

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

1. SOLICITATION NUMBER N00173-99-R-JW01	2. (X one)	
	<input type="checkbox"/>	a. SEALED BID
	<input checked="" type="checkbox"/>	b. NEGOTIATED (RFP)
	<input type="checkbox"/>	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)

CONTRACTING OFFICER
NAVAL RESEARCH LABORATORY
ATTN: CODE 3230.JW
WASHINGTON DC 20375-5326

4. ITEMS TO BE PURCHASED (Brief description)

ENGINEERING, SCIENTIFIC, AND COMPUTER SUPPORT OF SPACE SCIENCE EXPERIMENTS AND PROJECTS

5. PROCUREMENT INFORMATION (X and complete as applicable)

<input type="checkbox"/>	a. THIS PROCUREMENT IS UNRESTRICTED
<input checked="" type="checkbox"/>	b. THIS PROCUREMENT IS A <u>100</u> % 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.)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (1) Small Business
	<input type="checkbox"/> (2) Labor Surplus Area Concerns
	<input type="checkbox"/> (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 that website. 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.

NOTE: THIS PROCUREMENT IS 100% SET-ASIDE FOR SMALL BUSINESSES

7. POINT OF CONTACT FOR INFORMATION

a. NAME (Last, First, Middle Initial) Waldenfelds, James P.	b. ADDRESS (Include Zip Code) Naval Research Laboratory 4555 Overlook Ave., SW Washington DC 20375-5326
c. TELEPHONE NUMBER (Include Area Code and Extension) (NO COLLECT CALLS) (202) 767-3003	

8. REASONS FOR NO RESPONSE (<i>X all that apply</i>)			
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 (<i>Specify</i>)			
9. MAILING LIST INFORMATION (<i>X one</i>)			
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 (<i>Include Zip Code</i>)	
c. ACTION OFFICER			
(1) Typed or Printed Name (<i>Last, First, Middle Initial</i>)	(2) Title	(3) Signature	(4) Date Signed (<i>YYMMDD</i>)

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FROM

AFFIX
STAMP
HERE

SOLICITATION NUMBER	
N00173-99-R-JW01	
DATE (<i>YYMMDD</i>)	LOCAL TIME
99 MAY 17	4:00 PM

TO NAVAL RESEARCH LABORATORY
CONTRACTING DIVISION, CODE 3230.JW
4555 OVERLOOK AVENUE SW
WASHINGTON DC 20375-5326

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ▶		RATING DO-C9	PAGE OF 1 34 PAGES
2. CONTRACT NO.	3. SOLICITATION NO. N00173-99-R-JW01	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 15 APR 99	6. REQUISITION/PURCHASE NO.
7. ISSUED BY CONTRACTING OFFICER NAVAL RESEARCH LABORATORY ATTN: CODE 3230.JW WASHINGTON DC 20375-5326			8. ADDRESS OFFER TO (If other than Item 7)		

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

SOLICITATION

9. Sealed offers in original and 03 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 222 RM 115 @NRL until 4 PM local time 17 MAY 99
(Hour) (Date)

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

10. FOR INFORMATION CALL: ▶	A. NAME James P. Waldenfels	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (202)767-3003 waldenfels@contracts.nrl.navy.mil
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OFFER (Must be fully completed by offeror)

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

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52-232-8) ▶	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	%	%	%	%
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)	
15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE. <input type="checkbox"/>		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 COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) ▶ 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 conduct research as described in Section C.	\$ *	\$ *	\$ *
0002	Data in accordance with Exhibit A (DD 1423) and Enclosure (1).	** NSP	** NSP	** NSP
TOTAL ESTIMATED COST PLUS FIXED FEE FOR CLINS 0001 AND 0002		\$ *	\$ *	\$ *

OPTION I

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0003	The contractor shall conduct research as described in Section C.	\$ *	\$ *	\$ *
0004	Data in accordance with Exhibit A (DD 1423) and Enclosure (1)	** NSP	** NSP	** NSP
TOTAL ESTIMATED COST PLUS FIXED FEE FOR CLINS 0003 AND 0004		\$ *	\$ *	\$ *

OPTION II

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0005	The contractor shall conduct research as described in Section C.	\$ *	\$ *	\$ *
0006	Data in accordance with Exhibit A (DD 1423) and Enclosure (1)	** NSP	** NSP	** NSP
TOTAL ESTIMATED COST PLUS FIXED FEE FOR CLINS 0005 AND 0006		\$ *	\$ *	\$ *

OPTION III

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0007	The contractor shall conduct research as described in Section C.	\$ *	\$ *	\$ *
0008	Data in accordance with Exhibit A (DD 1423) and Enclosure (1)	** NSP	** NSP	** NSP
TOTAL ESTIMATED COST PLUS FIXED FEE FOR CLINS 0007 AND 0008		\$ *	\$ *	\$ *

OPTION IV

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0009	The contractor shall conduct research as described in Section C.	\$ *	\$ *	\$ *
0010	Data in accordance with Exhibit A (DD 1423) and Enclosure (1)	** NSP	** NSP	** NSP
TOTAL ESTIMATED COST PLUS FIXED FEE FOR CLINS 0009 AND 0010		\$ *	\$ *	\$ *

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
TOTAL ESTIMATED COST PLUS FIXED FEE FOR ALL CLINs (0001-0010):		\$ *	\$ *	\$ *

* Offeror shall enter figure here.

** 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.

C-2 REQUIREMENTS FOR ON-SITE CONTRACTORS

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

SECTION D
PACKAGING AND MARKING

D-1 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)

E-2 INSPECTION AND ACCEPTANCE

Inspection and acceptance of the final delivery will be accomplished by the Technical Manager (TM) or Contracting Officer Representative (COR) designated in Section G of this contract . Inspection and acceptance will be performed at the Naval Research Laboratory, Washington DC 20375-5320.

**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 months thereafter, with four options that will extend the period of performance for an additional twelve months each, if exercised.
- (b) The principal place of performance of this contract shall be at the Naval Research Laboratory, Washington, DC.

SECTION G
CONTRACT ADMINISTRATION DATA

G-1 PROCURING OFFICE REPRESENTATIVE

In order to expedite administration of the 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- *

Security Matters- *

Safety Matters- *

Patent Matters- *

Release of Data- *

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.

(* To be filled in at time of award)

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 SUBCONTRACTORS/CONSULTANTS

(a) Advance notification or requests for consent pursuant to the contract clause entitled "Subcontracts" (FAR 52.244-2) shall be directed to the cognizant administrative contracting officer (ACO).

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

Subcontractor/Consultant Name	Estimated Cost
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(Paragraph (b) will be included and filled in at time of award if subcontractor/consultants are proposed by the successful offeror)

G-5 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.
 - *X* is not required.
- (f) A Certificate of Performance
 - ** shall be provided with each invoice submittal.
 - *X* 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-6 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-7 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-8 ACCOUNTING AND APPROPRIATION DATA

(To be filled in at time of award)

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

This is a _____.

(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 – offeror to propose key personnel.)

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 19,000* total hours of direct labor for the base year, and **an additional 19,000* total hours** for each exercised option, including 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) 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 is as follows:

<u>Labor Category</u>	<u>Hours Per Base or Option Period</u>
Research Scientist	1,900
Senior Scientist	1,900
Instrument Scientist	1,900
Senior Engineer	1,900
Senior Electrical Engineer	1,900
Database Administrator/ Programmer Analyst	1,900
Electrical Engineer	1,900
Operations Engineer	1,900
Data Technician	1,900
Electronic Technician	1,900
**	**
Total	**

* (As adjusted at time of award in accordance with Provision L-10.)

** (To be entered at time of award in accordance with Provision L-10.)

H-4 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-5 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-6 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-7 YEAR 2000 COMPLIANT INFORMATION TECHNOLOGY

This requirement applies to information technology (IT) that processes date-related information. All such IT delivered under this contract shall be Year 2000 compliant as defined at FAR 39.002.

H-8 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.arnet.gov/far>

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

a. FEDERAL ACQUISITION REGULATION CLAUSES

FAR CLAUSE TITLE

52.202-1	-	Definitions (OCT 1995)
52.203-3	-	Gratuities (APR 1984)
52.203-5	-	Covenant Against Contingent Fees (APR 1984)
52.203-6	-	Restrictions On Subcontractor Sales To The Government (JUL 1995)
52.203-7	-	Anti-Kickback Procedures (JUL 1995)
52-203-8	-	Cancellation, Rescission, And Recovery Of Funds For Illegal Or Improper Activity (JAN 1997)
52.203-10	-	Price Or Fee Adjustment For Illegal Or Improper Activity (JAN 1997)
52.203-12	-	Limitation On Payments To Influence Certain Federal Transactions (JUN 1997)
52.204-2	-	Security Requirements (AUG 1996)
52.204-4	-	Printing/Copying Double-Sided On Recycled Paper (JUN 1996)
52.209-6	-	Protecting The Government's Interest When Subcontracting With Contractors Debarred, Suspended, Or Proposed For Debarment (JUL 1995)
52.211-15	-	Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	-	Audit And Records-Negotiation (AUG 1996)
52.215-8	-	Order of Precedence - Uniform Contract Format (OCT 1997)
52.215-11	-	Price Reduction for Defective Cost or Pricing Data - Modifications (OCT 1997)
52.215-13	-	Subcontractor Cost or Pricing Data Modifications (OCT 1997)
52.215-14	-	Integrity of Unit Prices (OCT 1997)
52.215-15	-	Pension Adjustments And Asset Reversions (DEC 1998)
52.215-17	-	Waiver of Facilities Capital Cost of Money (OCT 1997) (<i>will be included if the successful offeror does not propose facilities capital cost of money</i>)
52.215-18	-	Reversion or Adjustment of Plans for Post-retirement Benefits (PRB) Other

- than Pensions (OCT 1997)
- 52.215-19 - Notification of Ownership Changes (OCT 1997)
- 52.215-21 - Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data -Modifications (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 Business Concerns (JAN 1999)
- 52.219-14 - Limitations On Subcontracting (DEC 1996)
- 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"
- 52.222-20 - Walsh-Healey Public Contracts Act (DEC 1996)
- 52.222-21 - Prohibition of Segregated Facilities (FEB 1999)
- 52.222-26 - Equal Opportunity (FEB 1999)
- 52.222-29 - Notification Of Visa Denial (APR 1984) (DEVIATION)
- 52.222-35 - Affirmative Action For Disabled Veterans And Veterans Of The Vietnam Era (APR 1998)
- 52.222-36 - Affirmative Action For Workers With Disabilities (JUN 1998)
- 52.222-37 - Employment Reports On Disabled Veterans And Veterans Of The Vietnam Era (APR 1998)
- 52.223-2 - Clean Air And Water (APR 1984)
- 52.223-3 - Hazardous Material Identification And Material Safety Data (JAN 1997)
- 52.223-5 - Pollution Prevention and Right-To-Know Information (APR 1998)
- 52.223-6 - Drug-Free Workplace (JAN 1997)
- 52.223-14 - Toxic Chemical Release Reporting (OCT 1996)
- 52.225-11 - Restrictions On Certain Foreign Purchases (AUG 1998)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-10 - Filing of Patent Application- Classified Subject Matter (APR 1984)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
(*will be included if the successful offeror is a small business or a non-profit organization*)
- 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)
- 52.232-20 - 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 (DEC 1998) - Alternate I (DEC 1991)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.237-3 - Continuity Of Services (JAN 1991)
- 52.237-10 - Identification of Uncompensated Overtime (OCT 1997)
- 52.242-1 - Notice Of Intent To Disallow Costs (APR 1984)
- 52.242-3 - Penalties For Unallowable Costs (OCT 1995)
- 52.242-4 - Certification of Final Indirect Costs (JAN 1997)
- 52.242-13 - Bankruptcy (JUL 1995)
- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate II (APR 1984)
- 52.244-2 - Subcontracts (AUG 1998) - Alternate I (AUG 1998)
- 52.244-5 - Competition In Subcontracting (DEC 1996)
- 52.244-6 - Subcontracts for Commercial Items and Commercial Components (OCT 1998)
- 52.245-5 - Government Property (Cost-Reimbursement, Time-And-Material, Or Labor-Hour Contracts) (JAN 1986) (DEVIATION)
- 52.245-9 - Use And Charges (APR 1984) (DEVIATION)
- 52.245-18 - Special Test Equipment (FEB 1993)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.246-25 - Limitation Of Liability - Services (FEB 1997)
- 52.247-1 - Commercial Bill Of Lading Notations (APR 1984)
- 52.247-63 - Preference For U. S. Flag Carriers (JAN 1997)
- 52.249-6 - Termination (Cost-Reimbursement) (SEP 1996)
- 52.249-14 - Excusable Delays (APR 1984)
- 52.251-1 - Government Supply Sources (APR 1984)
- 52.252-6 - Authorized Deviations in Clauses (APR 1984)(fill in Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2))
- 52.253-1 - Computer Generated Forms (JAN 1991)

b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION CLAUSES

DFARS CLAUSE TITLE

- 252.201-7000 - Contracting Officer's Representative (DEC 1991)
- 252.203-7001 - Special Prohibition On Employment (JUN 1997)
- 252.203-7002 - Display Of DoD Hotline Poster (DEC 1991)
- 252.204-7000 - Disclosure of Information (DEC 1991)
- 252.204-7003 - Control Of Government Personnel Work Product (APR 1992)
- 252.204-7004 - Required Central Contractor Registration (MAR 1998)

- 252.205-7000 - Provision Of Information To Cooperative Agreement Holders (DEC 1991)
- 252.209-7000 - Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate-Range Nuclear Forces (INF) Treaty (NOV 1995)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.215-7000 - 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 (JAN 1999)
- 252.225-7016 - Restriction On Acquisition Of Ball And Roller Bearings (AUG 1998)
- 252.225-7026 - Reporting Of Contract Performance Outside The United States (MAR 1998)
- 252.225-7031 - Secondary Arab Boycott Of Israel (JUN 1992)
- 252.225-7043 - Antiterrorism/Force Protection Policy For Defense Contractors Outside The United States (JUN 1998) (fill in : Naval Criminal Investigative Service (NCIS), Code 24, telephone, DSN 228-9113 or commercial (202)433-9113)

- 252.227-7000 - Non Estoppel (OCT 1966)
- 252.227-7001 - Release Of Past Infringement (AUG 1984)
- 252.227-7013 - Rights In Technical Data -- Noncommercial Items (NOV 1995)
- 252.227-7014 - Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)
- 252.227-7016 - Rights In Bids or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7025 - Limitations On The Use Or Disclosure Of Government-Furnished Information Marked With Restrictive Legends (JUN 1995)
- 252.227-7030 - 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)
(will be included if the successful offeror made a negative response to the inquiry at DFARS 252.247-7022)
- 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).

I-3 DFARS 252.225-7008 - SUPPLIES TO BE ACCORDED DUTY- FREE ENTRY (MAR 1998)

In accordance with paragraph (b) of the Duty-Free Entry clause of this contract, in addition to duty-free entry for all qualifying country supplies (end products and components) and all eligible end products subject to applicable trade agreements (if this contract contains the Buy American Act - Trade Agreements - Balance of Payments Program clause or the Buy American Act - North American Free Trade Agreement Implementation Act - Balance of Payments Program clause), the following foreign end products that are neither qualifying country end products nor eligible end products under a trade agreement, and the following nonqualifying country components, are accorded duty free entry.

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

SECTION J

LIST OF ATTACHMENTS

- J-1** Attachment (1) - Statement Of Work – 4 Pages, With Exhibit A - DD Form 1423, Contract Data Requirements And Enclosure (1) - Instructions For Distribution- 4 Pages
- J-2** Attachment (2) - DD 254, Contract Security Classification Specification Form Ser 068-98 Dated 981207 W/Attachments 2 Pages
- J-3** Attachment (3) Personnel Qualifications, 4 Pages

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

K-1 Representations, Certifications, and Other Statements of Offerors or Respondents

Each Offeror must submit a completed Representations, Certifications, and Other Statements Of Offerors or Respondents with its proposal which is available electronically in full text at <http://heron.nrl.navy.mil/contracts/reps&certs.htm>

K-2 FILL IN FOR FAR 52.219-1 - SMALL BUSINESS PROGRAM REPRESENTATIONS (OCT 1998)

The fill in information is as follows:

The standard industrial classification (SIC) code for this acquisition is 8731.

The small business size standard is 500 employees.

K-3 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING

The Offeror's CAGE Code is {fill-in}_____.

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

**SECTION L
INSTRUCTIONS CONDITIONS AND NOTICES
TO OFFERORS OR RESPONDENTS**

L-1 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

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

FAR CLAUSE TITLE

52.204-6	-	Data Universal Numbering System (DUNS) Number (APR 1998)
52.215-1	-	Instructions to Offerors- Competitive Acquisition (OCT 1997)
52.215-16	-	Facilities Capital Cost Of Money (OCT 1997)
52.252-5	-	Authorized Deviations in Provisions (APR 1984)

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

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

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

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

(b) Provide information described below:

See L-15, "Volume II – Business Proposal"

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 Person to be Furnished With Restrictions*	Basis for Assertion** Restrictions****	Asserted Rights Category***	Name of Asserting
(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 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-10 ANTICIPATED DISTRIBUTION AND LOCATION OF DIRECT LABOR HOURS BY LABOR CATEGORIES

The following is the anticipated distribution by labor category of the level of effort. This distribution shall be used by the offeror in preparing the cost proposal. If the offeror uses labor category terminology other than that used in this provision, the offeror must provide a table (in the technical proposal – See Provision L-13, paragraph (4) clearly relating their proposed labor categories to those in this provision. For purposes of the proposal, offerors shall propose as if all performance is at NRL. If it is the offeror's established practice to charge certain support labor (such as contracts, subcontract administration, administrative support) as a direct charge, a nominal amount of such support labor may be proposed; pricing detail should match that provided for other labor. Any such support labor shall not fulfill and shall be in addition to the level of effort indicated below.

<u>LABOR CATEGORY</u>	<u>Basic</u> <u>YEAR 1</u>	<u>Option I</u> <u>YEAR 2</u>	<u>Option II</u> <u>YEAR 3</u>	<u>Option III</u> <u>YEAR 4</u>	<u>Option IV</u> <u>YEAR 5</u>	<u>TOTAL</u>
Research Scientist	1,900	1,900	1,900	1,900	1,900	9,500
Senior Scientist	1,900	1,900	1,900	1,900	1,900	9,500
Instrument Scientist	1,900	1,900	1,900	1,900	1,900	9,500
Senior Engineer	1,900	1,900	1,900	1,900	1,900	9,500
Senior Electrical Engineer	1,900	1,900	1,900	1,900	1,900	9,500
Database Administrator/ Programmer Analyst	1,900	1,900	1,900	1,900	1,900	9,500
Electrical Engineer	1,900	1,900	1,900	1,900	1,900	9,500
Operations Engineer	1,900	1,900	1,900	1,900	1,900	9,500
Data Technician	1,900	1,900	1,900	1,900	1,900	9,500
Electronic Technician	<u>1,900</u>	<u>1,900</u>	<u>1,900</u>	<u>1,900</u>	<u>1,900</u>	<u>9,500</u>
Total	19,000	19,000	19,000	19,000	19,000	95,000

L-11 ANTICIPATED START DATE

Proposals must be based on an anticipated start date of July 1, 1999.

L-12 TRAVEL AND MATERIAL ESTIMATE

The travel and material estimate set forth below must be included in each offeror's cost proposal for evaluating purposes only. The contractor will be reimbursed allowable travel and material costs incurred in performance of task orders under the contract.

TRAVEL COSTS - \$300,000 (\$60,000 PER YEAR) PLUS ANY APPLICABLE INDIRECT COSTS.

MATERIAL COSTS - \$500,000 (\$100,000 PER YEAR) PLUS ANY APPLICABLE INDIRECT COSTS. (Materials under this contract are expected to consist of parts, components and supplies required for implementation of work described in the statement of work. Examples of such supplies are:

1. Replacement monitors, mass storage devices or media.
2. Electronic components, parts, etc.
3. Software compilers, graphics display packages, data archiving and retrieval packages, etc.

L-13 INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS

(1) Information for the technical/management proposal shall be placed in Volume I and be completely separate from the business 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. N00173-99-R-JW01
Closing Date:
(As specified in Block 9, RFP face page)
Attn: Code 3230.JW

(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 ***in the technical volume*** a table indicating proposed labor hours by skill category required to perform the statement of work. This table shall not contain labor rates or any other indication of price.

L-14 VOLUME I - TECHNICAL/MANAGEMENT PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 3 COPIES .

(1)The following information is required for evaluation of your technical/management :

(a) PERSONNEL QUALIFICATIONS AND EXPERIENCE

The proposal must provide documentation to demonstrate the experience, availability, and other qualifications of proposed personnel with respect to the statement of work, to Attachment (2) DD Form 254, and to Attachment No. (3), Personnel Qualifications. As the technical disciplines involved in the Statement of Work are highly specialized, personnel without actual experience in these areas are not acceptable. The offeror must provide resumes for all proposed personnel. In addition to career experience and education, each resume should describe specific experience supporting the statement of work and personnel qualifications unless obvious from the career experience. Ensure resume data for bachelor's degrees includes the year the degree was granted and the field (even if a higher degree is required). The proposal must document the offeror's past performance with regard to the performance of personnel assigned to contracts,, with emphasis placed on the expertise of key personnel. Eligibility for SECRET clearance may be based on evidence such as possession of a current SECRET or higher clearance, the absence of knowledge that would indicate a person would not be eligible, and no prior refusal of a SECRET or higher clearance without satisfactory explanation suggesting there is no current problem.

(b) CORPORATE EXPERIENCE AND RESOURCES

The proposal must demonstrate the offeror's corporate experience and available resources in performing projects requiring technical and scientific effort which is closely similar or related to the effort required by the Statement of Work. It must document company experience and past performance in maintaining project capability by reliably providing capable personnel and management support sufficient to avoid interruptions resulting in program disruption or loss of key, project corporate memory. Project descriptions, names of sponsoring agencies, and point of contact (program management or technical) information should be provided.

(c) MANAGEMENT APPROACH

The proposal should demonstrate the offeror's approach, ability, and willingness to effectively organize, adapt, and utilize its resources to assure that all work is performed in an economical, timely, and effective manner. The discussion should include at least the following aspects: experience in managing personnel located away from offeror's facility; the offeror's approach to forming and subsequently dissolving groups of personnel; the offeror's corporate structure and the functional relationships and responsibilities among the organizational elements that will participate in accomplishing the defined tasks. internal management communication lines, and the offeror's method of maintaining close liaison with NRL's Contracting Officer's Representative (COR). The offeror should discuss the authority and ability of the offeror's Program Manager's (PM) to independently commit company resources to performance under the contract and his line of communication to senior company management. The offeror should address the integration of any subcontractors and consultants into the overall Management Approach to ensure that contract objectives are met. The offeror should describe its startup plan to minimize the learning curve needed to reach full performance levels within thirty (30) days after contract award. The offeror should cover reporting systems' available for monitoring qualitative and quantitative aspects of contract performance including financial monitoring and reporting

L-15 VOLUME II - BUSINESS PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 1 COPIES

COST PROPOSAL

The offeror shall submit a business proposal that includes 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, and other costs such as travel. 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.

If a period of performance (e.g., the first (base) year, second year (first option year), etc.) overlaps the point where a rate changes, the offeror shall submit a description of the timing of the change, the amount of the base for each rate period, and the rate applied to each base. This may be submitted as a summary table, separate from the cost tables for each priced CLIN.

If labor fringe or overhead rates, G&A rates, or cost of money rates for the first period of performance are changing significantly (about 5% of the rate or more) from previously

experienced or approved rates, an explanation should be provided.

If facilities capital cost of money is proposed, the offeror shall submit DD Form 1861.

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 the cost factor, the closer the technical scores of the various proposals are to one another, the more important the business considerations become.

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. Within the technical/management factor, the subfactor entitled "Personnel Qualifications and Experience" is more than twice as important as the other two factors, and the subfactor entitled "Corporate Experience and Resources" is twice as important as the factor entitled "Management Approach."

M-2-1. TECHNICAL/MANAGEMENT

(1) PERSONNEL QUALIFICATIONS AND EXPERIENCE

The proposal will be evaluated on the experience, availability, and other qualifications of proposed personnel with respect to the Statement of Work, Attachment No. (2), DD Form 254, and qualifications set forth in Attachment No. (3), Personnel Qualifications. This will include the offeror's past performance with regard to the performance of personnel assigned to contracts, with emphasis placed on the expertise of key personnel.

(2) CORPORATE EXPERIENCE AND RESOURCES

The proposal will be evaluated on the offeror's corporate experience and available resources in performing projects requiring technical and scientific effort which is closely similar or related to the effort required by the Statement of Work, including past performance.

(3) MANAGEMENT APPROACH

The proposal will be evaluated on the offeror's approach, ability, and willingness to effectively organize, adapt, and utilize its resources to assure that all work is performed in an economical, timely, and effective manner.

M-2-2 COST TO THE GOVERNMENT

The proposal will be evaluated on the proposed estimated cost to the Government. The Government may adjust the proposed cost for purposes of evaluation based upon an evaluation of cost realism. 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 cost realism evaluation includes an analysis of the adequacy of the hours, labor mix, and other direct costs to perform the work as proposed in the technical proposal as well as the proposed labor and indirect rates. It also includes evaluation of the likelihood that the risks inherent in the offeror's technical approach will result in higher actual costs than anticipated.

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

FOR

SPACE SCIENCE RESEARCH AND DEVELOPMENT

1. INTRODUCTION

The Naval Research Laboratory (NRL) conducts a program of research and evaluation on the distribution and characteristics of background terrestrial and extraterrestrial sources of radio and infrared radiation, and related areas of atmospheric science, solar physics, upper air physics, radio propagation, infrared transmission, infrared detectors, and related electronics and cryogenic techniques, and investigates new applications in areas of interest to the Navy, such as precise time, position determination, remote sensing, and surveillance. The techniques employed in these investigations are ground based, airborne, and/or space. Results are of importance to radio communications, to the operation of ships and aircraft, to utilization of the space environment, and to fundamental understanding of natural radiation and geophysical phenomena.

In order to carry out these investigations, research and development is needed for the design, fabrication, assembly, and testing of experimental equipment, support of field operations and deployment of experimental packages, satellite design, computer modeling experiment design, data analysis instrument packaging and payload testing. In addition, the amount of raw data obtained from these investigations is massive in volume. The data must be processed, reduced and analyzed in a timely manner. To support this requirement, new computer programs have to be written and/or existing programs (software) have to be modified and documented.

2. SCOPE

This contract will provide R&D expertise for the design, fabrication, assembly, test, and analysis of NRL projects. This work will include creation and documentation of software. It will also involve the design, fabrication, assembly, integration, test and operation of sophisticated scientific instruments and experimental payloads. This will involve both on site and off site effort and will result in scientific publications.

3.0 REQUIREMENTS

3.1 The Solar Ultraviolet Spectral Irradiance Monitor (SUSIM) Aboard the Upper Atmosphere Research Satellite (UARS)

The contractor shall plan, define in detail, and schedule, with COR approval, the entirety of scientific operations for the SUSIM instrument aboard the UARS. This shall include developing long-range plans that will maintain the on-orbit calibration of the SUSIM instrument, developing the daily or as needed SUSIM instrument command loads, and monitoring the health of the instrument and the scientific data. The contractor shall conduct the data reduction task of the SUSIM UARS experiment in cooperation with the UARS Command and Data Handling Facility at Goddard Space Flight Center, with the result being scientifically useful SUSIM data sets on the DAAC at Goddard Space Flight Center. The contractor shall scientifically analyze the SUSIM data, with the results being the publication of scientific papers in refereed journals and presentations at national and international scientific meetings.

3.2 Remote Sensing

The contractor shall participate in the design, assembly, and calibration of radiometric equipment. The contractor shall design digital control and rf signal processing circuits. The contractor shall write computer programs to link together test equipment and custom built modules for data acquisition. Field experiments are done for data retrieval and science information gathering for various environmental aspects. The field experiments include flights aboard NASA and Navy airplanes that have been equipped by the contractor for scientific missions. The contractor shall support various satellite programs; this support includes space flight hardware and systems design.

3.3 Solar and Heliospheric Observatory's Wide-Field White-Light and Spectrometric Coronagraph (SOHO/LASCO) and Extreme-ultraviolet Imaging Telescope (SOHO/EIT)

The contractor shall participate in the operations of the LASCO and EIT experiments, including maintaining the flight and ground software systems and analyzing in-orbit calibration data. The contractor shall conduct the data reduction tasks of the SOHO LASCO and EIT experiments, distributing the data to LASCO and EIT co-investigators and maintaining the world-wide-web pages. The result of the data reduction tasks will be the production of scientifically useful LASCO/EIT data sets. The contractor shall also perform scientific analyses of the SOHO data, culminating with the results being published in scientific papers in scientific journals and in presentations at national and international scientific meetings.

3.4 Experiments Flown on Sounding Rockets

The contractor shall design, and upon COR approval, fabricate, assemble, align optics, program flight controllers, and test high spectral resolution and/or high spatial resolution optical instruments to be flown on sounding rockets. The spectral domain to be observed varies from instrument-to-instrument, from the extreme ultraviolet to the near infrared.

3.5 Detector and Camera Systems

The contractor shall test and evaluate electro-optical imaging devices. The contractor shall test equipment used to simulate solar radiation. The contractor shall test systems for introducing reflected sunlight into vacuum test chambers, and test electro-optical focal plane array detectors (such as CCDs), photodiodes, and photomultipliers. The contractor shall characterize optical instruments, measuring such properties as spectral resolution, throughput, and MTF. The contractor shall precisely photometrically calibrate detector systems and measure stray light properties of telescopes.

3.6 Navy Prototype Optical Interferometer (NPOI)

The contractor shall provide enhancements to NPOI's Digital Signal Processor (DSP) Fringe Engine system in order to obtain more science data. The contractor shall provide the following enhancements: (1) software revisions to make available other methods of collecting photon data; (2) modification of the DSP assembly code to increase the number of data points; (3) modification of the current Altera EPLD VME controller design to implement thirty-two bit and/or Block-Mode data transfers within the current hardware design; (4) an effort to increase the number from one to three spectrograph arrays; (5) fabrication, testing and installation of additional sets of Fringe Engine hardware; and (6) redesign of the Binner/Dither VMEbus assembly to receive thirty-two spectral channels.

3.7 General Laboratory Projects and Space Programs

The contractor shall design, and upon COR approval, fabricate, assemble, test, and maintain specialized laboratory equipment and facilities shared by the various projects and programs. The contractor shall design, and upon COR approval, fabricate, assemble, and test prototype instrumentation and software for various space projects.

The contractor shall plan, define in detail, and schedule, with COR approval, on-orbit operations of space instruments, and shall develop and document software to scientifically analyze the data from space instruments that study the sun and heliosphere, the earth's atmosphere and magnetosphere, or stars.

3.8 General Laboratory Projects and Programs

The contractor shall design, and upon COR approval, fabricate, assemble, maintain, and test specialized laboratory equipment and facilities shared by the various projects and programs.

4.0 PROJECT LEADER

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

5.0 CONTRACTOR REQUIREMENTS

5.1 Reports, Data and Other Deliverables

The Contract Data Requirements List (CDRL), DD1423, provides a detailed list of deliverables.

CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved
OMB No. 0704-0188

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

A. CONTRACT LINE ITEM NO. 0002, 0004, 0006, 0008, 0010				B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER _____			
D. SYSTEM / ITEM				E. CONTRACT / PR NO. PR 76-0037-99		F. CONTRACTOR (TBD under N00173-99-R-JW01)			
1. DATA ITEM NO. A001		2. TITLE OF DATA ITEM Technical Status Report				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 5.0		6. REQUIRING OFFICE NRL 7601			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY MNTLY		12. DATE OF FIRST SUBMISSION 15 days after 1st month		14. DISTRIBUTION	
8. APP CODE		11. AS OF DATE End of Month		13. DATE OF SUBSEQUENT SUBMISSION 15 days after end of mon.		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The contractor shall provide monthly reports summarizing any problems or areas of concern for which government assistance or guidance is desired, and stating any anticipated deviation in contractor's planned effort to achieve contract scientific/technical objectives. The contractor shall describe technical progress during the reporting period, citing any major changes in the technical approach planned at the beginning of the reporting period, and drawing attention to any anticipated technical, logistic or administrative problems. The report should be concise, but shall include the following: task objectives; general technical approach; status prior to and at the end of the report period; important findings and their implication; and significant hardware and software developments.						See Encl. (1).			
						15. TOTAL →			

1. DATA ITEM NO. A002		2. TITLE OF DATA ITEM Financial Status Report				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 5.0		6. REQUIRING OFFICE NRL 7601			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY MNTLY		12. DATE OF FIRST SUBMISSION 15 days after 1st month		14. DISTRIBUTION	
8. APP CODE		11. AS OF DATE End of Month		13. DATE OF SUBSEQUENT SUBMISSION 15 days after end of mon.		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The monthly cost shall be broken down by task. The contractor shall show the number of hours for each employee with costs for direct labor (and rate), overhead, G&A, any other burdens, and fee. The contractor shall give details for current period and show accrued cost for total contract. Expenses such as travel, materials, and training will be reported separately by person, showing hours for each employee with a separate total for overhead, G&A and fee costs. If the contractor employee worked on multiple tasks (as defined by the COR), the accounting for each task must be shown separately. The report shall be submitted with a copy of the monthly invoice.						See Encl. (1).			
						15. TOTAL →			

G. PREPARED BY <i>James P. Waldenfels</i> James P. Waldenfels			H. DATE 3/22/99 3/22/99		I. APPROVED BY		J. DATE	
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17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0002, 0004, 0006, 0008, 0010				B. EXHIBIT A		C. CATEGORY: TDP _____ TM- _____ OTHER _____														
D. SYSTEM / ITEM				E. CONTRACT / PR NO. PR 76-0037-99		F. CONTRACTOR (TBD under N00173-99-R-JW01)														
1. DATA ITEM NO. A003		2. TITLE OF DATA ITEM Software and Hardware Documentation				3. SUBTITLE														
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 5.0		6. REQUIRING OFFICE NRL 7601														
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION												
8. APP CODE AN				11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 50%;">a. ADDRESSEE</td> <td colspan="3" style="text-align: center;">b. COPIES</td> </tr> <tr> <td style="text-align: center;">Draft</td> <td colspan="2" style="text-align: center;">Final</td> </tr> <tr> <td></td> <td style="text-align: center;">Reg</td> <td style="text-align: center;">Repro</td> <td></td> </tr> </table>		a. ADDRESSEE	b. COPIES			Draft	Final			Reg	Repro	
a. ADDRESSEE	b. COPIES																			
	Draft	Final																		
	Reg	Repro																		
16. REMARKS In-code documentation shall be provided for all software. The in-code documentation shall include instructions for the user, in particular the locations of needed data files. A separate User's Guide shall be produced for interactive programs having many options. All software shall be provided as disk files on the NRL computers, and must be able to run on these designated computers. Hardware produced or modified under this statement of work shall be accompanied by documentation for maintenance and operation.						See Encl. (1).														
15. TOTAL →																				

1. DATA ITEM NO. A004		2. TITLE OF DATA ITEM Technical Documentation				3. SUBTITLE														
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 5.0		6. REQUIRING OFFICE NRL 7601														
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION												
8. APP CODE AN				11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 50%;">a. ADDRESSEE</td> <td colspan="3" style="text-align: center;">b. COPIES</td> </tr> <tr> <td style="text-align: center;">Draft</td> <td colspan="2" style="text-align: center;">Final</td> </tr> <tr> <td></td> <td style="text-align: center;">Reg</td> <td style="text-align: center;">Repro</td> <td></td> </tr> </table>		a. ADDRESSEE	b. COPIES			Draft	Final			Reg	Repro	
a. ADDRESSEE	b. COPIES																			
	Draft	Final																		
	Reg	Repro																		
16. REMARKS The contractor shall provide Technical Documentation which shall include: designs, schematics, requirements documents, procedures, systems block diagrams, field integration documents, interface control documents, as-built drawings, contamination, cleanliness, quality assurance, test results, etc. for COR review and approval.						See Encl. (1).														
15. TOTAL →																				

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY
James P. Waldenfels
James P. Waldenfels

H. DATE
3/22/99
3/22/99

I. APPROVED BY

J. DATE

CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0002, 0004, 0006, 0008, 0010	B. EXHIBIT A	C. CATEGORY: TDP _____ TM- _____ OTHER _____
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D. SYSTEM / ITEM	E. CONTRACT / PR NO. 76-0037-99	F. CONTRACTOR (TBD under RFP N00173-99-R-JW01)
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1. DATA ITEM NO. A005	2. TITLE OF DATA ITEM Final Report	3. SUBTITLE
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4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE SOW 5.0	6. REQUIRING OFFICE NRL 7601
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7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY OTIME	12. DATE OF FIRST SUBMISSION 30 days after end	14. DISTRIBUTION		
8. APP CODE AN		11. AS OF DATE End of Performance	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE		b. COPIES
					Draft	Reg
						Repro

16. REMARKS The final report shall be a concise but comprehensive summary of the scientific objectives; findings and recommendations made over the entire contract period. Final reports must be submitted to the COR for approval prior to publication and distribution.	15. TOTAL →
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17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

1. DATA ITEM NO. A006	2. TITLE OF DATA ITEM Contractor On-Site Labor Report	3. SUBTITLE
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4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE SOW 5.0	6. REQUIRING OFFICE NRL 7602
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7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY MNTLY	12. DATE OF FIRST SUBMISSION 30 DAC	14. DISTRIBUTION		
8. APP CODE		11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION 5th working day/month	a. ADDRESSEE		b. COPIES
					Draft	Reg
						Repro

16. REMARKS The Contractor shall provide a monthly contractor on-site labor report by the 5th workday of each month for the preceding month. The report must include the following data: 1. Reporting period: Contract Number, Contract Value, Current Funding, Date Submitted. 2. Labor (including subcontractors): show employee's name and number of hours worked on-site at the Naval Research Laboratory. If employees worked on multiple tasks (as defined by the COR), the number of hours worked on each task must be shown separately.	15. TOTAL →
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17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY <i>James P. Waldenfels</i> James P. Waldenfels	H. DATE 3/22/99 3/22/99	I. APPROVED BY	J. DATE
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**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 Code: TBD 4555 Overlook Ave., S.W. Washington, DC 20375-5320	N00173	1	1
Administrative Contracting Officer TBD	TBD	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)	TBD	1	1

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 SER: 068-98 a. FACILITY CLEARANCE REQUIRED SECRET b. LEVEL OF SAFEGUARDING REQUIRED NONE	
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)			3. THIS SPECIFICATION IS: (X and complete as applicable)		
a. PRIME CONTRACT NUMBER		X	a. ORIGINAL (Complete date in all cases)		Date (YYMMDD) 981207
b. SUBCONTRACT NUMBER			b. REVISED (Supersedes all previous specs) Revision No.		Date (YYMMDD)
X	c. SOLICITATION OR OTHER NUMBER 76-0037-99	Due Date (YYMMDD)	c. FINAL (Complete Item 5 in all cases)		Date (YYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NO. if Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.					
5. IS THIS A FINAL DD FORM 254? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NO. if Yes, complete the following: In response to the contractor's request dated _____, retention of the identified classified material is authorized for the period of _____.					
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)					
a. NAME, ADDRESS, AND ZIP CODE		b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)		
FOR RFP PURPOSES ONLY, NOT VALID FOR ACTUAL CONTRACT AWARD					
7. SUBCONTRACTOR					
a. NAME, ADDRESS, AND ZIP CODE		b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)		
N/A			N/A		
8. ACTUAL PERFORMANCE					
a. LOCATION		b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)		
N/A			N/A		
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT Research areas of upper air physics, astronomy, astrophysics, and remote geo-sensing.					
10. THIS CONTRACT WILL REQUIRE ACCESS TO:				11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
		YES	NO		
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION			X	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	
b. RESTRICTED DATA			X	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION			X	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	
d. FORMERLY RESTRICTED DATA			X	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	
e. INTELLIGENCE INFORMATION:			X	e. PERFORM SERVICES ONLY	
(1) Sensitive Compartmented Information (SCI)			X	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	
(2) Non-SCI			X	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	
f. SPECIAL ACCESS INFORMATION			X	h. REQUIRE A COMSEC ACCOUNT	
g. NATO INFORMATION			X	i. HAVE TEMPEST REQUIREMENTS	
h. FOREIGN GOVERNMENT INFORMATION			X	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	
i. LIMITED DISSEMINATION INFORMATION			X	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	
j. FOR OFFICIAL USE ONLY INFORMATION			X	l. OTHER (Specify)	
k. OTHER (Specify)					

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

Direct Through (Specify):

Commanding Officer, Naval Research Laboratory, Washington, DC 20375-5320, Code 7601.

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

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

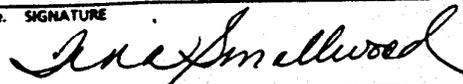
Access to classified information is not required for the purpose of submitting a bid/proposal for this statement work. However, prior to award of contract, the successful contractor will be required to have a SECRET facility clearance, and personnel available with DoD granted personnel security clearances 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 or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.) Yes No

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

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (Include Area Code)
TINA SMALLWOOD	Contracting Officer, Security	202-767-2240/2521

d. ADDRESS (Include Zip Code) Naval Research Laboratory Washington, DC 20375-5320	17. REQUIRED DISTRIBUTION	
	<input checked="" type="checkbox"/> a. CONTRACTOR	<input type="checkbox"/> b. SUBCONTRACTOR
e. SIGNATURE 	<input checked="" type="checkbox"/> c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR	<input type="checkbox"/> d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
	<input type="checkbox"/> e. ADMINISTRATIVE CONTRACTING OFFICER	<input checked="" type="checkbox"/> f. OTHERS AS NECESSARY 1221.11,7601,7602

PERSONNEL REQUIREMENTS

Below are the personnel requirements for each labor category. Relevant experience while pursuing education counts toward experience. "Demonstrated" means performance of relevant functions on a specific project, educational experience, etc. that is or can be documented.

To enhance corporate knowledge, responsibility, accountability and efficiency, these positions shall be filled by one person, except for incidental performance. All proposed personnel must be U.S. Citizens. All individuals must have the capability to obtain and maintain a SECRET clearance.

References to OPM Qualification Standards for General Schedule are to the following website: <http://www.opm.gov/fedclass/html/gclass.htm> under "Occupational Series Standards."

Senior Scientist
Research Scientist
Instrument Scientist
Senior Engineer
Senior Electrical Engineer
Database Administrator/Programmer Analyst
Electrical Engineer
Operations Engineer
Data Technician
Electronic Technician

SENIOR SCIENTIST – Must have a minimum of a master's degree in physical science (as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," GS-1300P – see website above) or mathematics with a minimum of five years experience in solar and astrophysics research. Must have demonstrated experience in planning activities for, operating, and characterizing a space-based UV optical instrument. Must also have demonstrated skills used for analyzing and interpreting scientific data time series, including but not limited to advanced Fourier techniques. Must have interpreted scientific experimental data resulting in published papers in refereed scientific journals.

RESEARCH SCIENTIST – Must have Ph.D. in physical science (as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," GS-1300P – see website above) or mathematics, with a minimum of seven years experience in solar and astrophysics research. Must have demonstrated experience in the overall management of a continuously operating space-based UV optical instrument, including the development of science plans; techniques of instrument operations and characterization;

reduction and the scientific interpretation of experimental results; and specification, programming, and management of programming tasks by others. A minimum of five years of programming experience with IDL (Interactive Development Language) and Fortran is required. Must also have produced scientific papers published in refereed scientific journals or have evidenced the ability to do so by citation as a co-author or participant in such papers.

INSTRUMENT SCIENTIST – Must have a minimum of a master's degree in physical science (as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," GS-1300P – see website above) or mathematics with a minimum of five years experience in solar and astrophysics research. Must have demonstrated experience in analyzing and characterizing space-based UV optical and imaging instruments. Must have eight years of experience using the IDL programming language. Must possess skills used for analyzing scientific and image time series including Fourier techniques. Must also have produced scientific experimental results published in refereed scientific journals or have evidenced the ability to do so by citation as a co-author or participant in such papers.

SENIOR ENGINEER – Must have a minimum of a master's degree in astronomy with a minimum of seven years experience in physical sciences (as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," GS-1300P – see website above). Must have demonstrated experience in being a senior engineer for space-based embedded systems for scientific data acquisition. Must be familiar with scientific CCD (Charge Coupled Device) imaging for space use, including test procedures, CCD characteristics, CCD operations, and design of automated test software and camera electronics. Must be experienced in writing spacecraft ground support software, including telemetry, planning and operations. Must have demonstrated the ability to administer a network of workstations to do work comparable to data reduction and analysis of final LASCO (Large Angle Spectrometric Coronagraph) data including image decompression and image processing. Must have current working knowledge of latest computing techniques and software tools including Java, Tcl, Perl, SQL, HTML and C. Must have the demonstrated ability to perform independent research and present results.

SENIOR ELECTRICAL ENGINEER - Must have a minimum of a bachelor's degree in electronic or electrical engineering with a minimum of seven years experience in Scientific VMEbus instrumentation and support hardware. Experience must include or be comparable to mechanical and electrical design, fabrication, testing and installation of VMEbus assemblies for use in the Navy Prototype Optical Interferometer's (NPOI) distributed VMEbus control systems (for background see http://www.astronomy.net/astroguide/info/observatory/Navy_Prototype_Optical_Interferometer/ and related sites). Must be familiar with VMEBus specification, VMEBus board design and VMEBus system integration. Must have demonstrated digital design skills directly relating to design of VMEbus circuit board assemblies. Must have demonstrated analog design skills to design, test and debug high speed and high voltage circuits. To directly support projects, must have demonstrated experience with OrCad

schematic design software, Tango PCB design software, Altera Programmable Logic Design software, DSP Assembly and SPICE Simulation.

DATABASE ADMINISTRATOR/PROGRAMMER ANALYST – Must have a minimum of a master's degree in computer science, or in an engineering program with a documented concentration in computer science courses, with a minimum of five years experience in database administration/program analysis. Must have demonstrated experience in administering and writing software on a Sybase SQL database. Must have demonstrated experience in handling all data archive tasks including software updates, backups, data updates and database design. Must have demonstrated familiarity with software tools including PERL, SQL, IDL and C, particularly the Sybase C client. Must have demonstrated experience in writing software to access databases and generate reports.

ELECTRICAL ENGINEER – Must have a minimum of a bachelor's degree in electrical or electronic engineering with a minimum of five years of experience directly related to rf and microwave design. Demonstrated experience must include mechanical and electrical design, fabrication, assembly, testing, packaging, and calibration geared towards radiometric instrumentation. Must have demonstrated experience with data acquisition systems, computer control, and software for flow control, such as C++ and LabView. CAD experience is required for mechanical design. Must also have experience with measurement equipment, including network analyzers and spectrum analyzers. Familiarity with aircraft environment and flight specifications is desired.

OPERATIONS ENGINEER – Must have a minimum of a a bachelor's degree in engineering (as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," see link to GS-0800 Engineering Group – see website above, under "Exclusions," or see <http://www.cybercomm.net/~digibook/doc13b.htm> – exclude non-professional, technician, drafting and trainee classifications) with a minimum of five years demonstrated experience in space-based experiment operations management. Must have a minimum of five years experience in managing the operations of a space-based UV optical instrument including interpretation of ephemeris projections, formulation of command loads and monitoring of instrument activities and status. Must also have three years experience in IDL programming on VAX/VMS in the evaluation and analysis of instrument data products.

DATA TECHNICIAN – Must have a minimum of a bachelor's degree in physical sciences, computer science or engineering (equivalent fields are as identified in the OPM Qualification Standards for General Schedule, under "Occupational Series Standards," GS-1300P for physical science – see website above, or for engineering under "Occupational Series Standards," see link to GS-0800 Engineering Group – within website above, under "Exclusions," or see <http://www.cybercomm.net/~digibook/doc13b.htm> -- exclude non-professional, technician, drafting and trainee classifications) with a minimum of two years experience with IDL and Unix. Must have demonstrated ability to use Unix workstations and PCs running Solaris or Windows 95/NT and to manage a data archive storing several

terabytes of scientific data. Must have demonstrated experience in operating and maintaining a data archive including CDROM jukeboxes, PCS and RAID systems that make up the hardware of the archive. Must be familiar with daily operations operating and maintaining the data archive including reducing data, writing CD-R for the archive and fulfilling data requests. Must write software to perform these tasks as Unix shell scripts, IDL routines and Perl as required. Must have demonstrated experience in network systems administration.

ELECTRONIC TECHNICIAN – Must have a high school degree with a minimum of three years electronic technology education. Must have a minimum ten years electronic development experience for space environment. Must have demonstrated experience in electronic design and testing of instruments for investigating space. Must have demonstrated ability in design of electronic circuits for space environment as well as testing and troubleshooting electronic circuits and components. Must have experience coordinating and scheduling of electronics from inception to launch, including supervision of tasks to insure schedule requirements are satisfied.