

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING DO-C9	PAGE OF 1 22 PAGES
2. CONTRACT NO.	3. SOLICITATION NO. N00173-02-R-MS12	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 03 JAN 03	6. REQUISITION/PURCHASE NO. 57-3076-02
7. ISSUED BY CONTRACTING OFFICER NAVAL RESEARCH LABORATORY 4555 OVERLOOK AVENUE SW WASHINGTON DC 20375-5326 ATTN: CODE 3220		CODE N00173	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 4 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 See Section L-2 until 4:00pm local time 03 FEB 03
(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 Mary M. Sandy, Contract Specialist	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) 202-767-3710
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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 %
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14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
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15B. TELEPHONE NO. (Include area	<input type="checkbox"/> 15C. CHECK IF REMITTANCE ADDRESS	17. SIGNATURE	18. OFFER DATE
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()	23. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM
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24. ADMINISTERED BY (If other than Item 7) CODE	25. PAYMENT WILL BE MADE BY CODE
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26. NAME OF CONTRACTING OFFICER (Type or print)	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE
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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/SERVICES	ESTIMATED COST	FIXED FEE	ESTIMATED COST PLUS FIXED FEE
0001	The Contractor shall conduct research and development in accordance with Section C.	\$	\$	\$
0002	Data in accordance with Exhibit A (DD 1423)	* NSP	* NSP	* NSP
TOTAL EST COST PLUS FIXED FEE		\$	\$	\$

** Not Separately Priced*

NOTICE TO OFFERORS: In addition to inserting the estimated cost and fixed fee for the base year above, the estimated cost and fixed fee for each optional extension of the term of the contract are to be inserted in Section H.

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

C-1 STATEMENT OF WORK

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

C-2 REQUIREMENTS FOR ON-SITE CONTRACTORS

For those portions of the work under this contract performed at any NRL site, the contractor shall comply with the Requirements for On-Site Contractors dated 08 October 2002 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**

- 52.246-8 - Inspection Of Research And Development - Cost Reimbursement (MAR 2001)
52.246-9 - Inspection Of Research And Development (Short Form) (APR 1984)

DFARS CLAUSE TITLE

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

E-2 INSPECTION AND ACCEPTANCE

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

**SECTION F
DELIVERIES OR PERFORMANCE**

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

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

F-2 PERIOD AND PLACE OF PERFORMANCE

- (a) The term of this contract is from date of contract award through 12 months thereafter, with four (4) options that will extend the period of performance for an additional 12 months each, if exercised.
(b) The principal place of performance of this contract shall be at the Naval Research Laboratory, Washington, DC 20375.

F-3 PLACE OF DELIVERY - FOB DESTINATION

The contractor shall deliver supplies, all transportation charges paid, to destination in accordance with the clause in Section F of the Schedule titled FAR 52.247-34 FOB Destination (NOV 1991).

Receiving Officer

Naval Research Laboratory

Contract Number

ATTN: *

CODE: *

LOCATION: *

Bldg. 49

4555 Overlook Avenue, SW

Washington DC 20375-5320

(* To be filled in at time of award.)

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

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

Security Matters- Contracting Officer for Security, Code 1221, (202) 767-2240, DSN 297-2240, email security-group@nrl.navy.mil

Safety Matters- Head Safety Branch, Code 3540, (202) 767-2232, DSN 297-2232, email safety@nrl.navy.mil

Patent Matters-Associate Counsel (Intellectual Property), Code 1008.2, (202) 404-1552, DSN 297-1552, email patents@nrl.navy.mil

Release of Data-Public Affairs Officer, Code 1030 (202) 767-2541, DSN 297-2541, email publicaffairs@nrl.navy.mil

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

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

(* To be completed 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 paragraph (e) below.
- (d) A TDM shall be considered issued when the Government deposits it in the mail, or if transmitted by other means, when it is physically delivered to the contractor.
- (e) TDMs shall include, but not be limited to, the following information:
- (1) Date of TDM,
 - (2) Contract Number,
 - (3) Reference to the relevant portion or item in the Statement of Work,
 - (4) The specific technical direction or clarification, and
 - (5) The signature of the COR.
- (f) CORs shall retain all files containing TDMs for a period of two (2) years after the final contract completion date.
- (g) The only individual authorized in any way to amend or modify any of the terms of this contract shall be the Contracting Officer. When, in the opinion of the Contractor, any technical direction calls for effort outside the scope of the contract or inconsistent with this special provision, the Contractor shall notify the Contracting Officer in writing within ten (10) working days after its receipt.

G-4 SUBCONTRACTORS/CONSULTANTS

- (a) Advance notification or requests for consent pursuant to the contract clause entitled "Subcontracts" (FAR 52.244-2) shall be directed to the cognizant administrative contracting officer (ACO).
- (b) The following subcontractors/consultants have been identified in the Contractor's proposal as necessary for performance of this contract:

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

G-5 NAPS 5252.232-9001 - SUBMISSION OF INVOICES (COST-REIMBURSEMENT, TIME-AND-MATERIALS, LABOR-HOUR, OR FIXED PRICE INCENTIVE (JUL 1992))

- (a) "Invoice" as used in this clause includes contractor requests for interim payments using public vouchers (SF 1034) but does not include contractor requests for progress payments under fixed price incentive contracts.
- (b) The Contractor shall submit invoices and any necessary supporting documentation, in an original and 4 copies, to the contract auditor at the following address:

(To be completed 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-6 INCREMENTAL FUNDING

Pursuant to the Limitation of Funds clause (FAR 52.232-22), the total amount allotted to this contract is \$* and it is estimated that this amount is sufficient for contract performance through * .

*(*this provision will be included and completed at time of award, if applicable)*

G-7 INFORMATIONAL SUBLINE ITEMS

It is anticipated that the research and development services performed under this contract will be paid for from multiple sources of funds. Informational subline items will be established as necessary to identify each accounting citation classification.

G-8 SPECIAL PAYMENT INSTRUCTIONS- MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS (COST-REIMBURSEMENT)

Payments shall be made in accordance with the ACRN(s) cited on the contractor's invoice. The Contractor may contact the COR regarding which ACRN(s) to cite on an invoice.

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

This is a *

*(*To be completed 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 thirty (30) days in advance (sixty (60) 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: *

Labor Category	First/M/Last Name
Electronics Engineer	<i>*To be completed at time of award</i>
Mechanical Engineer	<i>*To be completed at time of award</i>

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

- (a) The Contractor agrees to provide the total level of effort specified in the next sentence in performance of the work described in this contract. The total level of effort for performance of this contract shall be 16,080 total hours for the basic award and 16,080 hours of direct labor for each option period, if exercised. A breakdown of labor categories and hours is set forth in paragraph (k) below.
- (b) The level of effort for this contract shall be expended at an average rate of 1,340 hours per month. It is understood and agreed that the rate of hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total hours of effort prior to the expiration of the term of the contract.
- (c) The Contractor is required to notify the Contracting Officer when any of the following situations occur, or are anticipated to occur: If during any three consecutive months the monthly average is exceeded by 25% or, if at any time it is forecast that during the last three months of the contract less than 50% of the monthly average will be used during any given month; or, when 85% of the total level of effort has been expended.
- (d) If, during the term of the contract, the Contractor finds it necessary to accelerate the expenditure of direct labor to such an extent that the total hours of effort specified would be used prior to the expiration of the term, the Contractor shall notify the Contracting Officer in writing, setting forth the acceleration required, the probable benefits which would result, and an offer to undertake the acceleration at no increase in the estimated cost or fixed fee together with an offer setting forth a proposed level of effort, cost breakdown, and proposed fixed fee for continuation of the work until expiration of the term hereof. The offer shall provide that the work proposed will be subject to the terms and conditions of this contract and any additions or changes required by then current law, regulations, or directives, and that the offer, with a written notice of acceptance by the Contracting Officer, shall constitute a binding contract. The Contractor shall not accelerate any effort until receipt of such written approval by the Contracting Officer. Any agreement to accelerate will be formalized by contract modification.
- (e) The Contracting Officer may, by written order, direct the Contractor to accelerate the expenditure of direct labor such that the total hours of effort specified in paragraph (a) above would be used prior to the expiration of the term. This order shall specify the acceleration required and the resulting revised term. The Contractor shall acknowledge this order within five days of receipt.
- (f) If the total level of effort specified in paragraph (a) above is not provided by the Contractor during the term of this contract, the Contracting Officer shall either (i) reduce the fixed fee of this contract as follows:

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

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

- (g) In the event the government fails to fully fund the contract in a timely manner, the term of the contract may be extended accordingly with no change to cost or fee. If the government fails to fully fund the contract, the fee will be adjusted in direct proportion to that effort which was performed.
- (h) Notwithstanding any of the provisions in the above paragraphs, the Contractor may furnish hours up to five percent in excess of the total hours specified in paragraph (a) above, provided that the additional effort is furnished within the term hereof, and provided further that no increase in the estimated cost or fixed fee is required, and no adjustment in the fixed fee shall be made provided that the Contractor has delivered at least 95% of the level of effort required in paragraph (a) above.
- (i) It is understood that the mix of labor categories provided by the Contractor under the contract, as well as the distribution of effort among those categories, may vary considerably from the initial mix and distribution of effort, which was estimated by the government or proposed by the Contractor.
- (j) Nothing herein shall be construed to alter or waive any of the rights or obligations of either party pursuant to the Clause entitled "Limitation of Costs" or "Limitation of Funds," either of which clauses as incorporated herein applies to this contract.
- (k) The anticipated breakdown by labor category of the total level of effort is as follows:

Labor Category	Basic Award and each Option, if exercised
Electronics Engineer	3440
Aerospace Engineer	3440
Mechanical Engineer	1920
Interdisciplinary Scientist	3440
Technician	1920
Computer Scientist	1920
Total	16,080

H-4 ONR 5252.235-9714 - REPORT PREPARATION (FEB 02)

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: All NISO American National Standards are available as free, downloadable pdf(s) at <http://www.niso.org/standards/index.html> . NISO standards can also be purchased in hardcopy form from NISO Press Fulfillment, P. O. Box 451, Annapolis Junction, MD 20701-0451 USA. Telephone U.S. and Canada: (877) 736-6476; Outside the U.S. and Canada: 301-362-6904 ax: 301-206-9789.]

H-5 ELECTRONIC AND INFORMATION TECHNOLOGY (EIT)

In accordance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), all EIT supplies and services provided under this contract must comply with the applicable accessibility standards issued by the Architectural and Transportation Barriers Compliance Board at 36 CFR part 1194 (see FAR Subpart 39.2). Electronic and information technology (EIT) is defined at FAR 2.101.

H-6 OPTION TO EXTEND THE TERM OF THE CONTRACT

This contract shall be renewable at the unilateral option of the Government by the Contracting Officer giving written notice of renewal to the Contractor within the existing term of the contract. The Government may exercise its option to renew the contract a total of four times and each such renewal shall extend the term of the contract by twelve (12) months. The Contractor agrees that performance under each such renewal shall be accomplished in accordance with all of the terms and conditions of this contract and at the estimated cost and fixed fee set forth below:

First Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Second Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Third Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Fourth Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

H-7 ON-SITE USE OF GOVERNMENT PROPERTY

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

H-8 REPRESENTATIONS AND CERTIFICATIONS

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

**PART II - CONTRACT CLAUSES
SECTION I
CONTRACT CLAUSES**

I-1 52.252-2 - CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

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

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

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

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

- | | | |
|-----------|---|--|
| 52.202-1 | - | Definitions (DEC 2001) |
| 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 | - | Printed Or Copied Double-Sided On Recycled Paper (AUG 2000) |
| 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 (JUN 1999) |
| 52.215-8 | - | Order Of Precedence - Uniform Contract Format (OCT 1997) |
| 52.215-11 | - | Price Reduction For Defective Cost Or Pricing Data - Modifications (OCT 1997) |
| 52.215-13 | - | Subcontractor Cost Or Pricing Data Modifications (OCT 1997) |
| 52.215-14 | - | Integrity Of Unit Prices (OCT 1997) |
| 52.215-17 | - | Waiver Of Facilities Capital Cost Of Money (OCT 1997)
(<i>will be included if the successful offeror does not propose facilities capital cost of money</i>) |
| 52.215-21 | - | Requirements For Cost And Pricing Data Or Information Other Than Cost Or Pricing Data - Modifications (OCT 1997) - Alternate IV (OCT 1997) |
| 52.216-7 | - | Allowable Cost And Payment (DEC 2002) |

- 52.216-8 - Fixed-Fee (MAR 1997)
- 52.219-4 - Notice Of Price Evaluation Preference For HUBZone Small Business Concerns (JAN 1999) Offeror elects to waive the evaluation preference.
- 52.219-6 - Notice Of Total Small-Business Set-Aside (JUL 1996)
- 52.219-8 - Utilization Of Small Business Concerns (OCT 2000)
- 52.219-14 - Limitations On Subcontracting (DEC 1996)
- 52.222-2 - Payment For Overtime Premiums (JUL 1990) -The Use Of Overtime Is Authorized Under This Contract If The Overtime Premium Does Not Exceed "0"
- 52.222-3 - Convict Labor (AUG 1996)
- 52.222-21 - Prohibition Of Segregated Facilities (FEB 1999)
- 52.222-26 - Equal Opportunity (APR 2002)
- 52.222-35 - Equal Opportunity For Special Disabled Veterans, Veterans Of The Vietnam Era, And Other Eligible Veterans (DEC 2001)
- 52.222-36 - Affirmative Action For Workers With Disabilities (JUN 1998)
- 52.222-37 - Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, And Other Eligible Veterans (DEC 2001)
- 52.223-3 - Hazardous Material Identification And Material Safety Data (JAN 1997)
- 52.223-5 - Pollution Prevention And Right-To-Know Information (APR 1998)
- 52.223-6 - Drug-Free Workplace (MAY 2001)
- 52.223-10 - Waste Reduction Program (AUG 2000)
- 52.223-14 - Toxic Chemical Release Reporting (OCT 2000)
- 52.225-8 - Duty-Free Entry (FEB 2000)
- 52.225-13 - Restrictions On Certain Foreign Purchases (JUL 2000)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-10 - Filing Of Patent Application- Classified Subject Matter (APR 1984)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.232-9 - Limitation On Withholding Of Payments (APR 1984)
- 52.232-17 - Interest (JUN 1996)
- 52.232-18 - Availability Of Funds (APR 1984)
- 52.232-20 - Limitation Of Cost (APR 1984) (*Applicable when the contract or task order is fully funded*)
- 52.232-22 - Limitation Of Funds (APR 1984) (*Applicable when the contract or task order is not fully funded*)
- 52.232-23 - Assignment Of Claims (JAN 1986) Alternate I (APR 1984)
- 52.232-25 - Prompt Payment (FEB 2002)
- 52.232-33 - Payment By Electronic Funds Transfer-Central Contractor Registration (MAY 1999)
- 52.233-1 - Disputes (JUL 2002)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.242-1 - Notice Of Intent To Disallow Costs (APR 1984)
- 52.242-3 - Penalties For Unallowable Costs (MAY 2001)
- 52.242-4 - Certification of Final Indirect Costs (JAN 1997)
- 52.242-13 - Bankruptcy (JUL 1995)
- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate V (APR 1984)
- 52.243-6 - Change Order Accounting (APR 1984)
- 52.243-7 - Notification Of Changes (APR 1984)fill in 30

- 52.244-2 - Subcontracts (AUG 1998) - Alternate I (AUG 1998)
- 52.244-5 - Competition In Subcontracting (DEC 1996)
- 52.244-6 - Subcontracts For Commercial Items (MAY 2002)
- 52.245-5 - Government Property (Cost-Reimbursement, Time-And-Material, Or Labor-Hour Contracts) (JAN 1986) (DEVIATION)
- 52.245-18 - Special Test Equipment (FEB 1993)
- 52.245-19 - Government Property Furnished "As-Is" (APR 1984)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.246-25 - Limitation Of Liability - Services (FEB 1997)
- 52.247-1 - Commercial Bill Of Lading Notations (APR 1984)
- 52.247-63 - Preference For U. S. Flag Carriers (JAN 1997)
- 52.249-6 - Termination (Cost-Reimbursement) (SEP 1996)
- 52.249-14 - Excusable Delays (APR 1984)
- 52.251-1 - Government Supply Sources (APR 1984)
- 52.252-6 - Authorized Deviations in Clauses (APR 1984)(fill in Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2))
- 52.253-1 - Computer Generated Forms (JAN 1991)

b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION CLAUSES

DFARS CLAUSE TITLE

- 252.201-7000 - Contracting Officer's Representative (DEC 1991)
- 252.203-7001 - Prohibition On Persons Convicted Of Fraud Or Other Defense Contract Related Felonies (MAR 1999)
- 252.203-7002 - Display Of DoD Hotline Poster (DEC 1991)
- 252.204-7000 - Disclosure Of Information (DEC 1991)
- 252.204-7003 - Control Of Government Personnel Work Product (APR 1992)
- 252.204-7004 - Required Central Contractor Registration (NOV 2001)
- 252.204-7005 - Oral Attestation Of Security Responsibilities (NOV 2001)
- 252.205-7000 - Provision Of Information To Cooperative Agreement Holders (DEC 1991)
- 252.209-7000 - Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate-Range Nuclear Forces (INF) Treaty (NOV 1995)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.215-7000 - Pricing Adjustments (DEC 1991)
- 252.223-7004 - Drug-Free Work Force (SEP 1988)
- 252.223-7006 - Prohibition On Storage And Disposal Of Toxic And Hazardous Materials (APR 1993)
- 252.225-7001 - Buy American Act And Balance Of Payments Program (MAR 1998)
- 252.225-7002 - Qualifying Country Sources As Subcontractors (DEC 1991)
- 252.225-7009 - Duty-Free Entry – Qualifying Country Supplies (End Products and Components (AUG 2000)
- 252.225-7012 - Preference For Certain Domestic Commodities (APR 2002)
- 252.225-7021 - Trade Agreements (OCT 2002)
- 252.225-7026 - Reporting Of Contract Performance Outside The United States (JUN 2000)
- 252.225-7031 - Secondary Arab Boycott Of Israel (JUN 1992)

- 252.225-7043 - Antiterrorism/Force Protection Policy For Defense Contractors Outside The United States (JUN 1998) (fill in : Naval Criminal Investigative Service (NCIS), Code 24, telephone, DSN 228-9113 or commercial (202)433-9113)
- 252.226-7001 - Utilization of Indian Organizations and Indian-Owned Economic Enterprises-DoD Contracts (SEP 2001)
- 252.227-7000 - Non Estoppel (OCT 1966)
- 252.227-7001 - Release Of Past Infringement (AUG 1984)
- 252.227-7013 - Rights In Technical Data -- Noncommercial Items (NOV 1995)
- 252.227-7014 - Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)
- 252.227-7016 - Rights In Bid Or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7025 - Limitations On The Use Or Disclosure Of Government-Furnished Information Marked With Restrictive Legends (JUN 1995)
- 252.227-7026 - Deferred Delivery Of Technical Data Or Computer Software (APR 1988)
- 252.227-7027 - Deferred Ordering Of Technical Data Or Computer Software (APR 1988)
- 252.227-7030 - Technical Data--Withholding Of Payment (MAR 2000)
- 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 (SEP 1999)
- 252.227-7039 - Patents--Reporting Of Subject Inventions (APR 1990)
- 252.235-7010 - Acknowledgment Of Support And Disclaimer (MAY 1995)
- 252.235-7011 - Final Scientific Or Technical Report (SEP 1999)
- 252.242-7000 - Post Award Conference (DEC 1991)
- 252.242-7004 - Material Management And Accounting System (DEC 2000)
- 252.243-7002 - Requests For Equitable Adjustment (MAR 1998)
- 252.244-7000 - Subcontracts For Commercial Items And Commercial Components (DOD Contracts) (MAR 2000)
- 252.245-7001 - Reports Of Government Property (MAY 1994)
- 252.246-7001 - Warranty Of Data (DEC 1991)
- 252.247-7023 - Transportation Of Supplies By Sea (MAY 2002)
- 252.247-7024 - Notification Of Transportation Of Supplies By Sea (MAR 2000)
(will be included if the successful offeror made a negative response to the inquiry at DFARS 252.247-7022)
- 252.251-7000 - Ordering From Government Supply Sources (OCT 2002)

I-2 FAR 52.223-11 - OZONE-DEPLETING SUBSTANCES (MAY 2001)

- (a) *Definitions.* "Ozone-depleting substance", as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as –
- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
 - (2) Class II, 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 -5 Pages, With Exhibit A - DD Form 1423, Contract Data Requirements List, 4 - Pages.
- J-2** Attachment (2) - DD Form 254, Contract Security Classification Specification, Ser 064-02 Dated December 4, 2002 - 2 Pages.
- J-3** Attachment (3) – Personnel Qualifications, - 5 Pages.
- J-4** Attachment (4) – Accounting and Appropriation Data- 1 page. *
(* To be included at time of award)

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

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

Each Offeror must submit a completed Representations, Certifications, and Other Statements Of Offerors or Respondents with its proposal which is available electronically in full text at

[HTTP://HERON.NRL.NAVY.MIL/CONTRACTS/REPS&CERTS.HTM](http://HERON.NRL.NAVY.MIL/CONTRACTS/REPS&CERTS.HTM)

Use Representations and Certifications: A

K-2 FILL IN FOR FAR 52.219-1 - SMALL BUSINESS PROGRAM REPRESENTATIONS (MAR 2001)

The fill in information is as follows:

The NAICS code for this acquisition is 541710.

The small business size standard is 500 employees.

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

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

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

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

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

FAR CLAUSE TITLE

- | | | |
|-----------|---|---|
| 52.204-6 | - | Data Universal Numbering System (DUNS) Number (JUNE 1999) |
| 52.215-1 | - | Instructions To Offerors- Competitive Acquisition (MAY 2001) |
| 52.215-5 | - | Facsimile Proposals (OCT 1997)
Paragraph (c) is completed as follows: (202) 767-0430 (primary) or (202) 767-0494 (alternate). In addition proposals may be transmitted by e-mail to sandy@contracts.nrl.navy.mil (primary) or cosby@contracts.nrl.navy.mil (alternate) in either Microsoft Word (version 97 or earlier) or pdf format. |
| 52.215-16 | - | Facilities Capital Cost Of Money (OCT 1997) |
| 52.222-24 | - | Preaward On-Site Equal Opportunity Compliance Evaluation (FEB 1999) |

DFAR CLAUSE TITLE

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

L-2 INSTRUCTIONS FOR SUBMISSION OF PROPOSALS/OFFERS

All proposals shall be submitted in accordance with FAR 52.215-1- *Instructions to Offerors- Competitive Acquisition*. Proposals/offers submitted in paper media through the United States Postal Service (USPS) or delivery services shall be addressed to:

Contracting Officer, ATTN: Code ___3220___

Naval Research Laboratory(NRL)

4555 Overlook Avenue, S.W.

Washington, D.C. 20375

Solicitation/RFP No. – N00173-02-R-MS12

Closing Date: _____ Time _____

Proposals may be hand delivered to the Contracting Office, NRL, 4555 Overlook Avenue, S.W., Washington, D.C. 20375, Building 222, Room 115 between the hours of 8AM until 4PM, local time, excluding weekends and federal holidays. NRL is a controlled-access facility. Photo identification will be required. Report first to Building 72, Visitor Control for access to NRL. After receiving a Visitor Pass, proceed directly to Building 222, Room 115, Contracting Office Receptionist to deliver the proposal. All offerors shall allow sufficient time for delivery of their proposal to the Contracting Office prior to the closing date and time announced in the solicitation. Directions and additional information

about NRL is available at <http://www.nrl.navy.mil/aboutdc.htm>

If facsimile proposals are authorized, contracting officers may request offeror(s) to provide the complete; original signed proposal at a later date.

L-3 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-4 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
- (c) See L-13

L-5 FAR 52.216-1 - TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Cost Plus Fixed Fee term contract resulting from this solicitation.

L-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 252.227-7017 - 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 Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions****
(List)*****	(List)	(List)	(List)

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

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

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

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

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

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

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

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

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

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

L-9 GOVERNMENT-FURNISHED PROPERTY

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

L-10 INQUIRIES CONCERNING THE RFP

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

L-11 TRAVEL AND MATERIAL ESTIMATES - FOR EVALUATION PURPOSES ONLY

The travel and material set forth below must be included in each offeror's cost proposal. During the term of the contract, the contractor will be reimbursed actual and verifiable travel and material expenses.

- a) The Government estimates the travel costs for this effort to be \$50,000 per year for the basic contract, and \$50,000 per year for each option, if exercised.
- b) The Government estimates the material costs for this effort to be \$300,000 per for the basic contract, and \$300,000 per year for each option, if exercised.
- c) The travel and material estimates are direct costs and the offeror should add applicable indirect costs, if any.

L-12 PROPOSAL ORGANIZATION

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

(2) Proposal 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.

L-13 VOLUME I - TECHNICAL/MANAGEMENT PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 4 COPIES .

- (1) Include a matrix cross-referencing proposed labor categories with the required labor categories stated in H-3, if different.
- (2) The following information is required for evaluation of your technical/management proposal:

Personnel Qualifications

The Offeror shall provide evidence that it has, or has the ability to obtain, personnel with relevant experience in the technical areas described in Attachment (1), Statement of Work and the required qualifications set forth in Attachment (3), Personnel Qualifications. The Offeror shall document the experience, education, and other qualifications of all personnel proposed to accomplish the task areas of the Statement of Work. As a minimum, the offeror shall provide for each proposed individual: name of proposed individual; proposed labor category, coinciding with the labor categories listed in Section H-3; resume; and status of current or ability to obtain the required security clearance as stated in Attachment (3), Personnel Qualifications. The Offeror shall provide evidence of their corporate experience relevant to the proposed task. Key personnel shall be identified as such.

Technical Understanding:

The Offeror must describe technical understanding for implementation of each task requirement, concept of achievement of task assignments, interrelationships of work tasks, and responsiveness to workload fluctuations in sustaining technical support and furnishing the required deliverables throughout the term of the contract.

Management Plan:

The offeror shall provide documentation to show proposed project organization as it demonstrates assignment of personnel, defines their roles in accomplishing the tasks outlined in the Statement of Work, Attachment (1), and assures adequate resources to guarantee effective continuity of effort throughout the duration of the term. The offeror shall provide a management plan that establishes the means for project monitoring and control.

L-14 VOLUME II - BUSINESS PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 4 COPIES

(1) COST PROPOSAL

The offeror shall submit a business proposal that includes a cost proposal with supporting information for each cost element consistent with offeror's cost accounting system. The supporting breakdown should include such elements as materials, direct labor, indirect cost, and other costs such as travel. The offeror shall provide exhibits as necessary to substantiate each cost element. 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. However, offerors are advised to use actual labor rates of proposed personnel as the basis for estimating labor costs when practicable.

**SECTION M
EVALUATION FACTORS FOR AWARD****M-1 EVALUATION**

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

M-2 EVALUATION FACTORS FOR AWARD

Proposals will be evaluated in accordance with the following criteria. The technical factor is more important than the cost factor. Personnel Qualifications and Technical Understanding are of equal importance and more important than Management Plan.

M-2-1. TECHNICAL/MANAGEMENT**(1) PERSONNEL QUALIFICATIONS**

The proposed personnel will be evaluated on the experience and qualifications of the proposed personnel relevant to the proposed task.; the quantity and quality of the Offeror's corporate experience relevant to the proposed task; and the previous experience of the key personnel including the degree to which they meet the requirements set forth in the Personnel Qualifications.

(2) TECHNICAL UNDERSTANDING

Technical Understanding will be evaluated on the Offeror's demonstrated overall soundness, ability to understand and accomplish the technical requirements of each Task Area specified in the Statement of Work, Attachment (1).

(3) MANAGEMENT PLAN

Management plan will be evaluated on the extent of corporate experience in performing, accomplishing, and managing projects related specifically to tasks in the statement of work and the soundness of the Offeror's project management approach for accomplishing the task.

M-2-2 COST TO THE GOVERNMENT

Proposed estimated cost to the Government. The Government may adjust the proposed cost for purposes of evaluation based upon an evaluation of cost realism. Cost Realism means that the costs in an offeror's proposal are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the various elements of the offeror's technical proposal. The cost realism evaluation includes an analysis of the adequacy of the hours, labor mix, and other direct costs to perform the work as proposed in the technical proposal as well as the proposed labor and indirect rates. It also includes evaluation of the likelihood that the risks inherent in the offeror's technical approach will result in higher actual costs than anticipated.

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

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

STATEMENT OF WORK

1.0 INTRODUCTION

This statement of work describes the engineering and related support services to be provided on-site for the Tactical Electronic Warfare Division, at the U.S. Naval Research Laboratory (NRL) 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. Electronic Countermeasures Techniques
- TASK 2. Artificial Intelligence
- TASK 3. Command & Control System Development
- TASK 4: UAV Design and Development

4-0 TASK DESCRIPTIONS

4.1 TASK 1. Electronic Countermeasure Techniques

General Task Description: This task is the evaluation and development of Electronic Countermeasures (ECM) techniques against radar controlled weapon systems. Electronic Attack (EA) applications include but are not limited to airborne and shipboard support (Stand-off, Escort, and Stand-in) and self-protect jamming. In addition to current threats, of primary concern is the development of techniques against advanced radar waveforms such as imaging radars for example High Range Resolution (HRR) and Synthetic Aperture Radar (SAR), also, threats in millimeter wave bands. 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 four sub tasks:

- 4.1.1 **Radar Vulnerability Analysis:** The Contractor shall analyze systems, sub-systems, and circuits of modern radars and determine vulnerabilities to EA. The Contractor shall work with NRL personnel in developing accurate digital models for use in ECM development. The Contractor shall provide digital models (software), model documentation, and reports on radar vulnerability analysis.
- 4.1.2 **ECM Development:** The Contractor shall use results of radar vulnerability analysis and computer models, countermeasure techniques against radars and homing seekers, which will be conceived and evaluated by the Contractor.
- 4.1.3 **Hardware Development:** The Contractor shall identify, design, fabricate, integrate, and laboratory test hardware capable of generating ECM waveforms that result from ECM development. The Contractor shall provide the hardware with design documentation, and a report summarizing the system characteristics and expected performance.
- 4.1.4 **ECM Testing:** 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 Contractor shall provide test plans and a report summarizing the test procedures and results.

4.2 **TASK 2. Artificial Intelligence**

General Task Description: This task is the development of new ways to control individual jammer nodes and networks of sensors, shooters, and jammers. In the network-centric scenario, nodes have a significant amount of information from multiple sources available for decision-making. Sorting relevant data from all information available can be a monumental task. Artificial intelligence methods can be used to sort data and make decisions for optimum electronic attack.

- 4.2.1 **Rule Base and Algorithm Development:** The Contractor shall define rule bases for data sorting and decision making for sensor nodes, jammer nodes, and overall system control. Methods such as Fuzzy Logic, Genetic Programming, and Expert Systems will be considered. Algorithms must be generated for the rule bases, and simulations performed to evaluate the algorithms. The Contractor shall provide documentation of the rule bases, algorithms and simulation results.

- 4.2.2 **Hardware Implementation:** The Contractor shall identify, design, fabricate, integrate, and laboratory test hardware capable of implementing the artificial intelligence algorithms with sensors and jammers. The Contractor shall provide hardware with design documentation, and a report summarizing the system characteristics and expected performance.
- 4.2.3 **Testing:** The Contractor shall test and evaluate sensors and jammers with artificial intelligence in the laboratory and field against a number of victims specified by the government (simulators, radars, etc.). The Contractor shall provide test plans and a report summarizing the test procedures and results.

4.3 TASK 3. Command and Control Systems Development

General Task Description: The Contractor shall conduct research, analysis and computer programming in the development of software services within the Defense Information Infrastructure Common Operating Environment (DII COE) and the development of C4I mission applications within various DII COE compliant C4I systems such as the Global Command and Control System (GCCS), GCCS-Maritime, Global Combat Support System (GCSS) and the Integrated Intelligence and Imagery (I3) system.

- 4.3.1 **Segment Development:** The Contractor shall perform analysis, computer programming design and coding, data base design, software testing and system documentation for the following components C4I systems: Embedded Training, the Run Time Infrastructure (RTI) Segment, the C4I Ambassador, Reconstruction Segment, and the Large Area Track Range (LATR) Segment. These command and control software components are comprised of sets of algorithms, decision aids, graphics, data management and communications programs designed to support operational forces to train for hostile engagements, conduct warfare, control military exercises, and to perform assessments following operations.
- 4.3.2 **Sensor Fusion:** The Contractor shall develop techniques and procedures for applying computer concepts and technologies to aid the integration and fusion of Electronic Warfare sensor data (particularly the Specific Emitter Identification system) into the Global Command and Control System. The Contractor shall design and code these segments at the Naval Research Laboratory and install and test them at other government facilities and commands including Space and Naval Warfare Systems Center and aboard Navy ships.

4.4 TASK 4. UAV DEVELOPMENT

General Task Description: This effort is for design, development, and fabrication of unmanned aerial vehicles (UAV). All aspects of UAV development are included, for example, engines, transmissions, power supplies, wings, fuselages, tails, etc. While primarily mechanical and aeronautical engineering, electronic engineering may also be necessary.

4.4.1 **Aerodynamic Design, Fabrication, and Evaluation.** The Contractor shall perform engineering design, analysis, test and evaluation for optimized expendable decoy and other unmanned aerial vehicles to include aerodynamics, structural, flight control, avionics, packaging, recovery and launch systems to maximize efficiency in the low Reynolds number flight regime.

The Contractor shall develop and implement aerodynamic computer simulations and models to evaluate Advanced EW vehicle performance. The Contractor shall perform simulations and deliver the results, along with conclusions and recommendations.

The Contractor shall design, develop, fabricate, and assemble prototype aerodynamic flight test vehicle(s) and support hardware and conduct flight testing of prototype hardware to evaluate improved flight performance and aerodynamic characteristics for possible incorporation into future systems.

The Contractor shall participate in the evaluation and provide recommendations for the enhancement of advanced design concepts and fabrication technologies for digital flight simulation, wind tunnel testing, and primarily low Reynolds number flight vehicles. The Contractor shall analyze and evaluate test data in support of vehicle/systems testing.

The Contractor shall develop and implement aerodynamic computer simulations and models to evaluate Advanced EW vehicle performance. The Contractor shall perform simulations and deliver the results, along with conclusions and recommendations.

4.4.2 **Mechanical Design, Fabrication and Evaluation.** The Contractor shall design, develop, fabricate, and assemble required mechanical test support hardware and conduct prototype tests to evaluate improved mechanical, stress and thermal performance for possible incorporation into future EW systems.

The Contractor shall analyze and evaluate test data to produce an independent evaluation of the resulting mechanical characteristics. The Contractor shall assess and report the operational realism of the tests.

The Contractor shall develop and implement thermal and structural computer simulations and models to evaluate advanced EW performance. The Contractor shall perform simulations and deliver the results, along with conclusions and recommendations.

4.4.3 **Systems/Subsystems Test Support.** The Contractor shall perform developmental and technical field test support for developmental, proof-of-concept, and operational low Reynolds number flight vehicle systems. The Contractor shall perform reviews in determining the systems, personnel, logistics, specialized test equipment and facilities required to support field tests. The Contractor shall assist in test planning, preparation, setup, and recovery of test devices. The Contractor shall assist in the assembly and operation of specialized test equipment, data recording equipment, and in the processing and evaluation of data collected from numerous developmental tests including, but not limited to, wind tunnel, static, drone, and aircraft launches of decoy systems.

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

The 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 (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing

A. CONTRACT LINE ITEM NO. 0002	B. EXHIBIT A	C. CATEGORY: TDP _____ TM _____ OTHER _____
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D. SYSTEM / ITEM R&D Support for Navy Aerospace EW	E. CONTRACT / PR NO. N00173-02-R-MS12	F. CONTRACTOR
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1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Hardware and Software Documentation	3. SUBTITLE
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4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE SOW 4.1.3, 4.2.2, 4.3.2	6. REQUIRING OFFICE NRL, Code 5732
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7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION ASREQ	14. DISTRIBUTION		
8. APP CODE N/A		11. AS OF DATE ASREQ	13. DATE OF SUBSEQUENT SUBMISSION ASREQ			

16. REMARKS Hardware developed under this task must be delivered to the government with complete design and construction documentation. Complete means that the documentation can be used to construct working laboratory copies of the hardware and software without additional design. Hardware must also be accompanied by a report summarizing the system characteristics and expected performance. Software developed under this contract shall be documented in sufficient detail to allow a technically competent but uninitiated person to understand the processing methods and be able to use the software. Well commented and modular software source code shall be delivered. The software shall be written in a high level, widely used language such as C, C++, FORTRAN, Visual Basic, SLQ, JAVA, etc., as best suited to the software application and as mutually agreed upon between the contractor and the government. All human readable software, including source code, make files, documentation text, user help files or other software text products associated with the software development shall be delivered in format(s) readable by standard text applications current available on personal computers. Machine readable code such as object code and executable code shall be delivered as files capable of running in the programming or computer environment selected for development of the software. Compiled stand-alone applications shall be delivered that function on the host computer/operating system (e.g., Windows PC, Unix, Macintosh, etc.) selected for using the software. Any software module that is developed or modified shall be documented with a text description that shall include the following as a minimum: a. Name and purpose of the software module b. Design concept and design logic used to implement the software module c. Name and purpose of other software modules with which it will be used d. Filenames and directory locations of the software modules e. Identification of the host computer and operation system in which the software will operate f. Identification of any special hardware/software requirements to use the program g. Instructions for using the software module h. If compiled type code, instructions for compiling, linking, and executing the software modules See Enclosure (1) to DD Form 1423 regarding distribution of "unclassified/limited" and "classified" documentation	15. TOTAL →
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G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
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17. PRICE GROUP
18. ESTIMATED

CODE 5732

CONTRACT DATA REQUIREMENTS LIST

Form Approved
OMB No. 0704-0188

The 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 (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing

A. CONTRACT LINE ITEM NO. 0002				B. EXHIBIT A		C. CATEGORY: TDP _____ TM- _____ OTHER _____			
D. SYSTEM / ITEM				E. CONTRACT / PR NO. N00173-02-R-MS12		F. CONTRACTOR			
1. DATA ITEM NO. A003		2. TITLE OF DATA ITEM ECM TESTING				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 4.1.4		6. REQUIRING OFFICE NRL, Code 5732			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION	
8. APP CODE N/A		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The product for statement of work task 4.1.4 is test plans and a report summarizing the test procedures and results.						NRL Code 5732		1	
						15. TOTAL →		1	
1. DATA ITEM NO. A004		2. TITLE OF DATA ITEM Rule Base and Algorithm Development				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 4.2.1		6. REQUIRING OFFICE NRL, Code 5732			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION	
8. APP CODE N/A		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The product for statement of work task 4.2.1 is documentation of the rule bases algorithms and simulation results. Implementation						NRL Code 5732		1	
						15. TOTAL →		1	
1. DATA ITEM NO. A005		2. TITLE OF DATA ITEM Hardware Implementation				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 4.2.2		6. REQUIRING OFFICE NRL, Code 5732			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION	
8. APP CODE N/A		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The product for statement of work task 4.2.2 is design documentation and a report summarizing the system characteristic sand expected performance.						NRL Code 5732		1	
						15. TOTAL →		1	
1. DATA ITEM NO. A006		2. TITLE OF DATA ITEM Testing				3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.)				5. CONTRACT REFERENCE SOW 4.2.3		6. REQUIRING OFFICE NRL, Code 5732			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION ASREQ		14. DISTRIBUTION	
8. APP CODE N/A		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		a. ADDRESSEE		b. COPIES	
								Draft	
16. REMARKS The product for statement of work task 4.2.3 is test plans and a report summarizing the test procedures and results.						NRL Code 5732		1	
						15. TOTAL →		1	
G. PREPARED BY NRL Code 5732				H. DATE 12/04/02		I. APPROVED BY		J. DATE	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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 064-02 a. FACILITY CLEARANCE REQUIRED <div style="text-align: center; border: 1px solid black; padding: 2px;">TOP SECRET</div> b. LEVEL OF SAFEGUARDING REQUIRED <div style="text-align: center; border: 1px solid black; padding: 2px;">NONE</div>			
2. THIS SPECIFICATION IS FOR: (X and complete as applicable) a. PRIME CONTRACT NUMBER b. SUBCONTRACT NUMBER c. SOLICITATION OR OTHER NUMBER <div style="text-align: center;">57-3076-02</div> DUE DATE (YYYYMMDD)			3. THIS SPECIFICATION IS: (X and complete as applicable) a. ORIGINAL (Complete date in all cases) DATE (YYYYMMDD) <div style="text-align: center;">20021204</div> b. REVISED (Supersedes all previous specs) REVISION NO. c. FINAL (Complete Item 5 in all cases) DATE (YYYYMMDD)				
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 classified material is authorized for the period of _____.							
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code) a. NAME, ADDRESS, AND ZIP CODE FOR RFP PURPOSES ONLY; NOT VALID FOR ACTUAL CONTRACT b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) N/A							
7. SUBCONTRACTOR a. NAME, ADDRESS, AND ZIP CODE N/A b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) N/A							
8. ACTUAL PERFORMANCE a. LOCATION N/A b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) N/A							
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT ENGINEERING AND TECHNICAL SUPPORT SERVICES							
10. CONTRACTOR WILL REQUIRE ACCESS TO:		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:		YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY		<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. RESTRICTED DATA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY		<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL		<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. FORMERLY RESTRICTED DATA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE		<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION		<input type="checkbox"/>	<input type="checkbox"/>	e. PERFORM SERVICES ONLY		<input type="checkbox"/>	<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES		<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Non-SCI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER		<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. SPECIAL ACCESS INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT		<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. NATO INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS		<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. FOREIGN GOVERNMENT INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS		<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE		<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. FOR OFFICIAL USE ONLY INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	l. OTHER (Specify)		<input type="checkbox"/>	<input type="checkbox"/>
k. OTHER (Specify)		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

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 5732

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.

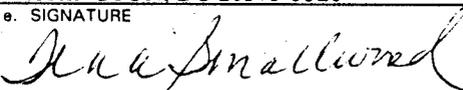
14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. Yes No
(If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide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

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. Yes No
(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.)

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) 767-2240/2391
--	---	---

d. ADDRESS (Include Zip Code)
NAVAL RESEARCH LABORATORY
4555 OVERLOOK AVE., SW
WASHINGTON, DC 20375-5320

e. SIGNATURE


17. REQUIRED DISTRIBUTION

<input checked="" type="checkbox"/>	a. CONTRACTOR
<input type="checkbox"/>	b. SUBCONTRACTOR
<input checked="" type="checkbox"/>	c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
<input type="checkbox"/>	d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
<input type="checkbox"/>	e. ADMINISTRATIVE CONTRACTING OFFICER
<input checked="" type="checkbox"/>	f. OTHERS AS NECESSARY 1221.1, 5732, 5702

PERSONNEL QUALIFICATIONS

LABOR CATEGORIES

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.

YEARS OF EXPERIENCE: Three years of experience in the areas of receivers, signal processing, low frequency waveforms, high voltage circuits and equipment, ECM techniques and low frequency radar operation is desired. Electronics Engineer may be a recent graduate.

TYPES OF EXPERIENCE REQUIRED:

- A. Design of analog/discrete RF receiver/transmitter 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.
- E. Knowledge of Radar Systems such as Search and Over-the-Horizon, SAR and ISAR.
- F. Experience with EW computer simulations.

SECURITY CLEARANCE: Engineer must possess or be eligible for a SECRET or TOP SECRET.

AEROSPACE ENGINEER

MINIMUM EDUCATION: Bachelor degree in Aeronautical Engineering. Equivalent: an Associate degree in Aeronautical Engineering plus two additional years of qualifying experience beyond the minimum. Aeronautical Engineer may be a recent graduate.

YEARS OF EXPERIENCE: Three years of experience in the areas of aircraft and/or drone systems development, integration and testing is desired.

TYPE OF EXPERIENCE REQUIRED:

- A. Experience with small supersonic aerodynamic vehicles desired
- B. Experience in design, development, and testing of aircraft and/or drone systems.

C. Experience with Offboard Countermeasures systems.

SECURITY CLEARANCE: Engineer must possess or be eligible for SECRET clearance.

MECHANICAL ENGINEER

MINIMUM EDUCATION: Bachelors degree in Mechanical Engineering. Equivalent: an Associate degree in Mechanical Engineering plus two additional years of qualifying experience beyond the minimum.

YEARS OF EXPERIENCE: Three years experience in design, development and testing of electromechanical devices for use on ship, aircraft and/or drone systems is desired. Mechanical Engineer may be a recent graduate.

TYPE OF EXPERIENCE REQUIRED:

- A. Experience with small supersonic aerodynamic vehicles desired
- B. experience in design, development and testing of aircraft and/or drone systems.
- C. Experience with Offboard Countermeasures systems.
- D. Hardware and software control of interactions between receiver, transmitter, and data display groups.
- E. Knowledge of Radar Systems such as Search and Over-the-Horizon, SAR and ISAR.

SECURITY CLEARANCE: Engineer must possess or be eligible for a SECRET clearance.

INTERDISCIPLINARY SCIENTIST:

MINIMUM EDUCATION: A Ph.D. degree in Physics, Math, Electrical, Aerospace Engineering or ac computer related field 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 of 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 is desired. Scientist may be a recent graduate.

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 wavelubes, traveling wavelube amplifiers, and magnetrons.
- E. Other related design experience in devices.

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

TECHNICIAN

MINIMUM EDUCATION: High school diploma.

YEARS OF EXPERIENCE: Three recent years of direct experience in laboratory research, development, fabrication, test and evaluation of electric and mechanical components is desired. Technician may be a recent graduate with an Associates degree or related formal technical education.

TYPE OF EXPERIENCE REQUIRED:

- A. Machinist experience that provides a background in the use 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.
- C. The individual should have practical experience with vacuum system technology, hydrogen furnaces, arc welding and other machine shop machinery.
- D. Practical experience in electronics, with experience in systems design, digital systems design, High and Low voltage power supplies

- E. Practical experience with maintenance, operation and modification of electronic and mechanical systems.
- F. Experience with computers and software such as LabVIEW, AutoCAD, Orcad, P-Spice, Altera, and others.

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

COMPUTER SCIENTIST

MINIMUM EDUCATION: A Bachelor degree in Computer Science or Electrical Engineering. Equivalent: a Bachelor degree in any other engineering or science 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.

YEAS OF EXPERIENCE REQUIRED: A minimum of five recent years experience in computer software design, test and debug is desired. Computer Scientist may be a recent graduate.

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;
- E. Expert systems algorithm development, statistical modeling for expert system evaluation, and neural network development.
- F. Digital computer software modeling and simulation of weapon systems and weapon system interactions;
- G. Experience in control/optimization in near real time of hardware and software, especially in electronic warfare applications.
- H. Modeling and simulation of radar/seeker/sensor systems.
- I. Modeling and simulation of radar/seeker/guidance systems.
- J. Software design and development in higher-order-languages, lower-order-languages, and in Windows and UNIX operating systems;
- K. Algorithm development for solutions to engineering and physical problems; and

- L. Computer hardware applications, and optimum usage of computer resources.

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