

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

1. SOLICITATION NUMBER

2. (X one)

N00173-99-R-RS01

- | | |
|---|---------------------|
| | a. SEALED BID |
| X | b. NEGOTIATED (RFP) |
| | c. NEGOTIATED (RFQ) |

INSTRUCTIONS

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

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

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

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

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

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

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

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

PROCURING CONTRACTING OFFICE (CODE 3250.RDS)
NAVAL RESEARCH LABORATORY
DEPARTMENT OF THE NAVY
STENNIS SPACE CENTER, MS 39529-5004

4. ITEMS TO BE PURCHASED (Brief description)

RESEARCH AND DEVELOPMENT EFFORTS FOR PHYSICS AND APPLICATIONS OF HIGH POWER LASER AND MICROWAVE SOURCES

5. PROCUREMENT INFORMATION (X and complete as applicable)

- | | |
|---|---|
| | a. THIS PROCUREMENT IS UNRESTRICTED |
| X | 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.) |
| X | (1) Small Business |
| | (2) Labor Surplus Area Concerns |
| | (3) Combined Small Business/Labor Area Concerns |

6. ADDITIONAL INFORMATION

THE NAVAL RESEARCH LABORATORY CONTRACTING DIVISION ISSUES SOLICITATIONS AND AMENDMENTS TO SOLICITATIONS ELECTRONICALLY VIA THE INTERNET AT THE FOLLOWING WEBSITE: [HTTP://HERON.NRL.NAVY.MIL/CONTRACTS/HOME.HTM](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.

7. POINT OF CONTACT FOR INFORMATION

- | | |
|--|--|
| a. NAME (Last, First, Middle Initial) | b. ADDRESS (Include Zip Code) |
| Sewell, Richard D. | PROCURING CONTRACTING OFFICE (CODE 3250) |
| c. TELEPHONE NUMBER (Include Area Code and Extension) (NO COLLECT CALLS) | NAVAL RESEARCH LABORATORY |
| (601) 688-5784 | STENNIS SPACE CENTER, MS 39529-5004 |

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

DD FORM 1707 REVERSE, MAR 90

FOLD

FOLD

FOLD

FOLD

FROM

AFFIX
STAMP
HERE

SOLICITATION NUMBER	
N00173-99-R-RS01	
DATE (YYMMDD)	LOCAL TIME
99 APR 13	3:30 PM

TO

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-RS01	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 12 MAR 99	6. REQUISITION/PURCHASE NO.
7. ISSUED BY PROCURING CONTRACTING OFFICE NAVAL RESEARCH LABORATORY (NRL-SSC) CODE 3250 DEPARTMENT OF THE NAVY STENNIS SPACE CENTER, MS 39529-5004			8. ADDRESS OFFER TO (If other than Item 7) CODE N68462		

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

SOLICITATION

9. Sealed offers in original and 05 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in BLDG 1100, RM 107 STENNIS SPACE CTR until 3:30 local time 13 APR 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 Sewell, Richard D.	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (228) 688-5784
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11. TABLE OF CONTENTS

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<input checked="" type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT	4	<input checked="" type="checkbox"/>	J	LIST OF ATTACHMENTS	21
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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	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN

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

15C. CHECK IF REMITTANCE ADDRESS

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 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 (Signature of Contracting Officer)	28. AWARD DATE

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

PART I - THE SCHEDULE**SECTION B****SUPPLIES OR SERVICES AND PRICES/COSTS****B-1 SUPPLIES/SERVICES AND COSTS**

ITEM NUMBER	SUPPLIES OR SERVICES	ESTIMATED COST	FIXED FEE	TOTAL EST. COST PLUS FIXED FEE
0001	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0002	Reports, Data, Software and Documentation in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP
<u>OPTION ONE (YEAR TWO)</u>				
0003	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0004	Reports, Data, Software and Documentation in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP

OPTION TWO (YEAR THREE)

0005	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in Section C.	\$	\$	\$
0006	Reports, Data, Software and Documentation in accordance with Exhibit A (DD 1423) and Attachment (1)	* NSP	* NSP	* NSP
TOTAL ESTIMATED COST PLUS FIXED FEE:		\$	\$	\$

* Not Separately Priced

SECTION C

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C-1 STATEMENT OF WORK -

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

C-2 REQUIREMENTS FOR ON-SITE CONTRACTORS

For those portions of the work under this contract performed at any NRL site, the contractor shall comply with the Requirements for On-Site Contractors dated 02 February 1998 which are hereby incorporated by reference. The full text is available at :

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

SECTION D PACKAGING AND MARKING

D-1 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:

<u>FAR CLAUSE</u>	<u>TITLE</u>
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52.246-3	- Inspection Of Supplies- Cost Reimbursement (APR 1984)
52.246-5	- Inspection Of Services - Cost Reimbursement (APR 1984)
52.246-8	- Inspection Of Research And Development - Cost Reimbursement (APR 1984)

DFARS CLAUSE TITLE

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

E-2 INSPECTION AND ACCEPTANCE

Inspection and acceptance of the final delivery 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 (12) months. The period of performance for each option, if exercised, shall be for a period of twelve (12) months.

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

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

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

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

SECTION G CONTRACT ADMINISTRATION DATA

G-1 PROCURING OFFICE REPRESENTATIVE

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

Contract Matters – *

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 CONTRACTOR-ACQUIRED PROPERTY

(a) The contractor is authorized to acquire the following items of facilities which are needed to accomplish this contract.

Items to be Acquired

Estimated Cost

(To be filled in at time of award)

(b) This authorization does not constitute any consent required pursuant to the contract clause entitled "Subcontracts" (FAR 52.244-2). Advance notification or requests for consent pursuant to that clause shall be directed to the administrative contracting officer (ACO).

(c) Pursuant to the contract clause entitled "Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)" (FAR 52.245-5), title to the property shall vest in the Government.

(d) Prior to acquisition of any item of Industrial Plant Equipment, the Contractor must comply with the requirements of Department of Defense Federal Acquisition Regulation Supplement (DFARS 245.302-1(b)(1)(A). (See DFARS 245.301 for definition of "Industrial Plant Equipment.")

G-5 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

(TO BE FILLED IN AT TIME OF AWARD IF SUBCONTRACT/CONSULTANTS ARE PROPOSED BY THE SUCCESSFUL OFFEROR)

G-6 NAPS 5252.232-9001 - SUBMISSION OF INVOICES (COST-REIMBURSEMENT, TIME-AND-MATERIALS, LABOR-HOUR, OR FIXED PRICE INCENTIVE (JUL 1992))

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

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

(To be filled in at time of award)

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

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

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

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

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

is required with each invoice submittal.

is required only with the final invoice.

is not required.

(f) A Certificate of Performance

shall be provided with each invoice submittal.

is not required.

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

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

G-7 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-8 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-9 ACCOUNTING AND APPROPRIATION DATA

(To be filled in at time of award)

SECTION H SPECIAL CONTRACT REQUIREMENTS

H-1 TYPE OF CONTRACT

(To be filled in at time of award)

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

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

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

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

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

The following are identified as key personnel:

(To be filled in at time of award)

H-3 ONR 5252.216-9706 - LEVEL OF EFFORT (DEC 88)

(a) The Contractor agrees to provide the total level of effort specified in the next sentence in performance of the work described in this contract. The total level of effort for performance of this contract shall be 7400 total hours of direct labor for the base year and 7400 total hours of direct labor for each of the option years. The total shall include subcontractor direct labor for those subcontractors specifically identified in the Contractor's proposal as having hours included in the proposed level of effort. A breakdown of labor categories and hours is set forth in paragraph (k) below.

(b) The level of effort for this contract shall be expended at an average rate of 616.67 hours per month. It is understood and agreed that the rate of hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total hours of effort prior to the expiration of the term of the contract.

(c) The Contractor is required to notify the Contracting Officer when any of the following situations occur, or are anticipated to occur: If during any three consecutive months the monthly average is exceeded by 25% or, if at any time it is forecast that during the last three months of the contract less than 50% of the monthly average will be used during any given month; or, when 85% of the total level of effort has been expended.

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

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

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

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

or (ii) subject to the provisions of the clause of this contract entitled "Limitation of Cost," require the Contractor to continue to perform the work until the total number of hours of direct labor specified in paragraph (a) shall have been expended, at no increase in the fixed fee of this contract.

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

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

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

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

(k) The anticipated breakdown by labor category of the total level of effort is as follows:

<u>Labor Category</u>	<u>Hours</u>
PRINCIPAL RESEARCH SCIENTIST/ENGINEER	400
SENIOR RESEARCH SCIENTIST/ENGINEER	1000
RESEARCH SCIENTIST	1000
MASTER ENGINEER	1900
TECHNICIAN	1900
OFFICE AUTOMATION ASSISTANT	<u>1200</u>
TOTAL	7400

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

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

H-7 YEAR 2000 COMPLIANT INFORMATION TECHNOLOGY

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.

H-9 CONTRACTOR'S PROGRAM MANAGER

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

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

**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)
52.204-4	- Printing/Copying Double-Sided On Recycled Paper (JUN 1996)
52.209-6	- Protecting The Government's Interest When Subcontracting With Contractors Debarred, Suspended, Or Proposed For Debarment (JUL 1995)
52.211-15	- Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	- Audit And Records-Negotiation (AUG 1996)
52.215-8	- Order of Precedence - Uniform Contract Format (OCT 1997)
52.215-14	- Integrity of Unit Prices (OCT 1997)
52.215-15	- 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 and Pricing Data or Information Other Than Cost or Pricing Data - Modifications (OCT 1997) - Alternate IV (OCT 1997)

- 52.216-7 - Allowable Cost And Payment (APR 1998)
- 52.216-8 - Fixed-Fee (MAR 1997)
- 52.219-4 - Notice of Price Evaluation Preference For HUBZone Small Business Concerns (JAN 1999) Offeror elects to waive the evaluation preference.
- 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)
- 52.219-25 - Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (JAN 1999)
- 52.222-1 - Notice To The Government Of Labor Disputes (FEB 1997)
- 52.222-2 - Payment For Overtime Premiums (JUL 1990) -The Use Of Overtime Is Authorized Under This Contract If The Overtime Premium Does Not Exceed "0"
- 52.222-3 - Convict Labor (AUG 1996)
- 52.222-4 - Contract Work Hours And Safety Standards Act-Overtime Compensation (JUL 1995)
- 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 (JAN 1999)
- 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)
- 52.226-1 - Utilization Of Indian Organizations And Indian-Owned Economic Enterprises (JAN 1999)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.230-2 - Cost Accounting Standards (APR 1998)
- 52.230-3 - Disclosure And Consistency Of Cost Accounting Practices (APR 1998)
- 52.230-6 - Administration Of Cost Accounting Standards (APR 1996)
- 52.232-9 - Limitation On Withholding Of Payments (APR 1984)
- 52.232-17 - Interest (JUN 1996)
- 52.232-20 - Limitation Of Cost (APR 1984) (Applicable when the contract or task order

- is fully funded)
- 52.232-22 - Limitation Of Funds (APR 1984) (Applicable when the contract or task order is not fully funded)
- 52.232-23 - Assignment Of Claims (JAN 1986) Alternate I (APR 1984)
- 52.232-25 - Prompt Payment (JUN 1997)
- 52.233-1 - Disputes (DEC 1998)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.237-3 - Continuity Of Services (JAN 1991)
- 52.237-10 - Identification of Uncompensated Overtime (OCT 1997)
- 52.242-1 - Notice Of Intent To Disallow Costs (APR 1984)
- 52.242-3 - Penalties For Unallowable Costs (OCT 1995)
- 52.242-4 - Certification of Final Indirect Costs (JAN 1997)
- 52.242-13 - Bankruptcy (JUL 1995)
- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate V (APR 1984)
- 52.243-6 - Change Order Accounting (APR 1984)
- 52.243-7 - Notification Of Changes (APR 1984) fill in 30
- 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)
- 52.245-19 - Government Property Furnished "As-Is" (APR 1984)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.246-24 - Limitation Of Liability - High-Value Items (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)
- 252.204-7000 - Disclosure of Information (DEC 1991)
- 252.204-7003 - Control Of Government Personnel Work Product (APR 1992)
- 252.204-7004 - Required Central Contractor Registration (MAR 1998)
- 252.205-7000 - Provision Of Information To Cooperative Agreement Holders (DEC 1991)
- 252.209-7000 - Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate-Range Nuclear Forces (INF) Treaty (NOV 1995)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.211-7005 - Substitutions For Military Or Federal Specifications And Standards (AUG 1997)
- 252.223-7004 - 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)
- 252.225-7021 - Trade Agreements (MAR 1998)
- 252.225-7025 - Restriction On Acquisition Of Forgings (JUN 1997)
- 252.225-7026 - Reporting Of Contract Performance Outside The United States (MAR 1998)
- 252.225-7031 - Secondary Arab Boycott Of Israel (JUN 1992)
- 252.227-7000 - Non Estoppel (OCT 1966)
- 252.227-7001 - Release Of Past Infringement (AUG 1984)
- 252.227-7013 - Rights In Technical Data -- Noncommercial Items (NOV 1995)
- 252.227-7014 - Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)
- 252.227-7016 - Rights In Bids or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7025 - Limitations On The Use Or Disclosure Of Government-Furnished Information Marked With Restrictive Legends (JUN 1995)
- 252.227-7026 - Deferred Delivery Of Technical Data Or Computer Software (APR 1988)
- 252.227-7027 - Deferred Ordering Of Technical Data Or Computer Software (APR 1988)
- 252.227-7030 - Technical Data--Withholding Of Payment (OCT 1988)
- 252.227-7034 - Patents--Subcontracts (APR 1984)
- 252.227-7036 - Declaration Of Technical Data Conformity (JAN 1997)
- 252.227-7037 - Validation Of Restrictive Markings On Technical Data (NOV 1995)
- 252.227-7039 - Patents--Reporting of Subject Inventions (APR 1990)

- 252.231-7000 - Supplemental Cost Principles (DEC 1991)
- 252.232-7009 - Payment By Electronic Funds Transfer (CCR) (JUN 1998)
- 252.235-7010 - Acknowledgment of Support and Disclaimer (MAY 1995)
- 252.235-7011 - Final Scientific Or Technical Report (MAY 1995)
- 252.242-7000 - Post Award Conference (DEC 1991)
- 252.243-7002 - Requests for Equitable Adjustment (MAR 1998)
- 252.245-7001 - Reports of Government Property (MAY 1994)
- 252.246-7001 - Warranty Of Data (DEC 1991)
- 252.247-7023 - Transportation Of Supplies By Sea (NOV 1995)
- 252.247-7024 - Notification Of Transportation Of Supplies By Sea (NOV 1995)
- 252.251-7000 - Ordering From Government Supply Sources (MAY 1995)

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

(a) Definitions.

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

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

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

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

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

SECTION J

LIST OF ATTACHMENTS

- J-1** Attachment (1): (1.1) Statement Of Work - 7 Pages; (1.2) Workforce Requirements – 2 Pages; (1.3) Exhibit A - DD Form 1423, Contract Data Requirements List – 3 Pages, with Enclosure (1) - Instructions For Distribution – 1 Page, and Enclosure (2) – Monthly Cost/ Performance Reporting Requirements – 1 Page.

**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 their proposal which is available electronically in full text at <http://heron.nrl.navy.mil/contracts/rep&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.

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)
52.211-2	- Availability of Specifications Listed in the DOD Index of Specifications and Standards (DODISS) and Descriptions Listed in the Acquisition Management Systems and Data Requirements Control List, DOD 5010.12-L (AUG 1998)
52.214-34	- Submission Of Offers In The English Language (APR 1991)
52.214-35	- Submission Of Offers In U.S. Currency (APR 1991)
52.215-1	- Instructions to Offerors- Competitive Acquisition (OCT 1997)
52.215-16	- Facilities Capital Cost Of Money (OCT 1997)
52.222-24	- Preadward On-Site Equal Opportunity Compliance Evaluation (FEB 1999)
52.237-1	- Site Visit (APR 1984)
52.252-5	- Authorized Deviations in Provisions (APR 1984)

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

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

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

- (a) Submission of cost or pricing data is not required.
- (b) Provide information described below:

The Offeror shall provide information as required in Section L.11 of this solicitation entitled "Instructions for Submission and Information Required to Evaluate Proposals".

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

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

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

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

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

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

- (a) The Offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter CAGE Before the number.
- (b) If the Offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Services Center (DLSC). The Contracting Officer will--
 - (1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of the Commercial and Government Entity (CAGE) Code;
 - (2) Complete section A and forward the form to DLSC; and
 - (3) Notify the Contractor of its assigned CAGE code.
- (c) Do not delay submission of the offer pending receipt of a CAGE code.

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

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

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

(LIST)

(LIST)

(LIST)

- * For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such items, component, or process. For computer software or computer software documentation identify the software or documentation.
- ** Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.
- *** Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).
- **** Corporation, individual, or other person, as appropriate.
- ***** Enter "none" when all data or software will be submitted without restrictions.

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

- (e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.
- (f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

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

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

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

L-9 GOVERNMENT-FURNISHED PROPERTY

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

L-10 INQUIRIES CONCERNING THE RFP

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

L-11 INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS**PART L.11.A – GENERAL**

(1) Offerors are advised of the possibility that award may be made on the basis of initial proposals without written or oral discussions. Therefore, proposals should be submitted on the most favorable terms from a price and technical standpoint.

(2) Offerors shall submit a completed solicitation document.

(3) In addition to a completed solicitation document, proposals shall be submitted in two readily separable volumes, one original and five copies of Volume I – Technical/Management Proposal, and one original and two copies of Volume II – Cost/Price

proposal. Volume I shall include all data and information required for evaluation, excluding all references to cost and pricing data (see Section L 11.B below). Volume II shall include a completed solicitation document and a complete and detailed cost/price breakdown (see Section L 11.C below).

(4) Proposal Identification/Mailing - The proposal should be packaged for delivery to permit safe and timely arrival at destination. The proposal package should be sent to the address shown in Block 7 of the RFP face page and marked:

RFP No. N00173-99-R- RS01
Closing Date: (As specified in Block 9, RFP face page)
Naval Research Laboratory (NRL-SSC)
Attn: Code 3235
Stennis Space Center, MS 39529-5004

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

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

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

PART L.11.B.1- PROPOSAL SUMMARY

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

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

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

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

PART L.11.B.3- TECHNICAL APPROACH

The Offeror shall discuss in detail its proposed technical approach for performance of the research, development and application requirements associated with Ultra Broadband Radiation Source tasks, Laser-Driven X-Ray Source tasks, Laser-Driven Shock Physics tasks, Ultrashort Pulse Intense Laser tasks, High Power Microwave Source tasks, Application of High Power Microwave Source tasks, and Office Automation tasks required in Section C of this solicitation. This discussion shall be in sufficient detail to (a) demonstrate the Offeror's compliance with the requirements specified in Section C of this solicitation; (b) demonstrate the Offeror's technical competence and understanding of the purpose, objectives and scope of the required work; (c) demonstrate the Offeror's understanding of the specific technical issues dealt with in the requirements; (d) present the Offeror's proposed procedures and solutions developed to address the requirements in Section C of this solicitation; and (e) discuss all other pertinent issues.

PART L.11.B.4- CORPORATE RESOURCES AND ORGANIZATIONAL CAPABILITIES

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

Pursuant to this requirement, the Offeror shall demonstrate its capacity to routinely and rapidly respond to the design, engineering, fabrication and installation requirements of a research laboratory through specific examples drawn from the previous five years of operations. The Offeror shall also demonstrate its capability to manage and coordinate the design, fabrication, and installation of large, expensive components engineered for research applications. The Offeror shall provide examples and references for both the Offeror and all proposed subcontractors.

PART L.11.B.5- CORPORATE PAST PERFORMANCE INFORMATION

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

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

(ii) Offerors shall contact the contracting organizations identified pursuant to paragraph (a) as

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

format used to collect the information may be used instead of the past performance report.

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

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

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

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

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

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

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

(i) The "Material" estimate of \$30,000.00 for the total period of performance (an estimated average of \$ 10,000.00 for each of the three years included in the period of performance) includes those directly associated items which are expected to be incorporated into end products or expended during performance and minor direct equipment expense.

(ii) The "Travel" estimate of \$21,000.00 for the total period of performance (an estimated \$3,000.00 for each of the three years included in the period of performance) includes travel and subsistence for work at alternative sites, and for allowable local travel per the Joint Travel Regulations.

L-12 MULTIPLE AWARDS

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

SECTION M EVALUATION FACTORS FOR AWARD

M.1. EVALUATION

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

M.2. EVALUATION FACTORS FOR AWARD

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

M.2.1. – Technical Category

The technical evaluation will consider the Offeror's overall approach to, understanding of, and capability to adequately perform and provide the requirements listed in the Statement of Work, as reflected in the Offeror's responses to the evaluation criteria listed in Sections H.3, L.11.B.2, L.11.B.3, L.11.B.4, and L.11.B.5. Technical scores will be based on evaluative determinations of whether the Offeror's proposal meets, does not meet, or exceeds the Government's minimum requirements. Pursuant to FAR 15.306(c), proposals which are found to contain unrealistic technical or schedule terms, which fail to comply with the requirements stated in this RFP, or which are found to be unrealistically high or low in cost/price, may be significantly downgraded or removed from further consideration. Areas within the Offeror's technical proposal which are found to offer technical solutions or effort exceeding the Government's minimum requirements may receive maximum technical scores.

Evaluated Components within the Technical area include "Workforce Qualifications and Experience", "Technical Approach", "Corporate Resources and Organizational Capabilities" and "Corporate Past Performance Information". Within the Technical category, the component "Workforce Qualifications and Experience" is weighted significantly higher than the components "Technical Approach", "Corporate Resources and Organization Capabilities", and "Corporate Past Performance Experience", each of which are weighted equally.

Past Performance – Past performance will be evaluated on the basis of quality of work performed, timeliness of performance, cost control, and business relations. The evaluation will be based on the information provided pursuant to Contract Section L.11.B.(4) and other sources, if available. Offerors that have no relevant performance history or for which past

performance information is not available will not be evaluated favorably or unfavorably on past performance. The Government may begin proposal evaluation prior to receipt of past performance information. If, after completion of proposal evaluation except evaluation of past performance, the contracting officer determines that evaluation of past performance will not affect the outcome of competitive selection, the contracting officer may waive its evaluation in accordance with FAR 15.304(c)(3)(iii).

M.2.2 - Cost/Price Proposal-RFP Requirements

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

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

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

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

M.3 EVALUATION OF OPTIONS

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

Attachment 1:

RFP NUMBER: N00173-99-R-RS01

TABLE OF CONTENTS

- ATTACHMENT 1.1 - SECTION C: WORK STATEMENT
- ATTACHMENT 1.2 - WORKFORCE REQUIREMENTS
- ATTACHMENT 1.3 - DD FORM 1423-CONTRACT DATA REQUIREMENTS LISTS
WITH ENCLOSURES (1) AND (2)

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

C.1 BACKGROUND

C.1.1 Introduction

The Beam Physics Branch of the Plasma Physics Division carries out basic and applied research on high power laser and microwave radiation sources. The Branch develops and uses a wide variety of theoretical, numerical and experimental techniques to conduct research in such areas as ultra broadband radiation, laser-driven x-ray sources, laser-driven shock physics, ultra-intense short pulse lasers, and high power microwave source development and applications.

Theoretical and computational research conducted by the Branch maintains several major experimental facilities as well as a number of smaller scale experiments. The Branch owns and maintains two major laser sources: (a) the table top terawatt (T3) laser, and (b) the PHAROS laser. The T3 laser produces a 400 fsec long pulse at a 1.06 micron wavelength with approximately 1 J of energy. This device is used for advanced accelerator and x-ray laser applications. The PHAROS laser has similar power but produces ~1 kJ per pulse. It is used for plasma x-ray sources and shock physics studies. The Branch also owns and maintains a 4.5 MeV rf electron gun used for laser-driven accelerator and laser synchrotron x-ray source studies. Lasers are also used in smaller experiments such as the ultra broadband source and semiconductor annealing process.

Microwave experiments are carried out in a separate facility. Sources available include (a) the tunable, high frequency quasi optical gyrotron, (b) a high-power X-band magnicon, and (c) several lower power sources. The magnicon is primarily intended for accelerator applications, while the other sources are used for materials sintering and bonding research. In addition, the Branch is currently constructing a fixed frequency high average power gyrotron which will provide unique materials processing capabilities.

C.1.2 Objective

The objective of this Request for Proposals (RFP) and Statement of Work (SOW) is to acquire the necessary personnel, equipment and facilities to perform detailed research in the areas described above using analytical, numerical and experimental techniques in computer-based and other research environments.

C.1.3 Scope of Work

In general, the successful Contractor shall perform analytical, numerical and experimental research and development efforts on-site at NRL in response to Contracting Officer Representative (COR) technical direction. This work shall include, but may not be limited to, research and development in the areas of (a) Ultra Broadband Radiation Sources; (b) Laser-Driven X-Ray Sources; (c) Laser-Driven Shock Physics; (d) Ultrashort Pulse Intense Lasers; (e) High Power Microwave Sources; (f) Applications of High Power Microwave Sources; and (g) various administrative tasks associated with the required research and development efforts.

C.2 (RESERVED)

C.3 SPECIFIC REQUIREMENTS

This section contains the detailed requirements for this effort. The Contractor shall accomplish these requirements using any guidelines and directions referenced in Section C.2 entitled Applicable Documents, unless use of these guidelines is modified by the Contracting Officer's Representative (COR) pursuant to Contract Section G-4 entitled Technical Direction Memorandum. The Contractor shall not incorporate proprietary hardware or software in any deliverable developed under this contract without prior written approval of the COR.

C.3.1 **TASK 1 – DEVELOPMENT AND APPLICATION OF ULTRA BROADBAND RADIATION SOURCES**

C.3.1.1 Background

Ultra broadband or supercontinuum radiation has been routinely produced in the laboratory using short laser pulses in appropriate nonlinear media. Investigations have been conducted on related concepts which employ two long laser pulses at slightly different frequencies to produce sidebands separated by the beat frequency which may cover a broad spectral range. Two potential applications for this are remote sensing of hazardous air pollutants and shipboard sources for infrared countermeasures (IRCM) against incoming missiles.

C.3.1.2 Work Requirement

The Contractor shall perform experimental, analytical and computational research and development efforts for programs in the area of ultra broadband sources. Experimental efforts may include, but may not be limited to, (a) efforts involving existing laser sources in the visible and near infrared regime, and (b) efforts involving mid- and far-IR sources. Theoretical and computational efforts shall include, but may not be limited to, (a) use of nonlinear optics computer codes to predict the spectrum; (b) analysis and support of ongoing experiments; and (c) evaluation of potential applications for this technology.

C.3.1.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.2 TASK 2 – LASER-DRIVEN X-RAY SOURCES

C.3.2.1 Background

NRL conducts research on several classes of laser-driven x-ray sources. The Laser Synchrotron Source (LSS) produces short, narrow-bandwidth x-ray pulses by scattering an intense laser pulse off a 4.5 MeV electron beam from an RF gun. The hot plasma x-ray sources utilize the PHAROS laser to produce large x-ray fluxes from solid targets. In addition, the T3 laser has been used as a driver for a university-designed x-ray laser source.

C.3.2.2 Work Requirement

The Contractor shall perform experimental research and development efforts in the area of laser-driven X-ray sources which shall include, but may not be limited to, the research areas referenced above. The Contractor shall analyze experimental results, evaluate potential applications, and make recommendations toward the planning of future experiments.

C.3.2.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.3 LASER-DRIVEN SHOCK PHYSICS

C.3.3.1 Background

NRL has several ongoing research programs in which solid or liquid targets are subjected to strong laser-produced shocks. For example, the PHAROS laser is used to produce strong shocks and bubbles in water, thus simulating the physics of underwater explosions and their effects on surface ships, submarines, and littoral mines. PHAROS has also been used to study shock propagation and material damage in solids. NRL is also interested in laser-induced mechanical annealing of semiconductors.

C.3.3.2 Work Requirement

The Contractor shall perform experimental research and development efforts in the area of laser-induced shock physics which shall include, but may not be limited to, the research areas referenced above. The Contractor shall analyze experimental results, evaluate potential applications, and make recommendations toward the planning of future experiments. The Contractor shall also perform upgrades to the existing laser drivers, at the direction of the COR.

C.3.3.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.4 ULTRASHORT PULSE INTENSE LASERS:

C.3.4.1 Background

NRL has pioneered the development and applications of terawatt compact lasers based on the technique of chirped pulse amplification, as shown by the T3 laser as one of the laboratory's major facilities. Many applications of this technology require stable propagation of the laser pulse over long distances, and NRL has carried out numerous studies on guiding plasma channels. NRL has also developed several laser-driven electron beam accelerator concepts, and energies exceeding 100 MeV have been produced in the laboratory. NRL currently plans a substantial upgrade to the T3 laser.

C.3.4.2 Work Requirement

The Contractor shall perform theoretical, computational, and experimental research and development efforts toward utilizing ultrashort pulse intense lasers which shall include, but may not be limited to, the research areas referenced above. The Contractor shall assess applications to future accelerators, assess novel radiation sources, and perform future upgrades to the experimental facilities, as the direction of the COR.

C.3.4.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.5 HIGH POWER MICROWAVE SOURCES:

C.3.5.1 Background

NRL has developed several microwave sources with high peak and/or average power. As an example, an effort to develop a magnicon source to provide high peak power radiation at a frequency of 11.4 GHz has been ongoing. NRL is also developing a CW version of the quasi-optical gyrotron (QOG) which is tunable between 60 and 120 GHz. Also, NRL is constructing a major new facility around an 80 GHz gyrotron which is designed to operate at average powers exceeding 10 KW.

C.3.5.2 Work Requirement

The Contractor shall perform experimental research and development efforts toward development and operation of high powered microwave sources which shall include, but may not be limited to, the sources referenced above.

C.3.3.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.6 APPLICATION OF HIGH POWER MICROWAVE SOURCES:**C.3.6.1 Background**

NRL utilizes high power microwave sources for a variety of applications, including microwave processing of ceramics. At the high frequencies from the quasi-optical and fixed frequency gyrotrons, radiation can be focused onto the workpiece to accelerate the heating process. This makes these sources suitable for bonding and surface processing application as well as bulk sintering. The magnicon source is primarily intended for high energy accelerator applications. Gyrotrons and magnicons are potentially suitable for power beaming of energy to small unmanned aerial vehicles (UAVs).

C.3.6.2 Work Requirement

The Contractor shall provide efforts directed toward (a) the planning, execution, and analysis of materials processing experiments; and (b) assessment of the feasibility of other applications of high power microwave sources.

C.3.6.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.7 OFFICE AUTOMATION EFFORTS:**C.3.7.1 Work Requirements**

The Contractor shall perform efforts in the area of office automation and administration, which shall include, but may not be limited to, (a) preparation of technical and administrative documents in a variety of formats, and (b) transfer of documents to the Division Web Server. Administrative tasks associated with the requirements stated herein may also be required.

C.3.7.3 Reports and Other Deliverables

The Contractor shall provide NRL with all reports and other deliverables in accordance with Attachment 1.3 – DD Form 1423, Contract Data Requirements List.

C.3.8 FACILITIES, EQUIPMENT, MATERIALS, SUBCONTRACTS AND SUPPLIES

The Contractor shall provide any and all equipment, materials, subcontracts, and supplies required to perform the work assigned under any resulting contract if not specifically provided by the Government under Section H, paragraph H.XX. Equipment and unexpended materials and supplies purchased by the Contractor for use under this contract shall become property of the Government at the end of the performance period.

ATTACHMENT 1.2:
WORKFORCE REQUIREMENTS

GENERAL:

As stated previously (See Section H.4), the Government estimates that approximately 22,200 labor hours will be required across the 36-month period of performance. The yearly hourly usage will generally be spread evenly over each year of the contract. It is anticipated that the following labor categories will be required under any resulting contract: (a) Principal Research Scientist/Engineer; (b) Senior Research Scientist/Engineer; (c) Research Scientist; (d) Master Engineer; (e) Technician; and (f) Office Automation Assistant. The following paragraphs address educational and experience requirements and describe typical duties required for each of the labor categories listed above.

(1) PRINCIPAL RESEARCH SCIENTIST/ENGINEER

(a) Educational Requirements - The Principal Research Scientist/Engineer shall as a minimum possess a Ph.D. degree in a Physics or Electrical Engineering

(b) Experience - The Principal Research Scientist/Engineer shall possess a minimum of ten (10) years of demonstrable relevant experience in plasma physics, optics, accelerator technology, pulsed power physics and/or high-power microwave sources and applications. The Principal Research Scientist/Engineer shall also demonstrate successful management of at least one major research project.

(2) SENIOR RESEARCH SCIENTIST

(a) Educational Requirements – Each Senior Research Scientist shall, as a minimum, possess a Ph.D. in a Physics or Engineering.

(b) Experience – Each Senior Research Scientist shall possess a minimum of five (5) years of demonstrable relevant experience in plasma physics, optics, accelerator technology, material science and/or high-power microwave sources and applications

(3) RESEARCH SCIENTIST/ENGINEER

(a) Educational Requirements - Each Research Scientist/Engineer shall, as a minimum, possess a Ph.D. in a Physics or Engineering

(b) Experience – Each Research Scientist/Engineer shall possess a minimum of three (3) years of demonstrable relevant experience in plasma physics, optics, accelerator technology, material science and/or high-power microwave sources and applications

(4) MASTER ENGINEER

(a) Educational Requirements - Each Master Engineer shall, as a minimum, possess a Bachelor's degree in Mechanical or Electrical Engineering, or demonstrable equivalent training.

(b) Experience - Each Master Engineer shall possess a minimum of ten (10) years of demonstrable experience in technical areas which shall include, but may not be limited to, high voltage pulsed power systems, high power microwave tubes, high vacuum systems, mechanical design, and precision machining.

(5) TECHNICIAN

Each Technician shall, as a minimum, possess a Bachelor's degree in Physics or Electrical Engineering, or a minimum of three (3) years experience in optics, electrical systems, or laboratory diagnostics.

(6) OFFICE AUTOMATION ASSISTANT

Each Office Automation Assistant shall, as a minimum, possess five (5) years experience in office automation and administrative efforts. The Office Automation Assistant shall possess a demonstrable familiarity with Windows or Macintosh operating systems and Microsoft Word or related products. The Government prefers that the Office Automation Assistant have demonstrable experience with a research organization.

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 Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204A, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please do not send your comments 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		B. EXHIBIT A		C. CATEGORY: TOP _____ TM _____ OTHER _____			
D. SYSTEM / ITEM		E. CONTRACT / PR NO. RFP: N00173-99-R-RS01		F. CONTRACTOR (To be determined at time of award)			
1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Monthly Cost and Performance Reports		3. SUBTITLE				
4. AUTHORITY (Data Acquisition Document No.)		5. CONTRACT REFERENCE Sections B, C, & H		6. REQUIRING OFFICE NRL CODE 6793			
7. DD 250 REQ LT	8. DWT STATEMENT REQUIRED	9. FREQUENCY MONTHLY	10. DATE OF FIRST SUBMISSION See Blk. 16	14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE See Blk. 16	13. DATE OF SUBSEQUENT SUBMISSION See Blk. 16	15. ADDRESSEE			
16. REMARKS Written Reports, in accordance with Enclosure (2) - Reporting Requirements Instructions, shall be made monthly. Block 12 - 15 days after the end of the first month after contract execution. Block 13 - 15 days after the end of each subsequent month. For written technical reports and for letter reports containing scientific or technical information, the distribution in Enclosure (1) applies.				15. COPIES			
				COR		Draft	Final
				CODE 6702			1
				ACO			1
				(Trx. Ltr. Only)			
				CODE 6790			1
				15. TOTAL	1 3		
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Contract Final Report		3. SUBTITLE				
4. AUTHORITY (Data Acquisition Document No.)		5. CONTRACT REFERENCE Sections B, C, & H		6. REQUIRING OFFICE NRL CODE 6790			
7. DD 250 REQ DD**	8. DWT STATEMENT REQUIRED	9. FREQUENCY One/R	10. DATE OF FIRST SUBMISSION	14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE See Section F	13. DATE OF SUBSEQUENT SUBMISSION	15. ADDRESSEE			
16. REMARKS A Final Report is defined as a scientific or technical report which summarizes all work accomplished under the Contract. Reprints of published articles may be accepted as technical reports with the concurrence of the COR. ** DD 250 required only for acceptance by the COR designated in Section G.				15. COPIES			
				COR		Draft	Final
				NRL CODE 6790			1
				ACO			1
				(Trx. Ltr. Only)			
				NRL CODE 6702			1
				15. TOTAL	1 3		
G. PREPARED BY NRL-SSC Code 3235:RDS		H. DATE 22 JAN 1999	I. APPROVED BY		J. DATE		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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			B. EXHIBIT A		C. CATEGORY: TOP _____ TM _____ OTHER _____			
D. SYSTEM / ITEM			E. CONTRACT / PR NO. RFP: N00173-99-R-RS01		F. CONTRACTOR (To be determined at time of award)			
1. DATA ITEM NO. A003	2. TITLE OF DATA ITEM Formal and Informal Technical Reports				3. SUBTITLE			
4. AUTHORITY (Use Acquisition Document No.)			5. CONTRACT REFERENCE Sections B, C, & H		6. REQUIRING OFFICE NRL Code 6793			
7. DD FORM REQ LT	8. DUST STATEMENT REQUIRED	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION **		14. DISTRIBUTION			
9. APP CODE		11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION **		a. ADDRESSEE		b. COPIES	
16. REMARKS Block 12: 30 days after completion of task or end of period of performance,					COR			
					CODE 6702			1
					ACO			
					(Trx. Ltr. Only)			
					CODE 6790			1
								1 1
1. DATA ITEM NO. A004			2. TITLE OF DATA ITEM Software, Databases, Models, Algorithms,		3. SUBTITLE			
4. AUTHORITY (Use Acquisition Document No.)			5. CONTRACT REFERENCE Sections B, C, & H		6. REQUIRING OFFICE NRL CODE 6790			
7. DD FORM REQ LT	8. DUST STATEMENT REQUIRED	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION SEE BLK. 16		14. DISTRIBUTION			
9. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION SEE BLK. 16		a. ADDRESSEE		b. COPIES	
16. REMARKS Block 12 - 30 days after completion of task or end of the period of performance					COR			
					CODE 6702			1
					ACO			1
					(Trx. Ltr. Only)			
					CODE 6790			1
								1 3
6. PREPARED BY NRL-SSC Code 3235:RDS			8. DATE 22 JAN 1999	1. APPROVED BY		3. DATE		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED

RFP NO: N00173-99-R-RS01 Enclosure (1) to Attachment (1.3)

INSTRUCTIONS FOR REPORT DISTRIBUTION

DEFINITIONS

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

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

MINIMUM DISTRIBUTION

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

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

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

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

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

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

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

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

1. INSTRUCTIONS FOR MONTHLY COST AND PERFORMANCE REPORTING REQUIREMENTS

This report shall specify:

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

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