M&S tool supporting the Ballistics Missile Defense Office (BMDO) system definition and analysis efforts referred to as the Synthetic Scene Generation Model (SSGM). It enables the practical insertion of valid, high fidelity models into a common software framework providing a traceable standard to generate complex optical and radar signatures for the design, simulation and test of sensors and related system performance. SSGM benchmarks and measures the ability of advanced sensors, surveillance, and interceptor concepts to perform in the battlespace environment. It also supports sensitivity and trade-off analyses by providing a common phenomenology basis for missile defense studies.
- ◆ Performing the operational measurement and mapping of electron density (ED) and neutral density profiles (NDP) produced by NRL's Special Sensor Ultraviolet Limb Imager (SSULI) instrument that is hosted aboard Defense Meteorological Support Program (DMSP) satellites.
- ◆ Development, modeling, and simulation of atmospheric and near-space environmental data effects, models, and related databases.
- ◆ Activities and investigations to advance our understanding of the origin of the outer solar atmosphere, the corona, and of the coupling between the fine magnetic structure at the photosphere and the dynamic processes occurring in the corona.
- ◆ Conceptualization, M&S, design, and development of high-energy gamma-ray observatory instrumentation and calorimeters capable of observing celestial gamma ray sources.
- ◆ Development of compact instrumentation capable of monitoring total solar irradiance (TSI) with higher accuracy and precision than existing space-based devices to provide reliable determination of solar radiative forcing of climate and global change on seasonal, decadal, and centennial time scales.

Statement of Work

1.2 Scope

The scope of the efforts defined within this Statement Of Work (SOW), are quite broad and entail multi-disciplinary approaches to research, discover, model, and apply knowledge and technologies to models and simulations, spaceflight payloads, flight experiments and related instrumentation.

These activities require: (i) supporting spaceflight, sounding rocket, aircraft, and ground sensor systems, including payload processing and launch vehicle integration, GSE, mission operations, and resultant data processing, reduction, cataloging, archiving, and distribution; and (ii) design, development, fabrication, integration, test, calibration, and operation of flight instrumentation and related equipment that are required to collect, analyze, archive, and distribute scientific data.

The Contractor shall provide all personnel, supplies, materials, equipment and administration and shall provide scientific, engineering, technical, and analytical capabilities for the conceptualization, system engineering, design and development, and analysis of ongoing and proposed NRL projects and programs. This effort also includes the development and documentation of software in both laboratory and operational environments. The Contractor shall provide for the design, fabrication, assembly, integration, test, calibration, and operation of sophisticated scientific instruments, experimental payloads, and their GSE. The tasks will involve both on-site and off-site efforts and may result in scientific publications.

2 APPLICABLE DOCUMENTS

2.1 Government Documents

The following documents of the exact issue shown form a part of this document to the extent specified herein. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be considered a superseding requirement.

2.1.1 Specifications, Standards, and Handbooks

The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the Solicitation.

Statement of Work

2.1.1.1 Standards

Number	Title	Tailoring Guidelines
DoD-STD-2167A	Defense System Software Development http://tecnet0.jcte.jcs.mil:9000/htdocs/teinfo/directives/soft/ds2167a.html	As Specified by the COR
MIL-STD-1686	ESD Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment http://members.home.net/kolacki/MIL-STD-1686.htm	As Specified by the COR
MIL-STD-1815	ADA Programming Language http://tecnet0.jcte.jcs.mil:9000/htdocs/teinfo/directives/soft/ms1815a.html	As Specified by the COR
MIL-STD-498	Software Development and Documentation http://diamond.spawar.navy.mil/498/mil-498.html	As Specified by the COR
MIL-STD-1553	Digital Time Division Multiplex BUS http://diamond.spawar.navy.mil/specs/mil_std/mil_std_1553b.doc	As Specified by the COR

Military specifications can be obtained at the following web address:

<http://www.dodssp.daps.mil/>

2.1.2 Other Government Publications

Documents beginning with NASA are controlled by the National Aeronautics and Space Administration and may be obtained via their Internet Uniform Resource Locator (URL) address.

Number	Title	Tailoring Guidelines
NASA NRP-1124	NASA Reference Publication, Outgassing Data for Selecting Spacecraft Materials http://arioch.gsfc.nasa.gov/prd/prd.html	As Specified by the COR

3 REQUIREMENTS

The detailed SOW requirements and tasks are described in this section. The Contractor shall perform the tasks, provide the facilities for work accomplished off-site from NRL, and deliver all supplies, equipment, and items as set forth herein.

3.1 Program Status and Reporting

3.1.1 Project Management

The Contractor shall provide the management, control, and reporting functions necessary to manage, direct, control, and track the accomplishment of the efforts required under this SOW. The Contractor's program status and reporting efforts shall support SOW efforts from concept development, systems engineering, development, prototyping, fabrication, test, calibration, mission operation, and data reduction.

Statement of Work

3.1.2 Project Leader

The Contractor shall designate one senior on-site employee to serve as the Project Leader. The Project Leader shall be the point-of-contact for all technical performance issues, receiving direction from, and providing responses to the Contracting Officer's Representative (COR). Additionally, this person shall be responsible for supervising and directing the Contractor's employees. This position shall be a collateral duty for the assigned Contractor Project Leader.

3.1.3 Technical and Financial Status

The Contractor shall keep the COR well informed of contract efforts (i.e., technical, managerial, financial) with monthly reports, by telephone, and by visits, relative to the various tasks described in this SOW, and shall maintain liaison with COR. The Contractor shall prepare and submit a Quarterly Status Report (QSR), Monthly Financial Summary Report (MFSR), Monthly Contractor On-Site Labor Report (MCOLR) and a contract final report.

The QSR shall provide a brief narrative status of the technical process and status to each major task effort, any significant technical or project-specific problems, and the proposed resolution of the identified problem areas. The QSR shall identify any items that have impacted, or will impact schedule performance, cost, or task schedules. The QSR shall provide a status of materials, supplies, subcontracts, Government Furnished Materials or Equipment (GFM/GFE), Contract Data Requirements List (CDRL) items for the duration of the effort. The reports shall be in the contractor's format as approved by the COR.

The contractor shall provide a MCOLR by the fifth work day of each month for the preceding month. The report shall include the following: reporting period, contract number, contract value, current funding, date submitted, labor (including subcontractors) showing employee name and the number of hours worked on-site at NRL. If an employee and/or subcontractor worked on more than one task (as defined by the COR) then the accounting for each task shall be shown separately. The report shall be in the contractor's format as approved by the COR.

The MFSR shall contain a detailed financial report. The MFSR shall show the number of hours for each employee and/or subcontractor with labor overhead, G&A and fee costs. Details for the current period and total accrued cost shall be given. Expenses (e.g., travel, materials, training) shall be reported separately for each employee and/or subcontractor showing the overhead, G&A and fee costs. If an employee and/or subcontractor worked on more than one task (as defined by the COR), then the accounting for each task shall be shown separately. The MFSR shall include a listing of all materials, services, and supplies procured by the Contractor, along with a physical description, estimated and actual prices. The report shall be in the contractor's format as approved by the COR.

Statement of Work

3.1.4 Technical Documentation

The Contractor shall compose technical summaries and reports of surveys, investigations, or fact-finding efforts. The Contractor shall highlight documents or information reviewed or referenced; organizations contacted; a summary of efforts undertaken; key progress and accomplishments, problems, or findings; and appropriate recommendations, conclusions, and action items taken. The Contractor shall prepare and maintain program status and technical and programmatic presentations, and for other conferences, program, or review meetings. Logistical and/or administrative support shall be provided for various meetings, reviews, and conferences. The Contractor shall develop and provide briefings in the form of graphics transparencies and slides, posterboard charts, multi-media videos, or other specified media. The Contractor shall provide publications support by preparing visually effective briefing materials, video and multimedia presentations, programmatic and technical documentation, along with the necessary planning and coordination, to keep NRL personnel and the sponsoring agency informed of applicable program and technical information. Data to be produced shall include, viewgraphs and slides, videos, brochures, publications, photographs, WebPages and websites, and briefing materials supporting program and project objectives. The Contractor shall obtain, store, maintain, and reproduce technical data needed to fulfill the SOW requirements.

3.2 Concept Development and System Engineering

The Contractor shall provide engineering and scientific expertise for the functional analysis, interface definition, interoperability, design alternatives, and performance assessments for proposed NRL investigations and experiments. The Contractor shall evaluate experiments and testing of generic subsystems and components for applicability to specific investigations. This effort shall include ongoing flight and non-flight instruments supporting exploratory and advanced development projects that are related to the NRL's objectives in the areas of upper atmospheric, solar, and astronomical research. The Contractor shall conduct technical analyses for advanced sensing concepts. These shall identify and evaluate alternative technical issues, critical phases and reviews of potential problem areas, tradeoff studies with the attendant risk analyses, and specific recommendations for selected approaches. The Contractor shall develop interface control documents (ICDs) to assist in the interoperability design and assessment process. The Contractor shall monitor and support systems engineering and design activities and related documentation; participate in the system design process; recommend architecture design alternatives; assess reliability, and perform system engineering analyses. The Contractor shall prepare technical assessments, engineering analyses, and special investigations to identify, recommend, and implement resolutions of critical design or performance alternatives. The Contractor shall provide system level integration test plans and procedures; identify and report deficiencies; originate reviews for operations and maintenance procedures or checklists; support hardware and software reviews; provide "quick-look" engineering analyses and studies. The Contractor shall provide technical expertise to organize, support, and conduct technical interchange meetings (TIMs), Interface Control Working Group Meetings (ICWGs), Project Management Reviews (PMRs), design reviews, readiness reviews, and flight operations reviews.

Statement of Work

3.3 Flight Electronics and Avionics

3.3.1 Flight Processors and Controllers

The Contractor shall provide systems and detailed engineering expertise to specify and document controllers and central processors using reduced instruction set computers (RISC), radiation-tolerant microprocessors, digital signal processors (DSP), and other microprocessor-based designs, as approved by the COR. The Contractor shall design, develop, procure, fabricate, assemble, integrate, and test analog-to-digital converters (ADC), flight processors, and embedded controllers for ground and spaceflight applications. The Contractor shall make maximum use of field programmable gate arrays (FPGA) and standardized printed wiring board (PWB) formats (e.g., VME, SEM-E) that allow reuse of designs among multiple flight instruments and experimental payloads. The Contractor shall maintain and use CAD tools for the design and simulation of FPGA designs.

3.3.2 Interface and Data Handling Electronics

The Contractor shall provide systems engineering and detailed technical expertise to specify, document, and develop specific interface and data handling electronics for sensors, detectors, storage, and electro-mechanical devices. The Contractor shall design, develop, procure, fabricate, assemble, integrate, and test these interface units for ground and spaceflight applications. The Contractor shall design, build, and test interface and simulators to verify electronic subsystem functionality.

3.3.3 Circuit Card Design and Layout

The Contractor shall provide engineering skills required to design, layout, and document layout of PWB and Printed Wiring Assemblies (PWA) using Computer Aided Design (CAD) software tools like ORCAD. Design and assembly practices shall be consistent with NRL's requirements as directed by the COR.

3.3.4 Backplanes, Power Converters, and Chassis Units

The Contractor shall provide systems and mechanical design engineering to define and specify electrical and mechanical requirements for backplanes, power converters, and chassis units. The Contractor shall design, develop, procure, fabricate, assemble, integrate, and test backplanes, power converters, and chassis systems for ground and spaceflight applications.

3.4 Software Systems

3.4.1 Software Engineering Support

The Contractor shall provide software engineering support and technical assistance for technology assessments. The Contractor shall make maximum use of existing NRL software packages for analyses where appropriate, and in cases where existing packages are inadequate, the Contractor shall design, develop, and maintain additional software analytical packages to address specific problem investigations. The Contractor shall develop and maintain databases for the efficient use of scientific data and shall provide for information transfer to other software systems.

Statement of Work

3.4.2 Flight and Ground Software

The Contractor shall design, develop, fabricate, integrate, and test flight and ground software for use on existing and new flight instrumentation, experimental payloads, and their GSE. The flight code shall be developed using "C/C++" unless otherwise designated by the COR. The Contractor shall provide software-engineering expertise to develop the root and follow-on code supporting high-performance radiation-tolerant computer processor development, integration, and testing for flight applications. The Contractor shall take advantage of existing development facilities and resources, software designs, and related test capabilities. All new work shall be accomplished through extension or modification of current software systems and the developed software shall be appropriate for use in subsequent development projects. The Contractor shall establish a systematic software development process in consonance with the needs of the NRL and the flight instrument or experiment payload. The development process shall be described in a written plan that includes the following activities: development environment; systems requirements and analysis; system design; coding and unit testing; unit integration; qualification testing; and integral processes (e.g., configuration management). The Contractor shall make use of computer-aided software engineering (CASE) tools for documentation to the extent practical. Design approaches shall be presented during TIMs and design reviews to assure correctness of the design and appropriateness of the software.

3.4.3 Modeling and Simulation (M&S) Software

NRL is enhancing the Synthetic Scene Generation Model (SSGM) for BMDO with utilities to extract and display spectral information for terrestrial backgrounds and hard body targets. SSGM is based on the state-of-science theoretical work and significant software enhancements are anticipated to couple the SSGM to empirical measurements and provide increased confidence in the M&S results. The Contractor shall provide technical expertise to support NRL's design, development, module test, software integration, and user support for SSGM and related M&S software. The Contractor shall maintain an object-oriented analysis and programming methodology using a tailored process appropriate to the R&D community. All M&S software shall be delivered to NRL and integrated with existing and planned SSGM software builds to create an integrated operational software system resident at the NRL. The Contractor shall formulate and prepare specific tasks, perform integration and tests, and submit written documentation, including user guides, on the R&D efforts related to this task. The Contractor shall produce training manuals and conduct user training for the SSGM upgrades. The Contractor shall provide training to SSGM program personnel on the system's operation and maintenance. Training shall include instruction on database updates, rule base changes and updates, and user interface modification. Training shall include manuals, tutorials and hands-on demonstrations.

Statement of Work

3.4.4 Ground Data Analysis Software

NRL investigators are developing remote sensing algorithms (RSA) for extracting scientifically significant information from large data sets in performing the theoretical analysis required for interpretation of the resultant data. NRL's theoretical modeling and research led to the design and development of instruments scheduled to fly aboard the USAF's DMSP Block 5D-3 series of satellites. Operational Ground Data Analysis Software (GDAS) is under development to provide comprehensive space environmental data to the Space Forecast Center (SFC). The Contractor shall design, develop, test and verify, qualify, and install operational GDAS based on the RSAs. The Contractor shall use an object oriented analysis and programming (OOA/OOP) development methodology. The developed software shall use Ada to ensure compatibility with existing software suites. The software design shall be accomplished by using two computer software configuration items (CSCI) to implement the RSAs, process the resultant data, and graphically display the results on the SFC's computers. The software shall produce Sensor Data Records (SDRs) and shall use NRL's RSAs to create the Environmental Data Records (EDRs) using the raw sensor data and the satellite ephemeris and telemetry data. The software shall provide the operators with the capability to process and display selected SSULI data to support specialized nowcast and forecast operations. The Contractor shall provide options to use data obtained from the NRL's Remote Atmospheric and Ionospheric Detection System (RAIDS) instrument, the HIRAAS instrument, and the LORAAS instrument to calibrate and verify the GDAS algorithms and models. Alternative uses of the GDAS to meet other scientific and experimental payload needs shall be investigated.

3.4.5 Mission Planning, Scheduling, and Telemetry Display Software

The Contractor shall provide software engineering capabilities to develop planning and scheduling tools to support on-orbit operations and observations of scientific instruments. The software shall be capable of generating integrated schedules for spaceflight viewing and observations, space vehicle operations, and related communications support. The software shall provide a "quick-look" telemetry data display capability for the designated mission. The software shall be easily tailored for new applications by filling in database tables and generating a new user interface using commercially available development tools. The Contractor shall provide software for trending space vehicle and instrument engineering data outputs. The software shall provide telemetry and data displays. The software shall support pre-launch test operations and post-launch space vehicle data trending requirements.

3.4.6 Software Development Process

The Contractor shall implement a software development process of its own design that will work in conjunction with each project's configuration management system. The Contractor's process shall assure the orderly control of software products. The Contractor shall provide an effective mechanism to incorporate software changes, during development and operational use. Efforts shall include: (i) establishing an approved baseline configuration for the software (definition); (ii) maintaining configuration control over all changes in the baseline software (change control and processing); and (iii) providing traceability of the software baselines and changes to these baselines (configuration accounting).

Statement of Work

3.5 Ground Support Equipment (GSE)

The development of ongoing and new instrumentation and experimental payloads requires the capability to test and characterize their operation and performance under ambient and stressing conditions. Recent examples of such efforts include the ARGOS Central Electronics Bus Simulator (CEBusSim), the Space Vehicle Simulator (SVSIM), the ATIC Controller Simulator (ACS), the SSULI USA Test Set (USATS), and the JPEX Rocket Simulator (JPEXSIM). The Contractor shall provide the resources to design, develop, procure, fabricate, integrate, and test GSE to support experimental payload checkout and verification. The GSE shall simulate all instrument or payload interfaces with the space vehicle under the control of software to the maximum extent practical within schedule and budget constraints. The Contractor shall emphasize user friendliness through pull-down menus, automated testing, and compatibility with existing GSE and common support equipment. The design approaches shall be presented during TIMs and design reviews to assure correctness of the design and appropriateness of the GSE for the end use. Technical documentation, including user's guides shall be developed as required to support users within the R&D community.

3.6 Flight Instrument Support

3.6.1 Specialized Detector and Array Support

The Contractor shall provide scientific and engineering expertise to design, specify, acquire, assemble, maintain, retrofit, repair, and rework specialized detector, calorimeter, radiometer, and optical sensor assemblies, including wedge and strip type ultraviolet detectors. All activities under this effort shall be accomplished in strict collaboration through direction of the COR to ensure the calibration and performance needs of the mission are maintained.

3.6.2 Integration and Test (I&T)

The Contractor shall provide engineering test support and supplies for the integration of prototype and flight electronics systems with the optical bench, sensors and detectors, and electro-mechanical components of the flight instrumentation. The Contractor shall support I&T activities including natural environmental stresses (e.g., thermal, vacuum), electromagnetic compatibility (EMC), shock and vibration, and Comprehensive Performance Testing (CPT). The Contractor shall develop and prepare test plans, test reports, and other documentation to facilitate execution of the project. Test programs shall be developed and approved by the COR and shall identify the steps necessary to obtain the requisite data. The Contractor shall perform experimental and developmental tests using both common and mission-unique test equipment. The Contractor shall compile test results in formats approved by the COR for further analysis and inclusion within the final test reports.

3.6.3 Calibration

The Contractor shall provide scientific expertise, engineering test support, and supplies for NRL scientists and engineers performing special calibrations and reducing the resultant data sets. The Contractor shall develop and maintain documentation to implement calibration requirements. The Contractor shall provide the engineering expertise to develop, fabricate, install, and maintain high-vacuum calibration chambers and related systems supporting the calibration of UV, solar irradiance, and similar instruments.

Statement of Work

3.6.4 Payload Processing

The Contractor shall provide engineering test support and supplies for the integration of flight instruments and experimental payloads with the space vehicle. The Contractor shall provide pre-launch and post-launch flight instrument support.

3.7 General Laboratory Projects and Programs

The Contractor shall design, procure, fabricate, assemble, test, calibrate, and maintain specialized laboratory equipment, instrumentation, GSE, and facilities used by various projects and programs. The Contractor shall provide technical expertise to convert existing local and wide area networks (LAN/WAN) to a high-speed digital network. The contractor shall develop the specifications, acquire the hardware and software, install, and checkout for a fiber optic network backbone supporting the mission of scientific and experimental missions.

3.8 Mission Operations and Data Analysis

The Contractor shall provide the mission operations and the ground operations support required for scientific and experimental payloads. Activities shall include technical support to managing mission operations and flight operations, including mission planning. The Contractor shall support the development of special communications, computer security, tracking, or near real-time ground support requirements. The Contractor shall incorporate specific features into the flight and ground system design that lead to low-cost operation. The Contractor shall make maximum use of existing mission operations facilities and processes.

3.9 Systems Integration

3.9.1 Payload and Launch Processing

The Contractor shall support the requirements of the space vehicle integrating Contractor (SVIC) and the launch site integrating Contractor (LSIC) for systems safety, hazard analyses and reporting, experimental payload processing, and launch vehicle integration. These activities include, but are not limited to, reviewing facilities, assessing SVIC and LSIC requirements, and verifying that requirements are met. The Contractor shall coordinate with safety and logistical personnel to plan, document, and control the safety and procedural information necessary to assure safe and efficient payload processing according to requirements set forth in launch range regulations. The Contractor shall support the experimental payload and launch vehicle working groups that address space vehicle to payload integration, safety training, launch processing, pre-flight and post-flight operations, and related activities.

3.9.2 Processing Procedures

The Contractor shall provide the appropriate documentation for the experimental payload to space vehicle and launch vehicle processing activities. This shall include hazard data, experiment and space vehicle test plans and procedures, verifications, ground simulations, and functional tests supporting the processing and integration environment. The Contractor shall develop, maintain, and revise hazardous and non-hazardous operating procedures required by the SVIC and the LSIC.

Statement of Work

3.9.3 Systems Safety Program

The Contractor shall apply safety engineering and safety management principles, criteria, and techniques to optimize safety and enhance mission effectiveness within the constraints of operational effectiveness, time, and cost. System safety activities shall stress early hazard identification, evaluation, and elimination or reduction of residual risk to preclude system damage or destruction and injury to personnel. The system safety program shall be conducted using launch site regulations.

3.10 Product Assurance

NRL will establish requirements for product assurance concurrent with flight instrumentation and experimental payload design activities. These requirements will emphasize verification by test at the subsystem and system level.

- ◆ Electrical, Electromechanical, and Electronic (EEE) Parts - The Contractor shall implement a cost effective, tailored electronics parts program that includes the selection, qualification, acquisition, and correct application of electronic parts. The Contractor shall perform a parts engineering and procurement effort (including supplemental screening using guidelines approved by the COR) for scientific and experimental payloads.
- ◆ Quality Assurance - The Contractor's quality assurance (QA) program shall include policies, requirements, and activities during the design, fabrication, test, and delivery of flight instruments. The QA program shall emphasize quality tasks and their integration with the design, fabrication, and test phases, using guidelines approved by the COR for scientific and experimental payloads.
- ◆ Reliability Assurance - The Contractor shall provide a reliability assurance program during the design, fabrication, test, and delivery of flight hardware. All flight hardware shall be designed to preclude the propagation of failures across interfaces. The Contractor shall identify specific upgrades to enhance flight hardware reliability during TIMS and designs reviews.
- ◆ Configuration Management - The Contractor shall implement a streamlined and cost-effective configuration management process to assure the orderly control of hardware and software produced during the development process. The Contractor shall provide an effective mechanism to incorporate change control. Activities shall include: (i) establishing an approved baseline configuration (definition); (ii) maintaining configuration control over all changes in the baseline (change control and processing); and (iii) providing traceability of changes to the baselines (configuration accounting).
- ◆ Materials and Processes (M&P) - The Contractor shall implement an M&P control program using guidelines approved by the COR for scientific and experimental payloads.
- ◆ Contamination Control - The Contractor shall implement a tailored Contamination Control process to assure that flight hardware is not compromised due to molecular or particulate contamination.
- ◆ Design Reviews - The Contractor shall conduct a series of major reviews for all flight electronics and GSE developed under this SOW. These shall consist of a Preliminary Design Review (PDR), a Critical Design Review (CDR), and a Pre-Ship Review (PSR). Other reviews, required to comply with specific flight instrument needs, may be scheduled.

Statement of Work

- ◆ Test and Verification - The Contractor shall conduct a verification program that includes all significant environments and a functional verification, using end-to-end systems tests, in specific operational modes. The verification tests shall include software validation to assure that all requirements are verified during testing. Flight hardware tests shall address thermal-vacuum, dynamics, EMC/EMI, and natural space environments. The Contractor shall provide test plans for system and subsystem level tests.
- ◆ Software and Hardware Documentation - The Contractor shall be responsible for technical writing and editing tasks associated with the development of flight hardware, software, and GSE. The Contractor shall prepare and maintain technical documentation including analysis reports; specifications and ICDs; design descriptions for both hardware and software; test plans, procedures, and reports; documentation and parts list; and drawing packages providing for a system baseline. The Contractor shall use computer aided techniques for documents, specifications, plans, procedures, drawings, test data, operating instructions, electrical and electronic schematics, and reference data. The Contractor shall review and edit documents, manuals, reports, and documentation for accuracy, literacy, and technical content. The Contractor shall deliver all documentation in both hard copy and on electronic media. The Contractor shall provide technical data packages documenting these designs.

CONTRACT DATA REQUIREMENTS LIST

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FISC reporting burden for the collection of information is estimated to average 440 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 20533. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Printing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. ALL		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER _____	
D. SYSTEM / ITEM			E. CONTRACT / PR NO.		F. CONTRACTOR
1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Quarterly Status Report (QSR)			3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE Statement of Work (SOW) 3.1.3.		6. REQUIRING OFFICE COR (See section G.2)
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY Quarterly	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION
9. APP CODE		11. AS OF DATE *	13. DATE OF SUBSEQUENT SUBMISSION *		
16. REMARKS *QSR to be submitted 90 days after award and every 90 days thereafter. In accordance with SOW 3.1.3, and as required by the COR. Shall be in Contractor's format as approved by the COR.					15. TOTAL →
					14. DISTRIBUTION
				Draft Reg Repr	
				To be provided at time of award	
				15. TOTAL →	
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Monthly Financial Summary Report (MFSR)			3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 3.1.3		6. REQUIRING OFFICE COR
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY Monthly	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION
9. APP CODE		11. AS OF DATE *	13. DATE OF SUBSEQUENT SUBMISSION *		
16. REMARKS *(MFSR) to be delivered the 15th work day of the second month after award and the 15th day of every month thereafter. In accordance with SOW 3.1.3, and as required by the COR. Shall be in Contractor's format as approve by					15. TOTAL →
					14. DISTRIBUTION
				Draft Reg Repr	
				To be provided at time of award	
				15. TOTAL →	
1. DATA ITEM NO. A003	2. TITLE OF DATA ITEM Monthly Contractor On-Site Labor Report (MCLOR)			3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 3.1.3		6. REQUIRING OFFICE COR
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY Monthly	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION
9. APP CODE		11. AS OF DATE *	13. DATE OF SUBSEQUENT SUBMISSION *		
16. REMARKS *MCLOR to be delivered the 5th day of the second month after award and the 5th day of every month thereafter. In accordance with SOW 3.1.3 and as required by the COR. Shall be in Contractor's format as approved by COR.					15. TOTAL →
					14. DISTRIBUTION
				Draft Reg Repr	
				To be provided at time of award	
				15. TOTAL →	
1. DATA ITEM NO. A004	2. TITLE OF DATA ITEM Scientific and Technical Reports			3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE Section B, C and the SOW		6. REQUIRING OFFICE COR
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY *	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION
9. APP CODE		11. AS OF DATE *	13. DATE OF SUBSEQUENT SUBMISSION *		
16. REMARKS *as required by the COR, submitted periodically for the purpose of reporting progress, may be in the form of technical report and/or presentations. For technical reporting containing Scientific or technical information see Encl (1).					15. TOTAL →
					14. DISTRIBUTION
				Draft Reg Repr	
				To be provided at time of award	
				15. TOTAL →	
G. PREPARED BY NRL-SSC Code 3235		H. DATE		I. APPROVED BY	
				J. DATE	

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

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A. CONTRACT LINE ITEM NO. ALL			B. EXHIBIT A		C. CATEGORY TOP _____ TM _____ OTHER _____		
D. SYSTEM / ITEM			E. CONTRACT / PR NO		F. CONTRACTOR		
1. DATA ITEM NO. A005	2. TITLE OF DATA ITEM Presentation and Briefing Materials				3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 3.1.4.-3.10		6. REQUIRING OFFICE COR		
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY *	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION		
9. APP CODE	11. AS OF DATE Contract Award		13. DATE OF SUBSEQUENT SUBMISSION *		a. ADDRESSEE		b. COPIES
16. REMARKS *The contractor shall provide ideas and concepts being presented using textual elements as required by technical direction memorandum.					To be provided at time of award		
					15. TOTAL		
1. DATA ITEM NO. A006	2. TITLE OF DATA ITEM Technical Design Packages				3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 3.2-3.6, 3.8, 3.9		6. REQUIRING OFFICE COR		
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY *	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION		
9. APP CODE	11. AS OF DATE Contract Award		13. DATE OF SUBSEQUENT SUBMISSION *		a. ADDRESSEE		b. COPIES
16. REMARKS *The contractor shall provide Technical Design Packages as required by technical direction memorandum and following guideline of DoD-STD-2167 and MIL-STD-498.					To be provided at time of award		
					15. TOTAL		
1. DATA ITEM NO. A007	2. TITLE OF DATA ITEM Software and design documentation				3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 1.2, 3.4.3.10		6. REQUIRING OFFICE COR		
7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY As Required	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION		
9. APP CODE	11. AS OF DATE Contract Award		13. DATE OF SUBSEQUENT SUBMISSION *		a. ADDRESSEE		b. COPIES
16. REMARKS *Shall include computer programs, object, source and executable code and final user documentation of any software provided under this contract. Delivery shall be made as required by the COR.					To be provided at time of award		
					15. TOTAL		
1. DATA ITEM NO. A008	2. TITLE OF DATA ITEM Contract Final Report				3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE Section 3.1.3		6. REQUIRING OFFICE COR		
7. DD 250 REQ DD250	8. DIST STATEMENT REQUIRED	10. FREQUENCY One Time	12. DATE OF FIRST SUBMISSION *		14. DISTRIBUTION		
9. APP CODE	11. AS OF DATE *		13. DATE OF SUBSEQUENT SUBMISSION		a. ADDRESSEE		b. COPIES
16. REMARKS *The contractor shall provide a Final Report within sixty days from contract completion. The report shall contain a comprehensive summary of activities, findings and deliverables under this contract. DD250 required for acceptance.					To be provided at time of award		
					15. TOTAL		
G. PREPARED BY			H. DATE	I. APPROVED BY		J. DATE	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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17. PRICE GROUP
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NRL-SSC Code 3235

DD Form 1423, JUN 90

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Previous editions are obsolete.

Page 2 of 2 Pages

SEP 09 '98 01:35PM NRL CONTR CODE 3235

**ENCLOSURE (1) TO DD FORM 1423
INSTRUCTIONS FOR DISTRIBUTION**

DISTRIBUTION OF 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	UNCLASSIFIED/LIMITED AND CLASSIFIED
COR Naval Research Laboratory Attn: * Code: * 4555 Overlook Ave., S.W. Washington, DC 20375-5320	N00173	1	1
Administrative Contracting Officer *	*	1	1
Director Naval Research Laboratory ATTN: Code: 5227 4555 Overlook Ave., S.W. Washington, DC 20375-5326	N00173	1	1
Defense Technical Information Center (DTIC) 8725 John J. Kingman Rd. Suite #0944 Fort Belvoir, VA 22060-6218	S47031	4	2

DISTRIBUTION OF NON-TECHNICAL REPORTS

The minimum distribution of non-technical reports submitted in connection with this contract is as follows:

ADDRESSEE	DODAAD CODE	NUMBER OF COPIES	
		UNCLASSIFIED/ UNLIMITED	UNCLASSIFIED/LIMITED AND CLASSIFIED
COR	N00173	1	1
Administrative Contracting Officer (DCMAO)	*	1	1

*-TO BE PROVIDED AT TIME OF AWARD

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>			1. CLEARANCE AND SAFEGUARDING a. FACILITY CLEARANCE REQUIRED <div style="text-align: center; border: 1px solid black; padding: 2px;">SECRET</div> b. LEVEL OF SAFEGUARDING REQUIRED <div style="text-align: center; border: 1px solid black; padding: 2px;">NONE</div>		
2. THIS SPECIFICATION IS FOR: <i>(X and complete as applicable)</i>			3. THIS SPECIFICATION IS: <i>(X and complete as applicable)</i>		
a. PRIME CONTRACT NUMBER		b. SUBCONTRACT NUMBER		a. ORIGINAL <i>(Complete date in all cases)</i>	Date (YYMMDD) 980630
c. SOLICITATION OR OTHER NUMBER 76-0159-98		Due Date (YYMMDD)	b. REVISED <i>(Supersedes all previous specs)</i>	Revision No.	Date (YYMMDD)
<input checked="" type="checkbox"/>			c. FINAL <i>(Complete from 2 in all cases)</i>		Date (YYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>NO. If Yes, complete the following:</i> Classified material received or generated under _____ <i>(Preceding Contract Number)</i> is transferred to this follow-on contract.					
5. IS THIS A FINAL DD FORM 2547 YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <i>NO. If Yes, complete the following:</i> in response to the contractor's request dated _____, retention of the classified material is authorized for the period _____.					
6. CONTRACTOR <i>(Include Commercial and Government Entity (CAGE) Code)</i>					
a. NAME, ADDRESS, AND ZIP CODE FOR RFP PURPOSES ONLY, NOT VALID FOR ACTUAL CONTRACT AWARD			b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i>	
7. SUBCONTRACTOR					
a. NAME, ADDRESS, AND ZIP CODE N/A			b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> N/A	
8. ACTUAL PERFORMANCE					
a. LOCATION N/A			b. CAGE CODE	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> N/A	
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT Research areas of upper air physics, astronomy, astrophysics, and remote geo-sensing.					
10. CONTRACTOR WILL REQUIRE ACCESS TO:			11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:		
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	YES	NO	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	YES	NO
b. RESTRICTED DATA		<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL		<input checked="" type="checkbox"/>
d. FORMERLY RESTRICTED DATA		<input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE		<input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION		<input checked="" type="checkbox"/>	e. PERFORM SERVICES ONLY		<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)		<input checked="" type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES		<input checked="" type="checkbox"/>
(2) Non-SCI		<input checked="" type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER		<input checked="" type="checkbox"/>
f. SPECIAL ACCESS INFORMATION		<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT		<input checked="" type="checkbox"/>
g. NATO INFORMATION		<input checked="" type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS		<input checked="" type="checkbox"/>
h. FOREIGN GOVERNMENT INFORMATION		<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS		<input checked="" type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION		<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE		<input checked="" type="checkbox"/>
j. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>	l. OTHER <i>(Specify)</i>		
k. OTHER <i>(Specify)</i>					

DD Form 254, DEC 90 (EG)

Previous editions are obsolete.

Designed using Perigee Pro 4.0/5 DADR (Rev. 98)

Attachment (2)

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

Direct Through (Specify)

Commanding Officer, Naval Research Laboratory, Washington, DC 20375-5320, Code 7601.12

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

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, 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

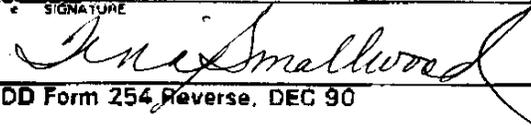
15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas) Yes No

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

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (Include Area Code)
TINA SMALLWOOD	Contracting Officer, Security	(202) 767-2521

c. ADDRESS (Include Zip Code)
 Naval Research Laboratory
 Washington, DC 20375-5320

- 17. REQUIRED DISTRIBUTION**
- a. CONTRACTOR
 - b. SUBCONTRACTOR
 - c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
 - d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
 - e. ADMINISTRATIVE CONTRACTING OFFICER
 - f. OTHERS AS NECESSARY

e. SIGNATURE


LABOR CATEGORIES AND PERSONNEL QUALIFICATIONS

The Contractor shall meet the requirements for key personnel. The proposed personnel shall be available for work efforts on the first day after contract award. Personnel designated as key personnel must possess or be capable of obtaining a Secret clearance. The desired personnel qualifications are as follows:

1. Senior Program Manager: B.Sc., Engineering, Finance, Business, Operations Research, or the equivalent. Minimum of ten years of demonstrated experience in the area of program management or project leadership. Demonstrated experience in the planning, direction, and control of scientific development programs involving spaceflight instruments, experimental payloads or substantially equal satellite systems. Demonstrated experience with program and acquisition planning (including scheduling, resource planning, and detailed budget preparation) for spaceflight instrument and satellite systems. Demonstrated management experience in the definition, design and development of spaceflight instruments and satellite systems. Relevant experience with spaceflight instrument and satellite systems program planning, directing and coordinating from inception program formulation through final closeout. Specific experience with the technical program planning required to support the developmental process including risk analysis, engineering specialty integration: program reviews; technical performance measurement; interface control, and program planning. Proficient with cross-platform word processing, project management, scheduling, spreadsheet, and database programs.

2. Program Manager and Project Leader: B.Sc. Business, Industrial, or Manufacturing Engineering, or a Masters Certificate in Project Management, or the equivalent. Minimum of eight years of demonstrated experience in the area of program management or project leadership. Demonstrated experience in the area of program management or project leadership. Specific experience in the planning, direction, and program management of spaceflight instruments, experimental payloads, satellite and sounding rocket systems. Relevant experience with spaceflight instrument and satellite systems program planning, directing and coordinating from inception program formulation through final closeout. Specific experience with the technical coordination process among Government, Co-contractor, Academic, and Industry personnel. Relevant experience supporting the space vehicle integration process in terms of systems safety, hazard analysis, interface control, and configuration management. Relevant experience with the DoD guidelines and standards used for deriving safety hazards and safety guidelines. Relevant experience with space vehicle integration guidelines, requirements and standards used for deriving spaceflight instrument interface control, ground and flight operation requirements. Specific experience interfacing with space vehicle and launch integration personnel, safety managers, and technical lead engineers to develop launch range documentation. Relevant experience with the DoD acquisition process. Demonstrated experience with the fabrication and manufacture of prototype and limited production space-qualified instruments and payloads. Proficient with cross-platform word processing, project management, scheduling, spreadsheet, and database programs.

3. Scientist: Ph.D., Physics, Mathematics, or Atmospheric Physics. Minimum

Personnel Qualifications

of seven years of demonstrated experience, knowledge, and familiarity with analyzing remotely sensed UV data. Experience with development of synthetic images and visualization software to support UV wavelength data analysis. Demonstrated experience with UV wedge and strip "Z" stack detector design, test and calibration. Experience with EUV dayglow and tropical arc image enhancement techniques. Experience with development of FUV dayglow spectrum image processing and atmospheric modeling algorithms. Experience with acquisition, analysis, simulation, and algorithm design and system evaluation required to design and implement complex realtime software systems using assembly, C, FORTRAN, C++, IDL and PV-Wave programming languages. Proficient with cross-platform word processing, spreadsheet, and database programs.

4. Senior Systems Engineer: B.Sc., Electrical Engineering, or the equivalent. Minimum of ten years of demonstrated experience performing Senior System Engineering duties for spaceflight instruments and satellite systems. Demonstrated experience with concept and prototype analog and digital spaceflight instruments and satellite systems. Demonstrated experience, knowledge, and familiarity with hardware development programs for scientific spaceflight instrumentation and experimental payloads. Demonstrated experience, knowledge, and familiarity with software development for developing spaceflight instrument systems and GSE software routines. Demonstrated experience, knowledge, and familiarity with realtime software development including requirements analysis and systems programming for flight systems, including: Telemetry and Command; Flight instrument control and pointing; Processor selection support, timing and sizing estimates, and costing; Interface analysis. Familiar with Reduced Instruction Set Computing (RISC) processors and their developmental systems, advanced compression algorithms and their space-qualified chipsets, and the design of ground support equipment processors and telemetry displays. Relevant experience with digital signal processing (DSP) hardware and development systems. Relevant experience with developing ground support equipment for testing spaceflight hardware and software in an operational satellite environment, including ground support software, ADSP-2100 based motor control systems, and specialized telemetry formatting and documentation equipment. Proficient with cross-platform word processing, spreadsheet, and database programs. Demonstrated capabilities with C/C++, VHDL, and related software design tools.

5. Senior Engineer, Software: B.Sc., Engineering, Physical Sciences, Mathematics, or the equivalent. Minimum of ten years of demonstrated experience, knowledge, and familiarity with realtime scientific software algorithms supporting flight instrumentation development programs. Knowledge and familiarity with the planning, execution and documentation of software development programs. Demonstrated experience, knowledge, and familiarity with realtime software development including requirements analysis and systems programming for flight systems, including: Telemetry and Command; Image processing; flight instrument control and pointing; Processor selection support, timing and sizing estimates, and costing; Interface analysis, and algorithm development. Specific knowledge to perform systems analysis, simulation, algorithm design, and system evaluation required to design and implement complex realtime software systems using assembly, C/C++, and FORTRAN

Personnel Qualifications

programming languages on a variety of spaceflight and ground processors. Specific experience with MIL-STD—1553 standard data bus and VME-based flight controller systems. Relevant experience with digital hardware and software test beds for space vehicle simulators which have the capability to evaluate and resolve hardware/software compatibility problems occurring during the developmental process. Strong background in Computer Aided Engineering, Computer Aided Design, and Automated Test Equipment (CAE/CAD/ATE). Proficient with PC and Macintosh cross-platform word processing, spreadsheet, and database programs and C/C++.

6. Engineer, Software: B.Sc., Engineering, Physics, Computer Science, Mathematics, or the equivalent. Minimum of five years of demonstrated experience, knowledge, and familiarity with realtime software development including requirements analysis and Systems programming for flight systems, including: Telemetry and Command; Flight instrument control and pointing; Processor selection support, timing and sizing estimates, and costing; Interface analysis, and algorithm development. Specific experience with MIL-STD-1553 standard data bus and VME-based flight controller systems. Relevant experience with digital hardware and software test beds for space vehicle simulators which have the capability to evaluate and resolve hardware/software compatibility problems occurring during the developmental process. Strong background in Computer Aided Engineering, Computer Aided Design, and Automated Test Equipment (CAE, CAD, ATE). The candidate shall have demonstrated experience, knowledge, and familiarity with the analysis, research, design, development, test, and evaluation of complex digital hardware and software development programs. Specific experience with requirements analysis and systems programming for ground systems, including: Command and telemetry processing and display; Payload pointing and control; Data archive, analysis, and distribution; FORTRAN, C/C++, Ada, and assembly language programming; and VAX/VMS. Proficient with cross-platform word processing, spreadsheet, and database programs. Demonstrated capabilities with and computer aided software design tools.

7. Sr. Engineer, Hardware: B.Sc., Engineering, Physical Sciences, Mathematics, or the equivalent. Minimum of five years of demonstrated experience with the analysis, research, design, development, test, and evaluation of complex hardware related to spaceflight instruments and satellite systems and GSE. Specific design engineering experience related to structural and thermal analysis, and system design, integration, test, and manufacture of spaceflight and GSE structures. Demonstrated experience with specification development, analysis, test, and integration of advanced lightweight optical sensors for spaceflight applications. Demonstrated experience with specification development, analysis, test, and integration of advanced composite structures for spaceflight applications. Proficient with cross-platform word processing, spreadsheet, and database programs. Demonstrated capabilities with and CAD/CAE applications design tools.

8. Electronics Engineer, General Design Support: B.Sc., Electrical Engineering, Physical Sciences, Mathematics, or the equivalent. Minimum of five years of demonstrated experience specifying, developing, and documenting spaceflight instrument electronics, conducting systems level environmental and reliability tests; documenting acceptance tests in formal plans and procedures; and planning and

Personnel Qualifications

conducting tests. Specific design engineering experience related to the electrical analysis, design, integration, and test of interface and data handling electronics for MIL-STD-1553 and VME-Based systems. Specific experience using digital and analog circuitry, i80xxx microprocessors, and digital signal processing (DSP) chipsets. Relevant design experience with printed wiring board design, layout, integration, and testing. Proficient with cross-platform word processing, spreadsheet, CAD/CAE and database programs.

9. Mechanical Engineer, General Design Support: Associates Degree in Engineering Technology or the equivalent. Minimum of five years of demonstrated experience specifying, developing, and documenting spaceflight instrument enclosures, chassis designs printed wiring board designs and equipment layouts. Specific experience on ground support equipment racks and interconnect diagrams. Specific experience in designing, planning, documenting, and installing complex ground enclosures for flight instrument command and control during flight operations, including wiring interconnects, power distribution, video and audio routing and distribution, and chassis design. Specific experience with AutoCad. Proficient with cross-platform word processing, spreadsheet, and database programs.

10. Engineer, Parts Procurement: B. Sc. Physics, Electrical Engineering, or the equivalent. Minimum of seven years of demonstrated experience with parts procurement and selection of EEE and non-EEE parts for spaceflight instruments and GSE systems. Demonstrated familiarity with Military Specifications and NASA parts procurement plans and requirements. Demonstrated experience with procurement of EEE parts and development of parts procurement screening requirements. Familiarity with NASA Handbook NHB5300.4. Familiarity with the NASA Materials Outgassing Specification. Demonstrated experience with DoD acquisition process with emphasis on parts procurement per Federal Acquisition Requirement guidelines and procedures. Demonstrated experience developing parts lists and component requirement reviews using spreadsheet and database programs.

11. Project Analyst: B.Sc. Engineering, Physical Sciences, Mathematics, or the equivalent. Minimum of five years of demonstrated understanding in analysis, systems integration, and implementation of a spaceflight instruments and experimental payloads. Specific experience developing systems and subsystem level schedules, planning payload and launch activities, and developing program controls and procedures. Working knowledge of Military Specifications and requirements. Relevant experience in spacecraft systems test and integration. Proficient with cross-platform word processing, scheduling, spreadsheet, and database programs.

12. Sr. Engineering Technician: Associates Degree in Engineering Technology or the equivalent. Minimum of five years of demonstrated capability with the design, fabrication, and testing of spaceflight instrumentation and its related GSE in a laboratory environment. Specific knowledge in the troubleshooting and repair of analog and digital components, including i80xxx and ADSP-2100 microprocessor-based flight instruments. Relevant experience with the design, fabrication and assembly of surface mount technologies for printed wiring board applications. Relevant experience with maintaining, operating and refurbishing High Vacuum Chambers and their associated vacuum system components and GSE. Experiences with cable

Personnel Qualifications

harnessing for spaceflight applications. Experience with software development to support spaceflight and GSE applications. Proficient with cross-platform word processing, spreadsheet, and database programs.

13. Sr. Technical Writer/Editor: BA or B.Sc. in Engineering, Journalism, Economics, English, or the equivalent. Minimum of five years of demonstrated capability to coordinate, prepare, edit, and proof technical specifications, plans, procedures, and documents related to spaceflight instrumentation and experimental payloads. Working knowledge of the requirements for hardware and software documentation using DoD STD-2167A and MIL-STD-498 in a tailored laboratory environment. Demonstrated capability to collect, compile, and track technical data and comments thereto, to include the documentation and tracking of CDRLs using automated tools. Proficient with cross-platform word processing, spreadsheet, and database programs.

14. Administrative, Clerical and Graphics Support: High School Degree or the equivalent. Minimum of three years. Demonstrated experience with non-technical writing, word-processing, proofreading, general computer art, paste-ups, database maintenance, and reference checking. Specific experience with cross-platform applications software (Word, Excel, Access, FileMaker) in a Local Area Network (LAN) environment. Proficient with cross-platform word processing, spreadsheet, and database programs.

02 February 1998

ATTACHMENT (4)

REQUIREMENTS FOR ON-SITE CONTRACTORS

TABLE OF CONTENTS

1. ACCESS TO NRL	1
2. NRL HOURS OF OPERATION AND HOLIDAY SCHEDULE	1
3. INFORMATION REGARDING SPONSORSHIP OF NON-US CITIZENS ASSIGNED TO THIS PROJECT	2
4. ON-SITE PERSONNEL	2
5. CONTRACTOR OCCUPATIONAL SAFETY AND HEALTH (OSH) PROGRAM COMPLIANCE	3
6. RADIATION SAFETY	3
7. ACQUISITION AND HANDLING OF AMMUNITION, ENERGETIC, AND EXPLOSIVE MATERIALS/ORDNANCE/DEVICES, PYROPHORICS, AND INERT ITEMS	5
8. HAZARDOUS MATERIAL CONTROL AND MANAGEMENT	6
9. EXPOSURE TO HAZARDOUS MATERIALS	6
10. ON-SITE "HOT-WORK"	7
11. ENVIRONMENTAL POLLUTION PROTECTION	7

1. ACCESS TO NRL

(a) PARKING/DELIVERIES

Parking at all Naval Research Laboratory (NRL) sites may be limited. This may require the Contractor to provide alternate means of transportation to and from the site. Contracts that will require deliveries of construction type building material or heavy equipment and contractor escorts should contact the security individual listed in Section G of the contract to make prior arrangements for admission to the NRL.

(b) BADGES AND CAR PASSES

The Contractor shall return all personnel security badges, vehicle passes, or keys issued to the Contracting Officer's Representative (COR) named in Section G of the contract. Badges and vehicle passes shall be returned at the completion of technical performance of the contract regardless of the expiration date of the badge or pass.

(c) TEXTBOOKS AND/OR REFERENCE MATERIALS

The Contractor shall return all textbooks and reference materials checked out from any NRL Library to that Library at the completion of the individual's performance or contract performance in accordance with NRLINST 12290.1B dated 1 October 1991.

2. NRL HOURS OF OPERATION AND HOLIDAY SCHEDULE

All or a portion of the effort under this contract will be performed on a Government Installation. The normal work week will be established by the COR named in Section G of the contract. No deviation in the normal established work week will be permitted without express advance approval in writing by the COR. In the event that the Contractor fails to observe the established work week, any costs incurred by the Government resulting there from shall be chargeable to the Contractor.

The following federal holidays are authorized exceptions to the normal work week

<u>NAME OF HOLIDAY</u>	<u>TIME OF OBSERVANCE</u>
New Year's Day	1 January
Martin Luther King Jr. Day	Third Monday in January
Presidents Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	4 July
Labor Day	First Monday in September
Columbus Day	Second Monday in October
Veteran's Day	11 November
Thanksgiving Day	Fourth Thursday in November
Christmas Day	25 December

Any other day designated by federal statute, Executive Order, or Presidential Proclamation.

In the event that any of the above holidays occur on Saturday or Sunday, the holiday must be observed by the Contractor in accordance with the practice observed by the assigned Government employees at the using activity.

Contractor personnel performing work under this contract at any NRL site shall limit their observation of holidays to those set forth above. In the event Contractor personnel work during a holiday other than those above, no form of holiday or other premium compensation will be reimbursed as either a direct or indirect cost. However, this does not preclude reimbursement for authorized overtime work.

When any NRL site grants emergency administrative leave to its Government employees, Contractor personnel performing effort at that NRL site must also be dismissed. However, the contractor shall continue to provide sufficient personnel to perform requirements of critical efforts already in progress or scheduled at the Laboratory.

3. INFORMATION REGARDING SPONSORSHIP OF NON-US CITIZENS ASSIGNED TO THIS PROJECT

Before allowing a non-U.S. citizen access to information required to perform this contract, to information generated in performance of the Statement of Work of the contract, or to a Government facility in connection with the work, the Contractor shall obtain written approval from the Security official listed in Section G of the contract.

4. ON-SITE PERSONNEL

Within 60 days after date of contract award, the contractor shall submit to their cognizant Defense Contract Audit Agency (DCAA) a list containing the names of personnel working under the contract on the NRL site. The contractor shall submit an updated list to DCAA on an annual basis thereafter.

If the contractor has more than one contract requiring on-site work , the annual updated list may be consolidated to include all contracts by number and the names of the on-site personnel working with each.

This requirement does not apply to firm-fixed-price contracts unless the contract requires a specified level of effort to be provided over a stated period of time.

5. CONTRACTOR OCCUPATIONAL SAFETY AND HEALTH (OSH) PROGRAM COMPLIANCE

The Contractor is responsible for their employee's safety and health and must abide by the appropriate federal and state Department of Labor Occupational Safety and Health Administration standards for program compliance. Section 20 of the Construction and General Industry standards requires a contractor to have a safety program and provide it to the Safety Individual named in Section G of the contract, if applicable.

6. RADIATION SAFETY

(a) OCCUPATIONAL EXPOSURE TO RADIATION

In accordance with NAVMED P-5055, medical examinations may be required for contractor personnel being considered for routine assignment to duties or occupations under this contract that require exposure to ionizing radiation or the handling of radioactive materials.

The Contractor is responsible for ensuring required medical examination(s) is/are conducted. The examinations such as Preplacement Examinations (PE), Reexamination (RE), Situational Examinations (SE), and Termination Examinations (TE) will be conducted in accordance with NAVMED P-5055.

As a result of this examination a pass/fail determination shall be made by the Examining Physician and a written report identifying the type of examination (PE, RE, SE, TE) and the results (pass/fail) forwarded no later than 45 days after each examination to the NRL, Attn: Safety Branch, Code 1240 (for the NRL DC site) and to the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.).

For any work to be performed at any NRL site, contractor personnel may be required to wear an NRL issued radiation dosimeter. A radiation dosimeter will not be issued to any contractor personnel until the written test report indicating that the employee passed the examination is received by the Safety code as noted in the above paragraph.

For contracts already in place, a Preplacement examination shall be performed within 60 days.

(b) RADIOACTIVE MATERIAL OR RADIATION PRODUCING DEVICES

The Contractor shall notify in writing the NRL Safety Branch, Code 1240 (for the NRL DC site) and NRL-SSC, Code 7030.5 (for the NRL Stennis Space Center, MS site) at least two(2) weeks in advance of all shipments to and from any NRL site of radioactive material or radiation

producing devices (e.g., x-ray machines). Shipments of radioactive material received without notification may be returned to the point of origin.

(c) LASER SAFETY

In accordance with OPNAVINST 5100.23D, medical examinations are required for contractor personnel being considered for routine assignment to duties or occupations under this contract that requires work with Class 3B, Class 4 and certain Class 3A lasers.

The Contractor is responsible for ensuring the required medical examinations(s) is/are conducted. The examinations such as Preplacement Examinations (PE), Reexamination (RE), Situational Examinations (SE), and Termination Examinations (TE) will be conducted in accordance with NAVMEDCOMINST 6470.2A.

As a result of this examination, a pass/fail determination will be made by the Examining Physician and a written report identifying the type of examination (PE, RE, SE, TE) and the results (pass/fail) forwarded no later than 45 days after each examination to NRL, Attn: Safety Branch, Code 1240(for the NRL DC site) and to the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.).

For contracts already in place, a Preplacement examination shall be performed with 60 days.

In addition to medical examinations, initial laser safety training is required to work with Class 3B, Class 4 and certain Class 3A lasers. Annual refresher training is also required for these systems. Contact the Safety Branch, Code 1240 (for the NRL DC site) and contact the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.) for details of the training and medical surveillance programs.

(d) RADIOFREQUENCY SAFETY

In accordance with OPNAVINST 5100.23D, all contractor personnel being considered for routine assignment to duties or occupations under this contract that require work with systems that emit radiofrequency (RF) radiation above the permissible exposure limits of DOD INST 6055.11 shall receive initial and annual safety training. Contact the Safety Branch, Code 1240 (for the NRL DC site) and contact the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.) for details of the training program.

7. ACQUISITION AND HANDLING OF AMMUNITION, ENERGETIC, AND EXPLOSIVE MATERIALS/ORDNANCE/DEVICES, PYROPHORICS, AND INERT ITEMS

The Contractor is responsible for ensuring that its personnel comply with the safety regulations and instructions in NAVSEA OP5, Volume 1, Ammunition and Explosives Ashore, NAVSEAINST 8020.9 and NRLINST 8020.1 when working with ammunition, energetic or explosive materials or devices.

The contractor shall:

- (a) Certify his/her employees are trained and qualified.
- (b) Provide a letter to the COR stating that the employees who use explosives (or who supervise employees who work with explosives) are trained and qualified to perform the work.
- (c) Renew the certification annually and whenever operations are significantly changed.

The report shall include the following information for each purchase:

- (1) Name, nomenclature of the material(s), or devices;
- (2) Quantity;
- (3) Name of the COR or TM listed in Section G of your contract including the COR's or TM's division code;
- (4) Location where chemicals will be stored;
- (5) Contract number;
- (6) Material Safety Data Sheet for each item;
- (7) Date of shipment and anticipated delivery date.

Chemical purchases, for purposes of this clause, means all chemicals regardless of their usage.

The contractor shall notify in writing the NRL Safety Officer, Code 1240 (for the NRL DC site) and the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.) at least 2 weeks in advance of all shipments to NRL of energetic or explosive materials, explosive ordnance/devices, pyrophorics and pyrotechnics. Shipments received without notification will be returned to the point of origin.

The contractor shall notify the NRL Safety Officer, Code 1240(for the NRL DC site) and the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.) of shipments of empty, inert, or "dummy" explosive devices 24 hours before their arrival at NRL. Appropriate documentation must accompany each item or they will be returned to the point of origin.

8. HAZARDOUS MATERIAL CONTROL AND MANAGEMENT

See the contract clause entitled “Hazardous Material Identification and Material Safety Data” (FAR 52.223-3) for definition of “hazardous material.”

For purpose of complying with the contract clause entitled “Hazardous Material Identification and Material Safety Data,” any hazardous material used or stored by the contractor at any NRL site shall be considered to be delivered under this contract.

After contract award, MSDSs required by the contract clause shall be submitted to the COR named in Section G of the contract and NRL Safety Branch, ATTN: Code 1240(for the NRL DC site) and to the NRL-SSC, ATTN: Code 7030.5 (for the NRL site at Stennis Space Center, MS.).

The contractor shall comply with NRLINST 4110.1A, NRL Hazardous Material Control and Management (HMC&M), when using or storing hazardous material at any NRL site. Copies of the instruction may be obtained from NRL Safety Branch, Code 1240, (202) 767-2232(for the NRL DC site) and from NRL-SSC, ATTN: Code 7030.5 , (601) 688-5561(for the NRL site at Stennis Space Center, MS.).

If hazardous material is to be used or stored by the contractor at any NRL site, the contractor shall provide the following information to the COR at the time the material is ordered or no later than the time the materials are delivered to any NRL site.

- a. A copy of the MSDS for each HM used or stored at NRL. (In addition, contractors must ensure that MSDSs are available at a central location in the workplace).
- b. The precautionary measures implemented to protect personnel using HM.
- c. The labeling system used by the contractor. (The labeling system must meet the requirements of 29 CFR 1910.1200 and 29 CFR 1910.1450.
- d. The procedures used to evaluate personnel exposure.
- e. An inventory of all HM used or stored at NRL. (For each chemical, the inventory must include location, quantity at NRL and chemical name).

9. EXPOSURE TO HAZARDOUS MATERIALS

In accordance with 29 CFR 1910.1200, the Contractor is hereby advised that a wide variety of hazardous materials are used and stored at the NRL and that some contractor personnel may be exposed to these materials under normal working conditions or foreseeable emergencies. MSDSs for materials currently used at NRL are available at the NRL Safety office. The NRL Safety office may also be contacted for information on the hazardous material labeling system

used in the NRL workplace and for required protective measures to be observed by the contractor personnel when working with or near such materials. It is the responsibility of the contractor to provide information and training to their employees as required in 29 CFR 1910.1200(h). (Ref: NRLINST 4110.1A).

10. ON-SITE "HOT-WORK"

Whenever performing hot-work, such as soldering, welding or cutting with open flame torches, on any NRL, Washington, D. C. site, the contractor is required to coordinate with the following prior to beginning work:

- (1) Resident Officer-in-Charge of Construction (ROICC-9040)
Phone (202) 767-1037
- (2) Naval District Washington Fire Department (Code 1250)
Fire Protection Inspector, (202) 685-0209/0211.

Whenever performing hot work, such as soldering, welding or cutting with open flame torches, on at the NRL-SSC site, the contractor is required to coordinate with the following prior to beginning work:

- (1) National Space and Aeronautics Administration
John C. Stennis Space Center Fire Department
Phone (601) 688-3639

11. ENVIRONMENTAL POLLUTION PROTECTION

The contractor shall comply with environmental protection laws (EPA) including the Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act and Federal Facility Compliance Act. Inspections by an EPA agency official may include questioning of the contractor personnel that are working with or have knowledge of hazardous materials and waste. Contractors are required to provide environmental training and maintain the appropriate documentation for Federal, State and local regulations.