

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

1. SOLICITATION NUMBER

2. (X one)

N00173-98-R-JW02

a. SEALED BID

b. NEGOTIATED (RFP)

c. NEGOTIATED (RFQ)

INSTRUCTIONS

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

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

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

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

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

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

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

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

CONTRACTING OFFICER
NAVAL RESEARCH LABORATORY
ATTN: CODE 3240.JW
WASHINGTON DC 20375-5326

4. ITEMS TO BE PURCHASED (Brief description)

Engineering and technical services support for a variety of R&D programs to develop sophisticated electronic warfare (EW) techniques and implementation hardware for Navy aerospace platforms.

5. PROCUREMENT INFORMATION (X and complete as applicable)

a. THIS PROCUREMENT IS UNRESTRICTED

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

<input type="checkbox"/> (1) Small Business	<input type="checkbox"/> (2) Labor Surplus Area Concerns	<input type="checkbox"/> (3) Combined Small Business/Labor Area Concerns
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6. ADDITIONAL INFORMATION

The Naval Research Laboratory Contracting Division issues solicitations and amendments to solicitations electronically via the Internet at the following website: <http://heron.nrl.navy.mil/contracts/home.htm>.

Any amendments to this solicitation will be posted at that website. Amendments will not be distributed by any other means. It is the responsibility of potential offerors to periodically review the website for amendments to this solicitation.

7. POINT OF CONTACT FOR INFORMATION

a. NAME (Last, First, Middle Initial)

WALDENFELS, James P.

b. ADDRESS (Include Zip Code)

CONTRACTING OFFICER, NAVAL RESEARCH LABORATORY, ATTN: CODE 3240.JW, 4555 OVERLOOK AVE., S.W., WASHINGTON, DC 20375-5326

c. TELEPHONE NUMBER (Include Area Code and Extension) (NO COLLECT CALLS) (202) 767-3003

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

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FROM

AFFIX
STAMP
HERE

SOLICITATION NUMBER	
N00173-98-R-JW02	
DATE (YYMMDD)	LOCAL TIME
980515	4:00 PM

**TO CONTRACTING OFFICER
NAVAL RESEARCH LABORATORY
ATTN: CODE 3240.JW
4555 OVERLOOK AVENUE, S.W.
WASHINGTON, DC 20375-5326**

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING DO-A7	PAGE OF 1 55 PAGES
2. CONTRACT NO.	3. SOLICITATION NO. N00173-98-R-JW02	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED April 8, 1998	6. REQUISITION/PURCHASE NO. 57-3025-98
7. ISSUED BY CONTRACTING OFFICER NAVAL RESEARCH LABORATORY ATTN: CODE 3240.JW WASHINGTON, DC 20375-5326			8. ADDRESS OFFER TO (If other than Item 7) 		

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

SOLICITATION

9. Sealed offers in original and 1 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in BLDG. 222, ROOM 115 until 4:00pm local time May 15, 1998
(Hour) (Date)

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

10. FOR INFORMATION CALL:	A. NAME JAMES P. WALDENFELS	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (202) 767-3003
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11. TABLE OF CONTENTS

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<input checked="" type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT	3	<input checked="" type="checkbox"/>	J	LIST OF ATTACHMENTS	25
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OFFER (Must be fully completed by offeror)

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

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52-232-8)	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	%	%	%	%
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.		17. SIGNATURE
AWARD (To be completed by Government)			18. OFFER DATE

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)
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	MAXIMUM ESTIMATED COST	MAXIMUM FIXED FEE	MAXIMUM TOTAL EST. COST PLUS FIXED FEE
0001	The contractor shall perform research support services as described in Section C.	\$	\$	\$
0002	Data in accordance with Exhibit A (DD 1423) and Enclosure (1).	* NSP	* NSP	* NSP
TOTAL MAXIMUM ESTIMATED COST PLUS FIXED FEE FOR CLINS 0001 AND 0002		\$	\$	\$

* Not Separately Priced

B-2 MINIMUM AND MAXIMUM QUANTITIES

As contemplated by the clause of the solicitation entitled, "Indefinite Quantity", the minimum quantity that will be ordered by the Government during the effective period of the contract is research and development support requiring the contractor to provide a level of effort of 1,920 direct labor hours.

The maximum quantity that the Government may order during the effective period of the contract is research and development support requiring the contractor to provide a level of effort of 91,200 direct labor hours.

The minimum and maximum quantities may consist of any combination of the tasks contained in the statement of work.

SECTION C

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C-1 STATEMENT OF WORK

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

C-2 The specific work to be carried out shall be further described in task orders issued under this contract.

C-3 REQUIREMENTS FOR ON-SITE CONTRACTORS

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

SECTION D

PACKAGING AND MARKING

D-1 PACKAGING AND MARKING

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

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

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

E-2 INSPECTION AND ACCEPTANCE

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

SECTION F**DELIVERIES OR PERFORMANCE****F-1 DELIVERIES OR PERFORMANCE CLAUSES INCORPORATED BY REFERENCE:****FAR CLAUSE TITLE**

52.242-15 - Stop-Work Order (AUG 1989) - Alternate I (APR 1984)

52.247-34 - F.O.B. Destination (NOV 1991)

F-2 DELIVERIES OR PERFORMANCE

(a) The effective period of this contract during which delivery orders/task orders may be issued is from date of contract award through 60 months thereafter.

(b) Each delivery order/task order shall specify the period of performance.

(c) All deliverables required by Contract Line Item No. (CLIN) 0001 under each order shall be shipped FOB Destination, Naval Research Laboratory, Washington DC 20375-5320, consigned to:

Contracting Officer's Representative

*

Naval Research Laboratory

Contract Number : *

Delivery Order Number: _____

Building: *

Code: *

4555 Overlook Avenue, SW

Washington DC 20375-5320

(d) Each delivery order/task order shall specify the place of performance.

(* To be filled in at time of award)

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

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

Contract Matters - Mr. James P. Waldenfels, Code 3240.JW, (202) 767-3003, DSN 297-3003, or Telecopier (202)767-6197

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

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

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

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

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

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

* is hereby designated the cognizant COR who will represent the Contracting Officer in the administration of technical details within the scope of this contract and inspection and acceptance. The COR is not otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Government. The COR may be personally liable for unauthorized acts. 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. This COR appointment shall be effective through the life of this contract unless otherwise relieved in writing and is not redelegable.

(* To be filled in at time of award)

G-3 TECHNICAL DIRECTION MEMORANDUM (TDM)

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

- (1) Direction to the Contractor which shifts work emphasis between work areas or tasks, requires pursuit of certain lines of inquiry, fills in details or otherwise describes work which will accomplish the objectives described in the statement of work;
- (2) Guidelines to the Contractor which assist in interpretation of drawings, specifications or technical portions of work description.

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

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

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

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

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

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

(f) CORs shall retain all files containing TDMs for a period of two (2) years after

the final contract completion date.

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

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

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

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

(To be filled in at time of award)

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

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

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

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

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

is required with each invoice submittal.

is required only with the final invoice.

is not required.

(f) A Certificate of Performance

shall be provided with each invoice submittal.

is not required.

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

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

G-5 INCREMENTAL FUNDING

Orders issued under this contract may be incrementally funded. Incrementally funded orders will contain a provision substantially as follows:

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

(* To be filled in at time of award)

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

The purpose of these instructions is to permit the paying office to charge the accounting classification citations in the contract in a manner that reflects the performance of the contract. These instructions do not create any obligation on the part of the Government or the contractor nor do they in any way alter any obligation created by any other provision of the contract. Invoices should be paid from available ACRNs in the following order:

- (a) ACRNs cited on the contractor's invoice.
- (b) On a proportional basis from any ACRNs assigned to funds which will cancel at the end of the current fiscal year.
- (c) The ACRN assigned to the following line of accounting:

97X4930.NH4A 000 77777 0 000173 2F 000000 N00173Z45000.
- (d) If funds appropriated in more than one fiscal year are allotted to the contract, the ACRN assigned to the oldest allotment of funds.
- (e) On a proportional basis from all ACRNs assigned to allotments of funds appropriated in a single fiscal year.

G-7 ACCOUNTING AND APPROPRIATION DATA

Each delivery order/task order will contain the accounting and appropriation data for payment under the contract.

G-8 TASK ORDER PROCEDURES FOR INDEFINITE QUANTITY CONTRACTS

The following procedure shall be followed when placing task orders under this contract:

- (a) Only properly appointed Contracting Officers employed at the Naval Research Laboratory (NRL) shall issue task orders under this contract.
- (b) A DD Form 1155 will be issued for each task order. The DD Form 1155, "Order for Supplies or Services", shall constitute the instrument for the placement of requirements under this contract.

(c) Each task order shall be subject to FAR 52.232-20 Limitation of Cost or FAR 52.232-22 Limitation of Funds clause, as appropriate. Each task order is subject to the terms and conditions of the clause in Section H entitled, "Level of Effort Task Orders".

(d) Prior to the issuance of a task order, the contractor will be provided with the statement of work and shall promptly submit a cost proposal for performing the work. The fixed fee shall be in the same proportion to the estimated cost for each task order as the maximum fixed fee is to the maximum estimated cost for the contract as set forth in Section B.

(e) Task orders issued shall include, but not be limited to, the following information:

- (1) Date of Order
- (2) Contract Number and Task Order Number
- (3) Accounting and Appropriation Data
- (4) Description of the Work to be Performed
- (5) Level of Effort
- (6) Place of Performance
- (7) Period of Performance
- (8) Estimated Cost Plus Fixed Fee
- (9) List of Government furnished material and the estimated value thereof for each order.

(f) The ceiling amount for each task order will be the ceiling price stated therein and may not be exceeded except when authorized by a modification to the task order.

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:

Senior Electronics Engineer (one person)
Senior Computer Scientist

(To be filled in at time of award)

H-3 LEVEL OF EFFORT TASK ORDERS

- (a) In the performance of each task order issued under this contract, the Contractor agrees to provide the level of effort specified in the task order and in accordance with this provision.
- (b) The level of effort per task order shall be expended at the average monthly rate specified therein. It is understood and agreed that the rate of direct labor hours expended each 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 task order.
- (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, at any time it is forecast that during the last three months of the task order 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 under a task order 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 under a task order such that the labor-hours of effort specified therein 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 ten days of receipt.
- (f) If the total level of effort specified in each task order is not provided by the Contractor during the term of the task order, the Contracting Officer shall either (i) reduce the fixed fee of the task order 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 the task order shall have been expended, at no increase in the fixed fee of the task order.

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

(h) Notwithstanding any of the provisions of the above paragraphs, the Contractor may furnish labor-hours up to five percent in excess of the total direct labor-hours specified in the task order 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 specified in the task order.

(i) It is understood that the mix of labor categories provided by the Contractor under the task order, 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 incorporated herein applies to each task order under this contract.

H-4 SUBCONTRACTORS/CONSULTANTS

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

Subcontractor/Consultant Name	Time or Unit	Estimated Cost
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(To be filled in at time of award)

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

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

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

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

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

H-6 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.

The following items will be available for contractor use on a shared basis with NRL personnel:

- Office area and office supplies (desk, chair, pens, etc.)
- Laboratory Bench
- Assorted Tools (wrenches, screwdrivers, etc.)
- Frequency Synthesizers (HP 8673A,B)
- Spectrum Analyzers (HP 8593A)
- Logic Analyzer (HP 16500A)
- Network Analyzer (HP 8510)
- Wire Wrap Equipment
- Soldering Equipment
- Antenna Compact Range
- Antenna Isolation Chamber
- Shielded Laboratories
- Microwave and Millimeter Wave Anechoic Chambers

IBM compatible Pentium, Macintosh, HP 360 computers and various laser printers and color plotters also will be made available for contractor use on a shared basis with NRL personnel. Design, layout, word processing, and control software packages will be made available.

H-7 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-8 YEAR 2000 COMPLIANT INFORMATION TECHNOLOGY

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

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

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

Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www-far.npr.gov/References/References.html>

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

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

52.202-1	-	Definitions (OCT 1995)
52.203-3	-	Gratuities (APR 1984)
52.203-5	-	Covenant Against Contingent Fees (APR 1984)
52.203-6	-	Restrictions On Subcontractor Sales To The Government (JUL 1995)
52.203-7	-	Anti-Kickback Procedures (JUL 1995)
52-203-8	-	Cancellation, Rescission, And Recovery Of Funds For Illegal Or Improper Activity (JAN 1997)
52.203-10	-	Price Or Fee Adjustment For Illegal Or Improper Activity (JAN 1997)
52.203-12	-	Limitation On Payments To Influence Certain Federal Transactions (JUN 1997)
52.204-2	-	Security Requirements (AUG 1996)
52.204-4	-	Printing/Copying Double-Sided On Recycled Paper (JUN 1996)
52.209-6	-	Protecting The Government's Interest When Subcontracting With Contractors Debarred, Suspended, Or Proposed For Debarment (JUL 1995)
52.211-15	-	Defense Priority and Allocation Requirements (SEP 1990)
52.215-2	-	Audit And Records-Negotiation (AUG 1996)
52.215-8	-	Order of Precedence - Uniform Contract Format (OCT 1997)
52.215-11	-	Price Reduction for Defective Cost or Pricing Data - Modifications (OCT 1997)
52.215-13	-	Subcontractor Cost or Pricing Data Modifications (OCT 1997)
52.215-15	-	Termination of Defined Benefit Pension Plans (OCT 1997)
52.215-17	-	Waiver of Facilities Capital Cost of Money (OCT 1997)

- 52.215-18 - Reversion or Adjustment of Plans for Post-retirement Benefits (PRB) Other than Pensions (OCT 1997)
- 52.215-19 - Notification of Ownership Changes (OCT 1997)
- 52.216-7 - Allowable Cost And Payment (FEB 1998)
- 52.216-8 - Fixed-Fee (MAR 1997)
- 52.216-15 - Predetermined Indirect Cost Rates (FEB 1998)
- 52.219-8 - Utilization Of Small, Small Disadvantaged And Women-Owned Small Business Concerns (JUN 1997)
- 52.219-9 - Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (AUG 1996) - Alternate II (MAR 1996)
- 52.219-16 - Liquidated Damages-Subcontracting Plan (OCT 1995)
- 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)
- 52.222-21 - Prohibition of Segregated Facilities (APR 1984) (DEVIATION)
- 52.222-26 - Equal Opportunity (APR 1984)
- 52.222-28 - Equal Opportunity Preadward Clearance Of Subcontracts (APR 1984)
- 52.222-35 - Affirmative Action For Special Disabled And Vietnam Era Veterans (APR 1984)
- 52.222-36 - Affirmative Action For Handicapped Workers (APR 1984)
- 52.222-37 - Employment Reports On Special Disabled Veterans And Veterans Of The Vietnam Era (JAN 1988)
- 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 (MAR 1997)
- 52.223-6 - Drug-Free Workplace (JAN 1997)
- 52.223-14 - Toxic Chemical Release Reporting (OCT 1996)
- 52.225-11 - Restrictions On Certain Foreign Purchases (OCT 1996)
- 52.226-1 - Utilization Of Indian Organizations And Indian-Owned Economic Enterprises (SEP 1996)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
- 52.227-12 - Patent Rights - Retention By The Contractor (Long Form) (JAN 1997)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.230-2 - Cost Accounting Standards (APR 1996)

- 52.230-3 - Disclosure And Consistency Of Cost Accounting Practices (APR 1996)
- 52.230-5 - Cost Accounting Standards - Educational Institutions (APR 1996)
- 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)
- 52.232-33 - Mandatory Information For Electronic Funds Transfer Payment (AUG 1996)
- 52.233-1 - Disputes (OCT 1995)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.237-10 - 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 I (APR 1984)
- 52.244-2 - Subcontracts (Cost-Reimbursement And Letter Contracts) (OCT 1997) - Alternate I (AUG 1996)
- 52.244-5 - Competition In Subcontracting (DEC 1996)
- 52.244-6 - Subcontracts for Commercial Items and Commercial Components (OCT 1995)
- 52.245-5 - Government Property (Cost-Reimbursement, Time-And-Material, Or Labor-Hour Contracts) (JUL 1995) (DEVIATION)
- 52.245-9 - Use And Charges (APR 1984) (DEVIATION)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.246-25 - Limitation Of Liability - Services (FEB 1997)
- 52.247-1 - Commercial Bill Of Lading Notations (APR 1984)
- 52.247-63 - Preference For U. S. Flag Carriers (JAN 1997)
- 52.249-5 - Termination For Convenience Of The Government (Educational And Other Non-Profit Institutions) (SEP 1996)
- 52.249-6 - Termination (Cost-Reimbursement) (SEP 1996)
- 52.249-14 - Excusable Delays (APR 1984)
- 52.251-1 - Government Supply Sources (APR 1984)
- 52.252-6 - Authorized Deviations in Clauses (APR 1984) fill in Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2)

52.253-1 - Computer Generated Forms (JAN 1991)

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

DFARS CLAUSE	TITLE
252.201-7000	- Contracting Officer's Representative (DEC 1991)
252.203-7001	- Special Prohibition On Employment (JUN 1997)
252.203-7002	- Display Of DoD Hotline Poster (DEC 1991)
252.204-7000	- Disclosure of Information (DEC 1991)
252.204-7003	- Control Of Government Personnel Work Product (APR 1992)
252.205-7000	- 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)
252.209-7005	- Military Recruiting On Campus (FEB 1996)
252.219-7003	- Small Business And Small Disadvantaged Business Subcontracting Plan (DoD Contracts) (APR 1996)
252.219-7004	- Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (Test Program) (JUN 1997)
252.219-7005	- Incentive For Subcontracting With Small Businesses, Small Disadvantaged Businesses, Historically Black Colleges And Universities And Minority Institutions (NOV 1995) If the Contractor exceeds the small disadvantaged business, historically black college and university, minority institution goal of its subcontracting plan, at completion of contract performance, the Contractor will receive 1 percent of the excess.
252.223-7004	- Drug-Free Work Force (SEP 1988)
252.223-7006	- Prohibition On Storage And Disposal Of Toxic And Hazardous Materials (APR 1993)
252.225-7012	- Preference For Certain Domestic Commodities (FEB 1997)
252.225-7026	- Reporting Of Contract Performance Outside The United States (NOV 1995)
252.225-7031	- Secondary Arab Boycott Of Israel (JUN 1992)
252.227-7013	- Rights In Technical Data -- Noncommercial Items (NOV 1995)
252.227-7014	- Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)

- 252.227-7016 - Rights In Bids or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7025 - Limitations On The Use Or Disclosure Of Government-Furnished Information Marked With Restrictive Legends (JUN 1995)
- 252.227-7030 - Technical Data--Withholding Of Payment (OCT 1988)
- 252.227-7034 - Patents--Subcontracts (APR 1984)
- 252.227-7036 - Declaration Of Technical Data Conformity (JAN 1997)
- 252.227-7037 - Validation Of Restrictive Markings On Technical Data (NOV 1995)
- 252.227-7039 - Patents--Reporting of Subject Inventions (APR 1990)
- 252.231-7000 - Supplemental Cost Principles (DEC 1991)
- 252.232-7000 - Advanced Payment Pool (DEC 1991)
- 252.232-7006 - Reduction Or Suspension Of Contract Payments Upon Finding Of Fraud (AUG 1992)
- 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)
- 252.242-7004 - Material Management And Accounting System (SEP 1996)
- 252.243-7002 - Certification of Requests for Equitable Adjustment (JUL 1997)
- 252.245-7001 - Reports of Government Property (MAY 1994)
- 252.247-7023 - Transportation Of Supplies By Sea (NOV 1995)
- 252.247-7024 - Notification Of Transportation Of Supplies By Sea (NOV 1995)
- 252.251-7000 - Ordering From Government Supply Sources (MAY 1995)

I-2 FAR 52.215-21 REQUIREMENTS FOR COST AND PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA - MODIFICATIONS (OCT 1997) - ALTERNATE IV (OCT 1997)

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

(b) Provide information described below:

For modifications, the offeror shall submit a cost proposal with supporting information for each cost element consistent with offeror's cost accounting system. The supporting breakdown should include such elements as materials, direct labor, indirect cost, and other costs such as travel. The offeror shall provide exhibits as necessary to substantiate the cost elements. Should rates be used in the proposal which are not DCAA approved, the offeror shall provide complete documentation and the rationale for their use at time of proposal submission.

INDEFINITE DELIVERY, INDEFINITE QUANTITY CLAUSES:

I-3 FAR 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from award of basic contract through sixty months thereafter.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

I-4 FAR 52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) *Minimum order.* When the Government requires supplies or services covered by this contract in an amount of less than 500 hours, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) *Maximum order.* The Contractor is not obligated to honor -

(1) Any order for a single item in excess of 18,240 hours within a 12 month period;

(2) Any order for a combination of items in excess of 18,240 hours within a 12 month period ; or

(3) A series of orders from the same ordering office within a twelve month period that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within **seven** days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

I-5 FAR 52.216-22 INDEFINITE QUANTITY (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum".

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after **sixty days after contract completion**.

I-6 FAR 52.223-11 - OZONE-DEPLETING SUBSTANCES (JUN 1996)

(a) Definitions.

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

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

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

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

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

SECTION J

LIST OF ATTACHMENTS

- J-1** Attachment (1) - Statement Of Work - 4 Pages, With Exhibit A - DD Form 1423, Contract Data Requirements - 3 Pages, And Enclosure (1) - Instructions For Distribution - 1 Page
- J-2** Attachment (2) - DD 254, Contract Security Classification Specification Form, Ser 010-98, Dated 980225 - 2 Pages
- J-3** Attachment (3) - Personnel Qualifications - 8 Pages

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

K-1 The following Representations, Certifications, and Other Statements Of Offerors or Respondents are incorporated by reference with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

FAR CLAUSE TITLE

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

DFARS CLAUSE TITLE

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

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

(a) *Definitions.*

"Common parent," as used in the solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Corporate status," as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity, (e.g., sole proprietorship or partnership), or corporation providing medical and health care services.

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

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

(c) *Taxpayer Identification Number (TIN).* TIN: _____. TIN has been applied for. TIN is not required because: Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.; Offeror is an agency or instrumentality of a foreign government; Offeror is an agency or instrumentality of a Federal, state, or local government; Other. State basis. _____(d) *Corporate Status.* Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services; Other corporate entity; Not a corporate entity; Sole proprietorship Partnership Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).(e) *Common Parent.* Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause. Name and TIN of common parent:

Name _____

TIN _____

K-3 FAR 52.204-5 -WOMAN-OWNED BUSINESS (OCT 1995)(a) *Representation.* The offeror represents that it is, is not a women-owned business concern.(b) *Definition.* "Women-owned business concern," as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

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

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

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

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

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

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

(ii) The Offeror has has not , within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror non-responsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

K-5 FAR 52.215-4 -TYPE OF BUSINESS ORGANIZATION (OCT 1997)

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

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

(b) If the offeror or respondent is a foreign entity, it operates as an individual, a partnership, a nonprofit organization, a joint venture, or a corporation, registered for business in _____.
(country)

K-6 FAR 52.215-6 -PLACE OF PERFORMANCE (OCT 1997)

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, intends, does not intend [check applicable block] to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

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

PLACE OF PERFORMANCE OWNER (STREET ADDRESS, CITY, STATE, COUNTY, ZIP CODE)	NAME AND ADDRESS OF AND OPERATOR OF THE PLANT OR FACILITY IF OTHER THAN OFFEROR OR RESPONDENT
---	--

K-7 FAR 52.219-1 - SMALL BUSINESS PROGRAM REPRESENTATIONS (JAN 1997)

(a) (1) The standard industrial classification (SIC) code for this acquisition is 8731.

(2) The small business size standard is 500 employees.

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

(b) *Representation.*

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

(2) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it is, is not a small disadvantaged business concern.

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

(c) *Definitions.* "Small business concern", as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in CFR Part 121 and the size standard in paragraph (a) of this provision.

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

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

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

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

(d) *Notice.*

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

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

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

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

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

K-8 FAR 52.222-22 - PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (APR 1984) (DEVIATION)

The offeror represents that--

(a) It has, has not participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation,

(b) It has, has not filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

K-9 FAR 52.222-25 - AFFIRMATIVE ACTION COMPLIANCE (APR 1984)

The offeror represents that--

(a) It has developed and has on file, has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or

(b) It has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

K-10 FAR 52.223-1 - CLEAN AIR AND WATER CERTIFICATION (APR 1984)

The Offeror certifies that--

(a) Any facility to be used in the performance of this proposed contract is , is not listed on the Environmental Protection Agency List of Violating Facilities;

(b) The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the Offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and

(c) The Offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

K-11 FAR 52.223-13 - CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)

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

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

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

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

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

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

(iii) The facility does not meet the reporting thresholds of toxic

chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

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

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

K-12 FAR 52.226-2 - HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION REPRESENTATION (MAY 1997)

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

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

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

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

is is not a Historically Black College or University;

is is not a Minority Institution.

K-13 FAR 52.227-6 - ROYALTY INFORMATION (APR 1984)

(a) *Cost or charges for royalties.* When the response to this solicitation contains costs or charges for royalties totaling more than \$250, the following information shall be included in the response relating to each separate item of royalty or license fee:

- (1) Name and address of licensor.
- (2) Date of license agreement.
- (3) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable.
- (4) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable.
- (5) Percentage or dollar rate of royalty per unit.
- (6) Unit price of contract item.
- (7) Number of units.
- (8) Total dollar amount of royalties.

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

K-14 FAR 52.230-1 - COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (APR 1996) ALTERNATE I (APR 1996)

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

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

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

I. DISCLOSURE STATEMENT--COST ACCOUNTING PRACTICES AND CERTIFICATION

(a) Any contract in excess of \$500,000 resulting from this solicitation, except contracts in which the price negotiated is based on (1) established catalog or market prices of commercial items sold in substantial quantities to the general

public, or (2) prices set by law or regulation, will be subject to the requirements of the Cost Accounting Standards Board (48CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

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

(c) Check the appropriate box below:

(1) Certificate of Concurrent Submission of Disclosure Statement.

The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows:

(i) original and one copy to the cognizant Administrative Contracting Officer (ACO) or cognizant Federal agency official authorized to act in that capacity (Federal Official), as applicable, and (ii) one copy to the cognizant Federal auditor.

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

Date of Disclosure Statement:_____

Name and Address of Cognizant ACO where filed:_____

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

(2) Certificate of Previously Submitted Disclosure Statement

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

Date of Disclosure Statement:_____

Name and Address of Cognizant ACO or Federal Official Where
Filed: _____

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

(3) Certificate of Monetary Exemption

The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated national defense prime contracts and subcontracts subject to CAS totaling more than \$25 million (of which at least one award exceeded \$1 million) in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Office immediately.

(4) Certificate of Interim Exemption

The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit revised a certificate to the Contracting Officer, in the form specified under subparagraphs (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of completed Disclosure Statement.

CAUTION: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$25 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

II. COST ACCOUNTING STANDARDS - ELIGIBILITY FOR MODIFIED CONTRACT COVERAGE

If the offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the

Cost Accounting Standards clause.

The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$25 million in awards of CAS-covered prime contracts and subcontracts, or the offeror did not receive a single CAS-covered award exceeding \$1 million. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

CAUTION: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$25 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$25 million or more.

III. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS.

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

YES NO

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

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

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

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

K-15 DFARS 252.209-7002 DISCLOSURE OF OWNERSHIP OR CONTROL BY A FOREIGN GOVERNMENT (SEP 1994)*(a) Definitions.*

As used in this provision --

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

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

(i) Means --

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

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

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

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

(4) "Proscribed information" means --

(i) Top Secret information;

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

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

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

(v) Sensitive Compartmented Information (SCI).

(b) *Prohibited on award.*

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

(c) *Disclosure.*

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

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

Name and Address of Offeror

Name and Address of Entity Controlled by a Foreign Government

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

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

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

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

(b) Representations.

Check the category in which your ownership falls--

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

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

_____ Black American (U.S. Citizen)

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

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

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

_____ Other

(c) *Certifications.*

Complete the following--

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

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

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

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

(d) *Penalties and Remedies.*

Anyone who misrepresents the status of a concern as a small disadvantaged business for the purpose of securing a contract or subcontract shall--

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

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

(3) Be ineligible for participation in programs conducted under authority of the Small Business Act.

K-17 DFARS 252.226-7001 - HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION STATUS(JAN 1997)(a) *Definitions.*

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

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

(b) *Certification.*

The Offeror certifies that it is--

_____A historically black college or university

_____A minority institution

(c) *Notification.*

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

K-18 DFARS 252.247-7022 - REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

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

(b) *Representation.*

The Offeror represents that it--

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

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

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

K-19 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING

The Offeror's CAGE Code is_____.

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

SECTION L

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

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

<http://www-far.npr.gov/References/References.html>

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

FAR CLAUSE TITLE

52.204-6	-	Contractor Identification Number - Data Universal Numbering System (DUNS) Number (DEC 1996)
52.211-2	-	Availability of Specifications Listed in the DOD Index of Specifications and Standards (DODISS) (JUN 1997)
52.215-1	-	Instructions to Offerors- Competitive Acquisition (OCT 1997)
52.215-16	-	Facilities Capital Cost Of Money (OCT 1997)
52.222-24	-	Preaward On-Site Equal Opportunity Compliance Review (APR 1984)DEVIATION
52.252-5	-	Authorized Deviations in Provisions (APR 1984)

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

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

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

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

(b) Provide information described below:

Required data are described in the cost proposal section of Provision L-12, 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 an Indefinite Delivery Indefinite Quantity type contract with Cost Plus Fixed Fee term form task orders resulting from this solicitation.

L-5 ANTICIPATED DISTRIBUTION OF DIRECT LABOR HOURS BY LABOR CATEGORIES

The following is the anticipated distribution by labor category of the maximum level of effort. This distribution shall be used by the offeror in preparing the cost proposal. If the offeror uses labor category terminology other than that used in this provision, the offeror must provide a matrix clearly relating their proposed labor categories to those in this provision.

<u>LABOR CATEGORY</u>	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>TOTAL</u>
Project Electronics Engineer	1,920	1,920	1,920	1,920	1,920	9,600
Electronics Engineer	3,840	3,840	3,840	3,840	3,840	19,200
Senior Electronics Engineer	3,840	3,840	3,840	3,840	3,840	19,200
Senior Scientist	960	960	960	960	960	4,800
Technician	1,920	1,920	1,920	1,920	1,920	9,600
Senior Computer Scientist	1,920	1,920	1,920	1,920	1,920	9,600
Computer Scientist	1,920	1,920	1,920	1,920	1,920	9,600
Software Engineer	<u>1,920</u>	<u>1,920</u>	<u>1,920</u>	<u>1,920</u>	<u>1,920</u>	<u>9,600</u>
Total	18,240	18,240	18,240	18,240	18,240	91,200

L-6 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-7 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-8 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	Basis for Asserting Assertion** Restrictions****	Asserted Name of Person Rights Category***	
to be Furnished With Restrictions*	(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-9 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-10 GOVERNMENT-FURNISHED PROPERTY

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

L-11 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-12 INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS

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

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

Solicitation No. N00173-98-R-JW02
Closing Date:
(As specified in Block 9, RFP face page)
Attn: Code 3240.JW

(3) Proposal Format and Length - No attempt is made to restrict the proposal format and style. However, the proposal should be written and organized so as to be compatible with the RFP, the Statement of Work,

company's organization and accounting structure, and proposed cost estimate. Offerors are encouraged to use recycled paper and maximize the use of double sided copying when preparing responses to solicitations.

(4) Labor must be proposed in accordance with the level of effort breakdown identified in Provision L-4.

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

VOLUME I - TECHNICAL/MANAGEMENT PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 4 COPIES

The following is provided as a broad indication of content rather than format:

- Introduction
- Personnel Qualifications
 - Personnel Resumes
 - Understanding and Knowledge
- Corporate Experience and Management Approach
- Past Performance

Under the Technical Subfactor entitled "Personnel Qualifications":

The proposal must provide documentation to demonstrate the experience, other qualifications and availability of its proposed personnel with respect to the requirements set forth in the SOW, in the attachment to the RFP entitled Personnel Qualifications and in the attached DD Form 254. Proposal of only one person for these positions will contribute more to the score than proposal of more than one person, except for the electronics engineer and senior electronics engineer positions, where the estimated level of effort is two persons per year (two persons in each of these positions will contribute more to the score than more than two persons). The offeror must provide resumes for all proposed personnel. In addition to career experience and education, each resume should describe specific experience supporting the statement of work and personnel qualifications unless obvious from the career experience. If a degree is mentioned, the kind and year granted must be stated.

In addition to the resumes, the proposed staff's ability to satisfy the qualifications identified as "Collective Staff Expertise" should be addressed in sufficient detail so that the level of expertise is evident (e.g., knowledge and understanding of key issues, theories, applications, application methodology,

developments, resources, facts, risks, research techniques, the research community, etc.) as well as who can provide the expertise. The foregoing examples are not meant as a mandatory topic outline; the offeror's task is to address these and/or other topics that will enable the evaluators to gauge knowledge and understanding. Include a table showing which proposed personnel provide key expertise in each of the areas indicated under "Collective Staff Expertise."

Under the Technical Subfactor entitled "Corporate Experience and Management Approach":

The proposal must document the relevance and depth of the company's experience in the field described in the Statement of Work as well as the soundness of the company's management approach regarding support to performing personnel, staff management, and business interactions.

Under the Technical Subfactor entitled "Past Performance":

(a) 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 5 contracts or subcontracts completed during the past 3 years for services similar in nature to this requirement. Include in the 5 any current contracts or subcontracts for similar services that were awarded at least one year prior to the date of this solicitation. Offerors that have no similar previous or current contracts should provide the requested information for proposed subcontractors that will perform major or critical aspects of the requirement or for the proposed project manager or key personnel responsible for major or critical aspects of the requirement.

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

(b) 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.

(c) 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.

VOLUME II - COST PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 2 COPIES

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

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

If labor fringe or overhead rates, G&A rates, or cost of money rates for the first period of performance are changing significantly (about 5% of the rate or more) from previously experienced or approved rates, an explanation should be provided.

If facilities capital cost of money is proposed, the offeror shall submit a table showing the allocation by year of each cost of money factor to land, buildings and equipment.

L-13 TRAVEL AND MATERIAL ESTIMATE

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

TRAVEL COSTS - \$250,000 (\$50,000 PER YEAR) PLUS ANY APPLICABLE INDIRECT COSTS.

MATERIAL COSTS - \$4,750,000 (\$950,000 PER YEAR) PLUS ANY APPLICABLE INDIRECT COSTS.

SECTION M

EVALUATION FACTORS FOR AWARD

M-1 EVALUATION

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

M-2 EVALUATION FACTORS FOR AWARD

Proposals will be evaluated in accordance with the following criteria. The technical factor is more important than the cost factor. Within the technical factor, subfactor (1) is more than twice as important as the sum of subfactors (2) and (3). Subfactor (2) is twice as important as Subfactor (3). All personnel qualifications identified as "required" or "minimum" must be satisfied in order for the proposal to be considered acceptable.

I. TECHNICAL/MANAGEMENT

(1) PERSONNEL QUALIFICATIONS

Each offer will be evaluated on the experience, understanding, knowledge, other qualifications and availability of its proposed personnel with respect to the requirements set forth in the SOW, in the attachment to the RFP entitled Personnel Qualifications and in the attached DD Form 254. Proposal of only one person for these positions will contribute more to the score than proposal of more than one person, except for the electronics engineer and senior electronics engineer positions, where the estimated level of effort is two persons per year. (two persons in each of these positions will contribute more to the score than more than two persons).

(2) CORPORATE EXPERIENCE AND MANAGEMENT APPROACH

Each offer will be evaluated on the relevance and depth of the company's experience in the field described in the Statement of Work as well as on the soundness of the company's management approach regarding support to performing personnel, staff management, and business interactions.

(3) PAST PERFORMANCE

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

II. COST

(1) PROPOSED OVERALL COST

Proposed estimated cost and fixed-fee.

(2) THE REALISM OF THE PROPOSED COST

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

The Government may adjust the proposed cost for purposes of evaluation based upon the results of the cost realism evaluation.

STATEMENT OF WORK

1.0 INTRODUCTION

This statement of work describes the engineering and related support services to be provided on-site for the Aerospace Electronic Warfare Systems Branch, Tactical Electronic Warfare Division, at the U.S. Naval Research Laboratory in Washington, D.C. The services include a number of interrelated tasks that vary in both the technical scopes and products. Several of the tasks support the same mission and careful coordination is required to ensure success.

2.0 SCOPE

The Contractor shall support tasks that include hardware and software system engineering, hardware and software system analysis, component specification, and data collection and analysis. The uniqueness of data availability, the availability of necessary data processing equipment, and the sensitive security requirements dictate that all tasks be performed on-site at NRL.

3.0 MAJOR TASKS

The contractor shall support the following major task areas:

TASK 1. Integrated Electronic Countermeasures

Task 2. Multi-Spectral Countermeasures

Task 3. Expert Systems

Task 4. Non-Cooperative Target Recognition

4.0 TASK DESCRIPTIONS

4.1 TASK 1. Integrated Electronic Countermeasures

General Task Description: This task is concerned with the development and evaluation of Electronic Countermeasures (ECM) techniques against radar controlled weapon systems. The techniques use combinations of currently available and emerging Fleet assets in new synergistic modes. Particularly, countermeasures for integrated towed decoys (ECM waveform generation onboard the aircraft, and transmission from an off board platform), and integrated chaff techniques (automatic chaff trigger from jammer) need to be developed. Other hardware could also be considered for integration, as

well as combinations of self-protect, stand-off and escort jamming. Specifically, this work involves the development of ECM concepts for jamming modern radars and seekers, the identification of hardware requirements to be developed and integrated to generate the ECM concepts, the configuration of this equipment into laboratory and field experimental systems, and the test and evaluation of the concepts for effectiveness. The contractor shall perform the following sub tasks:

4.1.2 ECM Concepts: The Contractor shall develop integrated countermeasures against modern radars and homing seekers. The victims for the countermeasures include pulse Doppler radars, Signature recognition radars such as inverse synthetic aperture radars, active homing seekers and track-via missile homing systems. The Contractor shall work with NRL personnel in developing accurate digital models to represent such systems, and use the models for countermeasures analysis as applicable. The product for this sub task will be digital models (software), model documentation, and a report on the countermeasure analysis.

4.1.3 Hardware Development: The Contractor shall identify, design, fabricate, integrate, laboratory test and evaluate hardware capable of generating ECM waveforms that result from countermeasure concepts investigations. The product for this task will be appropriate hardware with design documentation, and a report summarizing the system characteristics and expected performance.

4.1.4 Test and Evaluations: The Contractor shall test and evaluate the hardware developed under sub task 4.1.3 in the field, against a number of victims specified by the government (simulators, radars, etc.). The product shall be test plans and a report summarizing the test procedures and results.

4.2 TASK 2. Multi-Spectral Countermeasures

4.2.1 General Task Description: This task is concerned with countermeasures against radar controlled weapon systems that use multiple spectrums for tracking and guidance. An example of such a system is the dual mode RF/IR homing seeker. Most modern radars have automatic tracking modes other than microwave RF. The various track modes include, but are not limited to RF, IR, EO, and UV. Specifically, this work is concerned with the detection and identification of multi-mode threats, and the development of countermeasure concepts against these multi-mode systems. The contractor shall perform the following sub tasks:

4.2.2 Threat Identification Functions: The Contractor shall define signal detection and identification techniques against postulated threats, and work with NRL personnel to develop software and hardware surrogate approaches, to implement such techniques into hardware and software, and to perform laboratory and field testing against the surrogates. The product will be a summary of the trade-off study performed

for the selection of the optimum techniques, hardware configured for the laboratory and field tests, and a report summarizing the experiments performed and the results.

4.2.3 Countermeasure Techniques: The Contractor shall define passive and active techniques and modulations that are effective against postulated multi-mode radars and seekers. The Contractor shall work with NRL personnel to implement the countermeasure concepts in hardware and software to perform laboratory and field tests. The Contractor shall develop modeling and simulation programs to aid in the process of technique optimization. The product shall include a summary of the technical trade-offs, hardware and software design, electrical and mechanical documentation, and results of laboratory and field tests.

4.2.4 ECM Concepts: The Contractor shall develop and evaluate ECM system concepts and methods for collecting specific threat parameters specified by NRL. This shall include defining data collection requirements, data analysis, system concept definition, hardware design and test, and concept validation in the field.

4.3 TASK 3. Expert Systems:

4.3.1 General Task Description: The objective of this task is to develop concepts for expert systems applications to threat system functional identification. Current ECM systems require library look-up tables to identify specific threats. Functional identification will reduce or eliminate the library look-up tables by using radar waveform information to determine the function of the radar. Specifically, this work involves functional identification rule base development, neural network development and application, software implementation, and simulation test of functional identification systems for current and emerging ECM systems. The contractor shall perform the following sub tasks:

4.3.2 Rule Base and Algorithm Development: The Contractor shall define rule bases for functional identification of hostile radars, and develop software algorithms to implement the rule bases. The product for this sub task shall be a report documenting the functional identification rule base and the rationale for the base, and software documentation.

4.3.3 Expert System Application: The Contractor shall develop applications to retrofit current generation aircraft and other platform systems with functional identification capability. The Contractor shall develop applications for integrating functional identification into emerging and next generation airframes. The product shall be a report documenting the applications and insertion designs.

4.3.4 Expert System Evaluation: The Contractor shall develop statistical computer methods to emulate functional identification systems. The Contractor shall perform statistical tests and analysis of functional identification emulations. The product for this sub task will be a report detailing test results and methods and software.

Task 4: Non-Cooperative Target Recognition:

4.4.1 General Task Description: The objective of this task is to develop methods for jamming radar systems that use non-cooperative target recognition (NCTR) for identification of hostile platforms. Platforms may be sea, air, or space based. Specifically, this work involves theoretical characterization of targets based on complex radar returns in the time, frequency, and polarization domains, and the development of measurement, analysis, and jamming hardware that addresses these domains. Emphasis will be placed on the polarization domain. The contractor shall perform the following sub tasks:

4.4.2 Target Characterization: The Contractor shall perform theoretical analysis of target signatures in the time, frequency, and polarization domains. The Contractor shall apply theory and measurement data to develop mathematical and software models of complex target signatures. The product of this sub task will be a report detailing the target characteristics, and models. Software documentation is required for software modeling efforts.

4.4.3 Countermeasure Requirements: The Contractor shall generate the ECM requirements for jamming radars that use NCTR in time, frequency, and polarization domains. The product shall be a report justifying the requirements.

4.4.4 Hardware Development: The Contractor shall identify, design, integrate, laboratory test and evaluate hardware capable of generating ECM waveforms that meet the requirements specified by the Government. The product will be the appropriate ECM hardware and a report summarizing the system characteristics and expected performance.

4.4.5 Test and Evaluation: The Contractor shall test and evaluate the hardware developed under sub task 4.4.4 in the field, against a number of radars specified by the government. The product shall be a report summarizing the experimental arrangement and results.

5.0 DELIVERABLES

The contractor shall provide deliverables as required by Section 4.0 of the Statement of Work and as outlined in the DD Form 1423, Contract Data Requirements List.

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 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		B. EXHIBIT A		C. CATEGORY: TDP TM OTHER					
D. SYSTEM / ITEM R&D Support for Navy Aerospace EW			E. CONTRACT / PR NO. 57-3025-98		F. CONTRACTOR				
1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Technical Analysis Reports			3. SUBTITLE					
4. AUTHORITY (Data Acquisition Document No.)			5. CONTRACT REFERENCE SOW 4.0		6. REQUIRING OFFICE NRL Code 5732				
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ					
8. APP CODE N		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ					
16. REMARKS The technical reports shall present a concise and factual discussion of technical findings and accomplishments. The reports should be of technical publication quality, including appropriate subject matter reference. The following information shall be included: task objective, technical problems, general methodology (e.g. literature review, laboratory experiment, survey, field study, etc.), technical results, important findings and conclusions, implications for further research, significant hardware and software development, and special comments. See Enclosure (1) to DD Form 1423 regarding "unclassified/limited" and "classified."				14. DISTRIBUTION					
				a. ADDRESSEE		b. COPIES			
						Draft	Final		
						Reg	Repro		
				NRL Code 5732		1	1		
				ACO			1		
				NRL Code 5227			1		
				DTIC (See Blk 16)			4		
15. TOTAL		1	7						

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY <i>James P. Waldenfels</i> James P. Waldenfels		H. DATE 1/20/98	I. APPROVED BY		J. DATE
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1007-183

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

DISTRIBUTION OF TECHNICAL REPORTS

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

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

DISTRIBUTION OF NON-TECHNICAL REPORTS

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

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

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>				1. CLEARANCE AND SAFEGUARDING SER: 010-98								
				a. FACILITY CLEARANCE REQUIRED								
				TOP SECRET								
				b. LEVEL OF SAFEGUARDING REQUIRED								
				NONE								
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)				3. THIS SPECIFICATION IS: (X and complete as applicable)								
a. PRIME CONTRACT NUMBER				X		a. ORIGINAL (Complete date in all cases)		Date (YYMMDD)				
b. SUBCONTRACT NUMBER						b. REVISED (Supersedes all previous specs)		Revision No. Date (YYMMDD)				
c. SOLICITATION OR OTHER NUMBER		Due Date (YYMMDD)				c. FINAL (Complete Item 5 in all cases)		Date (YYMMDD)				
X 57-3025-98												
4. IS THIS A FOLLOW-ON CONTRACT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.												
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's request dated _____, retention of the identified classified material is authorized for the period of _____												
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)												
a. NAME, ADDRESS, AND ZIP CODE			b. CAGE CODE		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)							
FOR RFP PURPOSES ONLY, NOT VALID FOR ACTUAL CONTRACT AWARD.												
7. SUBCONTRACTOR												
a. NAME, ADDRESS, AND ZIP CODE			b. CAGE CODE		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)							
N/A					N/A							
8. ACTUAL PERFORMANCE												
a. LOCATION			b. CAGE CODE		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)							
N/A					N/A							
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT												
Engineering and technical support services.												
10. THIS CONTRACT WILL REQUIRE ACCESS TO:				11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:								
				YES	NO							
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION					X	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY					X	
b. RESTRICTED DATA					X	b. RECEIVE CLASSIFIED DOCUMENTS ONLY						X
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION					X	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL						X
d. FORMERLY RESTRICTED DATA					X	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE						X
e. INTELLIGENCE INFORMATION:						e. PERFORM SERVICES ONLY						X
(1) Sensitive Compartmented Information (SCI)				X		f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES						X
(2) Non-SCI				X		g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER					X	
f. SPECIAL ACCESS INFORMATION					X	h. REQUIRE A COMSEC ACCOUNT						X
g. NATO INFORMATION					X	i. HAVE TEMPEST REQUIREMENTS						X
h. FOREIGN GOVERNMENT INFORMATION					X	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS						X
i. LIMITED DISSEMINATION INFORMATION					X	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE						X
j. FOR OFFICIAL USE ONLY INFORMATION					X	l. OTHER (Specify)						
k. OTHER (Specify)												

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

Direct Through (Specify):

Commanding Officer, Naval Research Laboratory, Washington, DC 20375-5320, Code 5735.
NO PUBLIC RELEASE OF SCI AUTHORIZED.

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

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

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

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.) Yes No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.) Yes No

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

a. TYPED NAME OF CERTIFYING OFFICIAL TINA SMALLWOOD	b. TITLE Contracting Officer, Security	c. TELEPHONE (Include Area Code) 202-767-2240/2521
d. ADDRESS (Include Zip Code) Naval Research Laboratory Washington, DC 20375-5320		17. REQUIRED DISTRIBUTION <input checked="" type="checkbox"/> a. CONTRACTOR <input type="checkbox"/> b. SUBCONTRACTOR <input checked="" type="checkbox"/> c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR <input type="checkbox"/> d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION <input type="checkbox"/> e. ADMINISTRATIVE CONTRACTING OFFICER <input checked="" type="checkbox"/> f. OTHERS AS NECESSARY 1221.11, 1223.1, 5735, ONI-532
e. SIGNATURE 		

PERSONNEL QUALIFICATIONS

LABOR CATEGORIES

PROJECT ELECTRONICS ENGINEER:

MINIMUM EDUCATION: A Bachelor degree in Engineering

YEARS OF EXPERIENCE: A minimum of five recent* years covering the fields of Electronic Countermeasures (ECM) and associated technologies as applied to Advanced Coherent Threat Radars (e.g., SAR and ISAR).

TYPE OF EXPERIENCE REQUIRED:

- A. Design of discrete digital and analog components and microprocessors;
- B. Design of ECM technique generators/controllers;
- C. Design and use of research and development hardware/software involving Digital Radio Frequency Memories (DRFM) interfaces and control hardware as well as DRFM devices for electronic warfare applications and generation and implementation of effective electronic attack (EA) against advanced coherent radar threats;
- D. Hardware and software control of the interactions of receiver, transmitter and data display groups;
- E. Knowledge of research and development of hardware/software in the radar/seeker/sensor field with particular emphasis on monopulse, millimeter wave, multi-spectral, and dual-polarized sensor areas; and
- F. Research in the seeker guidance field, with emphasis on semiactive, active, and anti-air anti-radiation seekers.

ADDITIONAL EXPERIENCE DESIRED:

- A. Knowledge of Radar Systems such as (SAR) and (ISAR), and

- B. Research and development hardware/software knowledge in the areas of digital technology, optical fiber technology, tapped delay line technology, and its application to electronic warfare areas, digital and optical signal processing technology, and RF, microwave, and millimeter wave radar/sensor technology.

SECURITY CLEARANCE: Must possess or be eligible for TOP SECRET/SCI.

ELECTRONICS ENGINEER

MINIMUM EDUCATION: Bachelor degree in Electronics or Electrical Engineering. Equivalent: an Associate degree in Electronics or Electrical Engineering plus two additional years of qualifying experience beyond the minimum.

YEARS OF EXPERIENCE: A minimum of three recent* years of experience in the areas of receivers, signal processing, low frequency waveforms, ECM techniques and low frequency radar operation.

TYPE OF EXPERIENCE REQUIRED:

- A. Design of analog/discrete RF receiver subsystems;
- B. Design of discrete digital components and microprocessors;
- C. Design of ECM technique generators/controllers; and
- D. Hardware and software control of interactions between receiver, transmitter, and data display groups.

ADDITIONAL EXPERIENCE DESIRED:

- A. Knowledge of Radar Systems such as Search and Over-the-Horizon, SAR and ISAR.

SECURITY CLEARANCE: One engineer must possess or be eligible for TOP SECRET/SCI, other(s) SECRET.

SENIOR ELECTRONICS ENGINEER

MINIMUM EDUCATION: A Bachelor degree in Electrical or Electronics Engineering.

YEARS OF EXPERIENCE: A minimum of five recent* years of experience in theoretical and hardware design of digital circuits and microprocessors for ECM.

TYPES OF EXPERIENCE REQUIRED:

- A. Design of digital signal processing circuits and algorithms;
- B. Software programming of DSP circuits;
- C. Design of ECM technique generators and controllers; and
- D. Circuit card fabrication and test.

SECURITY CLEARANCE: Must possess or be eligible for TOP SECRET.

SENIOR SCIENTIST:

MINIMUM EDUCATION: A Ph.D. degree in Physics or Electrical Engineering that provides a background in high voltage electron devices, high power amplifiers, or other related background.

YEARS OF EXPERIENCE: A minimum of ten recent* years direct experience in laboratory research, development, test and evaluation of electron devices, high voltage power technology, high power amplifier sources, or other related background for Navy EW/Radar applications.

TYPE OF EXPERIENCE REQUIRED:

- A. Design and fabrication of distributed amplifiers;
- B. Design and fabrication of vacuum electron devices and solid state amplifiers; research, design, fabrication, and development of field emission cathodes;
- C. Design and fabrication of novel vacuum fabrication facilities and electron guns; and

- D. Design, fabrication, test, evaluation and operation of hardware/software involving high power tetrodes, triodes, klystrons, crossed-field amplifiers, traveling wavetubes, traveling wavetube amplifiers, and magnetrons.

ADDITIONAL EXPERIENCE DESIRED:

- A. Other related design experience in devices.

SECURITY CLEARANCE: Must possess or be eligible for TOP SECRET/SCI.

TECHNICIAN

MINIMUM EDUCATION: High school diploma.

YEARS OF EXPERIENCE: A minimum of three recent* years direct experience in laboratory research, development, fabrication, test and evaluation of electric and mechanical components.

TYPE OF EXPERIENCE REQUIRED:

- A. Machinist experience that provides a background in the usage of normal machine shop machinery in fabrication of prototypes in an R&D facility; and
- B. Electronics background in device fabrication, including the mechanical fabrication of components, subassemblies, and assemblies into a complete high power electron tube.

ADDITIONAL EXPERIENCE DESIRED:

- A. The individual should have practical experience with vacuum system technology, hydrogen furnaces, high voltage power supplies, arc welding and other machine shop machinery.

SECURITY CLEARANCE: Must possess or be eligible for SECRET.

SENIOR COMPUTER SCIENTIST

MINIMUM EDUCATION: A Bachelor degree in Computer Science or Electrical Engineering. Equivalent: a Bachelor degree in any other engineering discipline plus an additional year of qualifying experience beyond the minimum, or a Bachelor degree in any other discipline plus an additional three years of qualifying experience beyond the minimum.

YEARS OF EXPERIENCE: A minimum of five recent* years experience in computer software design, test and debug.

TYPES OF EXPERIENCE REQUIRED:

- A. Computer program design and development including higher-order-language experience in FORTRAN, C and C++;
- B. Algorithm development for solutions to engineering and physical problems;
- C. Computer hardware applications, and optimum usage of computer resources;
- D. Research and development of software for the development of aerospace EW simulations; and
- E. Expert systems algorithm development, statistical modeling for expert system evaluation, and neural network development.

ADDITIONAL EXPERIENCE DESIRED:

- A. Digital computer software modeling and simulation of weapon systems and weapon system interactions;
- B. Experience in control/optimization in near real time of hardware and software, especially in electronic warfare applications;
- C. Modeling and simulation of radar/seeker/sensor systems; and
- D. Modeling and simulation of radar/seeker/guidance systems.

SECURITY CLEARANCE: Must possess or be eligible for SECRET.

COMPUTER SCIENTIST

MINIMUM EDUCATION: An Associates degree in Computer Science. Equivalent: an Associates degree in an engineering or physical science discipline plus an additional two years of qualifying experience beyond the minimum, or an associates degree in any other discipline plus an additional four years of qualifying experience beyond the minimum, or an additional eight years of qualifying experience beyond the minimum.

YEARS OF EXPERIENCE: A minimum of two recent* years experience in computer software design, test and debug.

TYPES OF EXPERIENCE REQUIRED:

- A. Computer program design and development including higher-order-language experience and Windows and UNIX environment experience;
- B. Algorithm development for solutions to engineering and physical problems;
- C. Computer hardware applications, and optimum usage of computer resources; and
- D. Digital computer software modeling and simulation of weapon systems and weapon system interactions.

ADDITIONAL EXPERIENCE DESIRED:

- A. Experience in control/optimization in near real time of hardware and software, especially in electronic warfare applications.

SECURITY CLEARANCE: Must possess or be eligible for SECRET.

SOFTWARE ENGINEER

MINIMUM EDUCATION: A Bachelor degree.

YEARS OF EXPERIENCE: A minimum of two recent* years experience in computer software design and analysis.

TYPES OF EXPERIENCE REQUIRED:

- A. Software design and development in higher-order-languages, lower-order-languages, and in Windows and UNIX operating systems;
- B. Algorithm development for solutions to engineering and physical problems; and
- C. Computer hardware applications, and optimum usage of computer resources.

ADDITIONAL EXPERIENCE DESIRED:

- A. Experience in control/optimization in near real time of hardware and software, especially in electronic warfare applications.

SECURITY CLEARANCE: Must possess or be eligible for TOP SECRET.

COLLECTIVE STAFF EXPERTISE

The staff as a whole must possess the following knowledge and understanding:

(a) In-depth knowledge and understanding of the properties of digital radio frequency memories (DRFM) and their application to electronic attack (EA) against coherent threats;

(b) In-depth understanding of EA techniques that are effective against modern coherent radar/seeker threats;

(c) In-depth knowledge and knowledge and understanding of low frequency, RF, microwave, and millimeter wave transceiver technologies and their application to coherent and incoherent EA systems and techniques;

(d) In-depth knowledge and understanding of multi-spectral seeker/sensor

systems and the application of RF, microwave, millimeter wave, infrared, and electro-optical technologies to EA systems and techniques for countering multi-spectral seekers/sensors;

(e) In-depth knowledge and understanding of dual-polarization technology and its application to EA systems and techniques for countering seekers/sensors incorporating dual-polarization technology; and

(f) In-depth knowledge and understanding of neural networks and their application to electronic systems recognition.

*"Recent" means either the experience is current or the end of the latest experience was within three years of the closing date of the RFP (before award), or, after award, within three years of the date of performing under the contract.