



Development of a Variable Load & Ride Height Suspension System for the USMC LAV

INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2). A formal Request for Proposals (RFP) or other solicitation regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to fund all, some or none of the proposals received under this BAA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

I. GENERAL INFORMATION

1. Agency Name -

Office of Naval Research
One Liberty Center
875 North Randolph Street
Arlington, VA 22203-1995

2. Research Opportunity Title -

Development of a Variable Load & Ride Height Suspension System for the United States Marine Corps Family of Light Armored Vehicles

3. Program Name -

Light Armored Vehicle Advanced Suspension System

4. Research Opportunity Number -

ONR BAA 08-016

5. Response Date -

Full Proposals are due no later than 2:00 p.m. EDT on 13 June 2008

6. Research Opportunity Description -

The Office of Naval Research (ONR) is interested in receiving proposals for an advanced suspension for the family of United States Marine Corps (USMC) Light Armored Vehicles (LAV).

6.1 Background -

Due to an increase in protection requirements, military vehicles are continually subjected to increased payloads. In particular, this operational need for the USMC family of LAV has prompted the USMC to develop a requirement for an advanced suspension. This suspension system will provide improved ride quality, load carrying capacity, improved vehicle system durability, reliability and stability over the current LAV suspension while balancing mobility requirements with total ownership costs.

Since the LAV will be required to accommodate a substantial payload, the vehicle weight can vary substantially from the unloaded or lightly armored condition to the fully loaded condition. This can cause undesirable effects on unloaded vehicle ride quality, undesirable changes in body height and handling characteristics. Additionally, to optimize both system survivability (blast mitigation) and on and off road performance to meet current mission requirements, it is anticipated that the system should provide adjustable ride height while maintaining appropriate vehicle stability, performance and durability. Lastly, there is a need to mitigate rollover accidents which may necessitate built-in stability control systems.

6.2 Requirement and Objective -

ONR, in concert with the USMC, is soliciting proposals in the area of advanced military wheeled vehicle suspension systems. The overall goal would be to design, develop and demonstrate an advanced suspension system on a USMC LAV. Tasks expected to be performed are as follows:

PHASE I

- Review LAV and suspension system documentation
- Conduct technology development and trade-offs
 - Conduct technology development and system trade offs utilizing trade study or equivalent tools to assess system performance in terms of cost and weight as independent variables

- Perform modeling and simulation and performance analysis
 - Full system analysis utilizing physics-based models (ADAMS, DADS, FEA, etc.) is anticipated
- Develop conceptual and preliminary design of proposed suspension system
- Generate Phase I report. The report should include an updated Phase II technical and cost proposal, to support a Navy decision to award the follow-on task. [The decision to exercise the Phase II task shall be limited to Phase I Performers.]

PHASE II

- Develop preliminary and detailed designs of a suspension system
- Fabricate one full-scale suspension assembly (one vehicle wheel station)
- Test suspension assembly utilizing laboratory test environment to validate simulation-based performance analysis.
- Generate Phase II report to include an updated Phase III technical and cost proposal, to support a Navy decision to award the follow-on task. [The decision to exercise the Phase III task shall be limited to Phase II Performers.]

PHASE III

- Refine and finalize detailed designs of a suspension system
- Conduct system testing and tuning at contractor facility
- Fabricate and integrate a complete vehicle suspension set onto an LAV (to be provided as GFE)
- Support performance and durability testing at government-designated facility (assumed to be located in Nevada)
- Generate final report to include level 1 drawings and contractor test results

Suspension systems will be evaluated based on their ability to meet the following goals:

- Accommodate a range of vehicle weights from 26,000 to 45,000 lb
- Provide automatic load-leveling capability
- Provide ride height adjustment
 - Adjust suspension ride height both fore/aft and left/right
 - Vary load carrying ability between axles for aircraft and Landing Craft Air Cushion (LCAC) loading
 - Raise any wheel independently in response to tire failure or damage from blast/Improvised Explosive Device (IED) event
- Maintain acceptable ride quality during all load conditions
- Provide stability control (roll, pitch, yaw, bounce)
 - Handling of .6 g lateral acceleration is anticipated
- Accommodate the existing LAV braking system or provide an improved braking system as required for increased weight and stability control
- Accommodate an appropriate replacement tire/wheel runflat as may be required due to increased vehicle weight
- Provide integration of Central Tire Inflation System
- Integrate to existing vehicle structure and drive train system

- Integrate to fit within the existing suspension system space claim
- Survive marine/salt fog environment; provide 22 year life against current corrosion specification
- Support existing vehicle swim capability
- Provide ground clearance range of 12 to 24 inches
- Have on-board diagnostics compatible with SAE J 1939 and CAN 2.0
 - Provide suspension health parameter status
- Meet 4000 mean miles between hardware mission failure when operated against 10% paved, 20% secondary, 30% trails, 40% cross country mission profile
- Have low cost per vehicle set
- Reduced vehicle life cycle cost
- Technology Readiness Level (TRL) 7 at completion of effort

7. Point(s) of Contact -

Questions of a technical nature should be submitted to:

Mr. Adam Cascioli
 Project Officer
 Naval Surface Warfare Center, Carderock Division
 9500 MacArthur Blvd.
 West Bethesda, MD 20817-5700
 Email Address: adam.cascioli@navy.mil

Questions of a business nature should be submitted to:

Ms. Halyna Mudri
 Contracting Officer
 Code ONR 0253
 Office of Naval Research
 One Liberty Center
 875 North Randolph Street, Suite 1263A
 Arlington, VA 22203-1995
 Email Address: Halyna.Mudri@navy.mil

8. Instrument Type(s) -

It is anticipated that all awards resulting from this announcement will be contracts (See Section II, Paragraph 5).

9. Catalog of Federal Domestic Assistance (CFDA) Numbers -

Not Applicable

10. Catalog of Federal Domestic Assistance (CFDA) Titles -

Not Applicable

11. Other Information -

This announcement is restricted to basic and applied research and that portion of advanced technology development not related to the development of a specific system or hardware procurement. Contracts awarded under this BAA are for scientific study and experimentation directed towards advancing the state of the art and increasing knowledge or understanding.

Performers Information Package – Additional technical information is available upon request to the Project Officer (Mr. Adam Cascioli) whose contact information is shown above. This information, and all questions and answers, will be posted on ONR's website.

II. AWARD INFORMATION

1. ONR intends to award up to three initial contracts so that varying approaches can be explored in order to meet the desired capabilities and goals of the advanced suspension system desired for the LAV. It is likely that not more than two of the initial three contracts will be funded for additional phases.

The estimated total amount of funding available for the program is \$4,400,000 anticipated to be made available over a three year period. ONR may award less than \$4,400,000 under this BAA and apply subsequent funding as it is made available in the out-years.

2. PHASE I -

Phase I is estimated up to \$300,000 for each task order. Phase I will consist of an 8 month Concept Design phase. At the conclusion of Phase I, the Government may elect to issue one or more task orders for Phase II.

3. PHASE II -

Phase II is estimated up to \$900,000 for each task order. Phase II will be an 8 month Fabrication and Test phase of a single wheel station. At the conclusion of Phase II, the Government may elect to issue a single task order for Phase III.

4. PHASE III -

Phase III is estimated up to \$1,700,000. This final phase will be to fabricate, install, test and evaluate the technology on an LAV. Phase III is planned to last 18 months which includes 12-15 months for the contractor efforts followed by their support of a 3 - 6 month Vehicle Test phase to be performed by the Government.

5. Anticipated Award Types -

Awards will be in the form of an Indefinite-Delivery/Indefinite Quantity (IDIQ) Task Order Contract, which allows issuance of orders on a Cost-Plus-Fixed-Fee (CPFF) basis.

6. Anticipated Range of Individual Task Order Amounts -

See Section II, Paragraphs 2 through 4.

7. Anticipated Period of Performance* -

See Section II, Paragraphs 2 through 4. The total period of performance (to include all phases) is not expected to exceed 3 years.

* The months displayed above are the anticipated durations for the performance for each phase. The overall timeline includes an additional month after each of the first two phases to allow the Government opportunity to determine which contractors will be awarded future task orders.

The contractual effort(s) is estimated to begin in October 2008. The first task order will be the IDIQ minimum quantity. Subsequent task orders will follow the criteria established in FAR 16.505 for multiple award IDIQ task orders. Each successive task order will be competed among only those Contractors awarded task orders for the previous phase.

III. ELIGIBILITY INFORMATION

All responsible sources from academia and industry may submit proposals under this BAA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for HBCU and MI participation.

Federally Funded Research & Development Centers (FFRDCs), including Department of Energy National Laboratories, are not eligible to receive awards under this BAA. However, teaming arrangements between FFRDCs and eligible principal bidders are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC.

Navy laboratories and warfare centers as well as other Department of Defense and civilian agency laboratories are also not eligible to receive awards under this BAA and should not directly submit full proposals in response to this BAA. If any such organization is interested in one or more of the programs described herein, the organization should contact an appropriate ONR POC to discuss its area of interest. The various scientific divisions of ONR are identified at <http://www.onr.navy.mil/>. As with

FFRDCs, these types of federal organizations may team with other responsible sources from academia and industry that are submitting proposals under this BAA.

Teams are encouraged to submit proposals in any and all areas. However, Performers must be willing to cooperate and exchange software, data and other information in an integrated program with other contractors, as well as with system integrators, selected by ONR.

Some topics cover export controlled technologies. Research in these areas is limited to "U.S. persons" as defined in the International Traffic in Arms Regulations (ITAR) - 22 CFR § 1201.1 et seq.

IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process for Full Proposals -

The due date for receipt of Full Proposals is 2 p.m. (EDT) on 06/13/2008. It is anticipated that final selections will be made by 06/30/2008. As soon as the final proposal evaluation process is completed, the Offeror will be notified via email or letter of its selection or non-selection for an award. Proposals exceeding the page limit may not be evaluated.

2. Content and Format of Full Proposals -

Full Proposals submitted under the BAA are expected to be Unclassified. Confidential/classified proposals are not permitted and will not be accepted or considered for award.

Proposal submissions will be protected from unauthorized disclosure in accordance with FAR Subpart 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information. The proposal shall include a severable, self-standing Statement of Work, which contains only unclassified information and does not include any proprietary restrictions.

IMPORTANT NOTE: Titles given to the Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation."

The proposal format and content identified below are applicable to the submission of proposals for contracts.

Full Proposal Format – Volume 1 - Technical Proposal, Volume 2 - Cost Proposal

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing – single or double-spaced
- Font – Times New Roman, 12 point

- Number of Pages – Volume 1 is limited to no more than 40 pages. There is no page limit for Volume II. Limitations within sections of the proposal are indicated in the individual descriptions shown below. The cover page, table of contents, data rights assertions, other agencies listing, and resumes are excluded from the page limitations. Full Proposals exceeding the page limit may not be evaluated.
- Copies – one (1) original, five (5) copies, and one electronic copy on a CD-ROM (in Microsoft® Word or Excel 97 compatible or .PDF format).

Full Proposal Content

VOLUME 1: Technical Proposal

- **Cover Page:** This should include the words “Technical Proposal” and the following:
 - 1) BAA number;
 - 2) Title of Proposal;
 - 3) Identity of prime Offeror and complete list of subcontractors, if applicable;
 - 4) Technical contact (name, address, phone/fax, electronic mail address)
 - 5) Administrative/business contact (name, address, phone/fax, electronic mail address) and;
 - 6) Duration of effort (differentiate Phase I, Phase II, and Phase III efforts)
 - 7) Cover page must be signed and dated
- **Table of Contents:** (not included in page limitation) An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.
- **Technical Approach:** (10 pages) A description of the technical problem, program objectives, how Offeror’s approach improves on what is currently available, proposed technical solution, testing and validation approach and criteria, and expected benefits to current and future military vehicles.
- **Statement of Work:** (15 Pages) A Statement of Work (SOW) should clearly detail the scope and objectives of the effort and the technical approach for Phase I and outline the technical approach for Phases II and III*. This should include the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements as well as a plan for demonstrating and evaluating the operational effectiveness of the Offeror’s proposed products or processes in field experiments and/or tests in a simulated environment.

* The deliverables for Phases I and II are anticipated to include an updated technical proposal for the subsequent Phase (See Section VI, Paragraph 2). Each Phase described in Section I, Paragraph 6.2 may be awarded under separate Task Orders (See Award Information, Section II).

It is anticipated that the applicable Phase of the proposed SOW will be incorporated as an attachment to the resultant award instrument. To this end, the proposals must include a severable, self-standing SOW, without any proprietary restrictions, which can be attached to the contract award. Include a detailed listing of the technical tasks/subtasks organized by month.

- **Project Schedule and Milestones:** (2 Pages) A summary of the schedule of events and milestones.

- **Assertion of Data Rights and/or Rights in Computer Software:** (Not included in page limitation) For a contract award an Offeror may provide with its proposal assertions to restrict use, release or disclosure of data and/or computer software that will be provided in the course of contract performance. The rules governing these assertions are prescribed in Defense Federal Acquisition Regulation Supplement (DFARS) clauses 252.227-7013, -7014 and - 7017. These clauses may be accessed at the following web address:

<http://farsite.hill.af.mil/VDFDARA.HTM>

The Government may challenge assertions that are provided in improper format or that do not properly acknowledge earlier federal funding of related research by the Offeror.

- **Deliverables:** (1 Page) A detailed description of the results and products to be delivered inclusive of the timeframe in which it will be delivered.

- **Management Approach:** (6 Pages) A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor/subrecipient relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information required, by version and/or configuration.

- **Personnel:** (Not included in page limitation) The Offeror shall provide resumes of proposed key personnel to be utilized by the contractor/subcontractor in the performance of this contract. The Offeror shall ensure that the proposed personnel are fully capable of performing in an efficient, reliable and professional manner.

- **Past Performance :** (6 Pages) A detailed description of similar effort performed on past Government or privately funded programs, especially as it pertains to military wheeled vehicle suspension system design, development, and testing.

- **Other Agencies:** Include the name(s) of any other agencies to which the proposal has also been submitted.

VOLUME 2: Cost Proposal

The Cost Proposal shall consist of a cover page and two parts, Part 1 will provide a detailed cost breakdown of all costs by cost category by calendar or Government fiscal year, and Part 2 will provide a cost breakdown by Phase and by task/sub-task corresponding to the task numbers in the proposed Statement of Work. The Cost Proposal should include preliminary cost estimates for Phases II and III in order to establish the reasonableness of the government's schedule and funding assumptions*.

* The deliverables for Phases I and II are anticipated to include an updated cost proposal for the subsequent Phase (See Section VI, Paragraph 2). Each Phase described in Section I paragraph 6.2 may be awarded under separate Task Orders (See Award Information, Section II).

Although not required and provided for informational purposes only, detailed instructions, entitled "Instructions for Preparing Cost Proposals for Contracts and Agreements," including a sample template for preparing costs proposals for contracts and agreements, may be found at ONR's website listed under the 'Acquisition Department – Contracts & Grants Submitting a Proposal' link at:

http://www.onr.navy.mil/02/how_to.asp

Cover Page: The use of the SF 1411 is optional. The words "Cost Proposal" should appear on the cover page in addition to the following information:

- BAA number
- Title of Proposal
- Identity of prime Offeror and complete list of subcontractors, if applicable
- Technical contact (name, address, phone/fax, electronic mail address)
- Administrative/business contact (name, address, phone/fax, electronic mail address) and
- Duration of effort (separately identify Phase I, Phase II, and Phase III efforts)

Part 1 – Contract Costs: Detailed breakdown of all costs by cost category by calendar or Government fiscal year:

- Direct Labor – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates;
- Indirect Costs – Fringe Benefits, Overhead, G&A, COM, etc. (Must show base amount and rate);
- Proposed Contractor-Acquired Equipment - such as computer hardware for proposed research projects should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Where possible, indicate purchasing method (competition, price comparison, market review, etc.);
- Travel – Number of trips, destination, duration, etc.;
- Subcontract – A cost proposal as detailed as the Offeror's cost proposal will

be required to be submitted by the subcontractor. The subcontractor's or subrecipient's cost proposal can be provided in a sealed envelope with the Offeror's cost proposal or will be obtained from the subcontractor prior to award;

- Consultant – Provide consultant agreement or other document which verifies the proposed loaded daily/hourly rate;
- Materials - Should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the Offeror's procurement method to be used (competition, engineering estimate, market survey, etc.);
- Other Directs Costs - particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the contractor/recipient. (Justifications must be provided when Government funding for such items is sought.) Include a brief description of the Offeror's procurement method to be used (competition, engineering estimate, market survey, etc.);
- Phases – the Phase I Period of Performance, Phase II Period of Performance and Phase III Period of Performance must be priced at the submission of the proposal;
- Fee/Profit (“CONTRACT PROPOSALS ONLY”)

Part 2: Cost breakdown by task/sub-task corresponding to the same task breakdown in the proposed Statement of Work.

3. Significant Dates and Times -

Schedule of Events

<u>EVENT</u>	<u>DATE</u>	<u>TIME (EDT)</u>
Submission of Questions	May 30, 2008	2:00 pm
Full FY09 Proposal Due Date	June 13, 2008	2:00 pm
Notification of Selection for FY09 Awards	June 30, 2008*	
Issued FY09 Awards	Oct 01, 2008*	
Kick-off Meeting	TBD	

***These dates are estimates as of the date of this announcement.**

* Note: DoD Federal Acquisition Regulation provision 252.215-7003 (48 CFR § 252.215-7003) is incorporated into this solicitation by reference. The offeror is to exclude excessive pass-through charges from subcontractors. The offeror must identify in its proposal the percentage of effort it intends to perform and the percentage to be performed by each of its proposed subcontractors. If more than 70 percent of the total effort will be performed through subcontracts, the offeror must include the additional information required by the above-cited clause.

NOTE: Due to changes in security procedures since September 11, 2001, the time required for hard-copy written materials to be received at the Office of Naval Research has increased. Thus, it is recommended that any hard-copy proposal be mailed several days before the deadline established in the solicitation so that it will not be received late and thus be ineligible for award consideration.

4. Submission of Late Proposals -

Any proposal, modification, or revision that is received at the designated Government office after the exact time specified for receipt of proposals is “late” and will not be considered unless it is received before award is made, the contracting officer determines that accepting the late proposal would not unduly delay the acquisition and:

- If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 P.M. one working day prior to the date specified for receipt of proposals; or
- There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government’s control prior to the time set for receipt of proposals; or
- It was the only proposal received.

However, a late modification of an otherwise timely and successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time or receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the Government office designated for receipt of proposals by the exact time specified in the announcement, and urgent Government requirements preclude amendment of the announcement closing date, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the announcement on the first work day on which normal Government processes resume. The contracting officer must promptly notify any Offeror if its proposal, modifications, or revision was received late and must inform the Offeror whether its proposal will be considered.

5. Address for the Submission of Hard Copy Full Proposals for Contracts -

Hard copies of full proposals for Contracts should be sent to ONR at the following address:

Office of Naval Research
Attn: Mr. Rodney Peterson
ONR Department Code 30
875 North Randolph Street, Suite 1162
Arlington, VA 22203-1995

V. EVALUATION INFORMATION

1. Evaluation Criteria -

Award decisions will be based on a competitive selection of proposals resulting from a scientific and cost review. Evaluations will be conducted using the following evaluation criteria:

- 1) Overall scientific and technical merits of the proposal;
- 2) Estimation of performance, reliability, per unit cost, life cycle cost, and technical maturity of proposed LAV suspension system;
- 3) The Offeror's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the proposal objectives;
- 4) The qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader, and key personnel who are critical in achieving the proposal objectives; and
- 5) The realism of the proposed costs and availability of funds.

Overall, the technical factors combined (1 – 4 above) are more important than the cost factor. The technical factors 1 & 2 are of equal value and each is more important than factors 3 & 4, which are also of equal value. The degree of importance of cost will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the proposal's technical superiority to the Government.

For proposed awards to be made as contracts to large businesses, the socio-economic merits of each proposal will be evaluated based on the extent of the Offeror's commitment in providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small businesses, veteran-owned small businesses, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions.

The Government will evaluate all three Phases for award purposes by adding the total cost for Phases II and III to the total cost for the Phase I requirement. Evaluation of Phases II and III will not obligate the Government to award Phases II and III during contract performance.

2. Evaluation Panel -

Technical and cost proposals submitted under this BAA will be protected from unauthorized disclosure in accordance with FAR 3.104-4 and 15.207. The cognizant Program Officer and other Government scientific experts will perform the evaluation of technical proposals. Cost proposals will be evaluated by Government business professionals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. Similarly, support contractors may be utilized to evaluate cost proposals. However, proposal selection and award decisions are solely the responsibility of Government personnel. Each support contractor's employee having access to technical and cost proposals submitted in response to this BAA will be required to sign a non-disclosure statement prior to receipt of any proposal submissions.

VI. AWARD ADMINISTRATION INFORMATION

1. Administrative Requirements -

- The North American Industry Classification System (NAICS) code – The North American Industry Classification System (NAICS) code for this announcement is “541712” with a small business size standard of “500 employees.”
- Central Contractor Registry (CCR) - Successful Offerors not already registered in the CCR will be required to register in CCR prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information on CCR registration is available at <http://www.onr.navy.mil/02/ccr.htm>.
- Certifications – Proposals for contracts should be accompanied by a completed certification package which can be accessed on the ONR Home Page at Contracts & Grants located at http://www.onr.navy.mil/02/rep_cert.asp.

For contracts, in accordance with FAR 4.1201, prospective contractors shall complete and submit electronic annual representations and certifications at <http://orca.bpn.gov>. In addition to completing the Online Representations and Certifications Application (ORCA), proposals must be accompanied with a completed DFARS and contract specific representations and certifications. These "DFARS and Contract Specific Representations and Certifications," i.e., Section K, may be accessed under the Contracts and Grants Section of the ONR Home Page at http://www.onr.navy.mil/02/rep_cert.asp

- Subcontracting Plans - Successful contract proposals that exceed \$550,000, submitted by all but small business concerns, will be required to submit prior to award a Small Business Subcontracting Plan in accordance with FAR 52.219-9.

2. Reporting -

The following are typical data deliverables that will be required under this research effort:

Phases I through III deliverables:

- Monthly Technical Report
- Monthly Financial Report
- Kick-Off Meeting Technical Approach Presentation
- Read-Ahead briefing materials for every planned Review

In addition, the following are specialized data deliverables anticipated from all awardees under this BAA:

Phase I deliverables:

- Preliminary Design Drawings
- Phase I Summary Report to include:
 - Trade Study Results
 - Suspension Structural Analysis
 - Vehicle Mobility Analysis
 - Updated Phase II Technical and Cost Proposal

Phase II deliverables:

- Advanced Suspension System Test Plan and other Read-Aheads for Test Readiness Review (TRR)
- Level 1 detail design drawings of suspension system
- Phase II Summary Report to include:
 - Contractor Laboratory Test results
 - Updated Phase III Technical and Cost Proposal

Phase III deliverables:

- Installed Suspension System Test Plan and other Read-Aheads for TRR
- Final Report to include:
 - Contractor system test results
 - Level 1 detail design drawings of installed suspension system

Additional data deliverables may be proposed and finalized during negotiations.

Three hardware deliverables are also expected under the contracts to be awarded. They are:

Phase II hardware deliverables:

- One Full-Scale Suspension Assembly (One Vehicle Wheel Station)

Phase III hardware deliverables:

- Advanced Suspension System installed on a govt. furnished LAV
- Spare parts for Govt. testing as deemed necessary by Contractor

VII. OTHER INFORMATION

1. Government Property/Government Furnished Equipment (GFE) and Facilities -

Each proposer must provide a very specific description of any equipment/hardware that it needs to acquire to perform the work. This description should indicate whether or not each particular piece of equipment/hardware will be included as part of a deliverable item under the resulting award. Also, this description should identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. The purchase on a direct reimbursement basis of special test equipment or other equipment that is not included in a deliverable item will be evaluated for allowability on a case-by-case basis. Maximum use of Government integration, test, and experiment facilities is encouraged in each of the Offeror's proposals.

Government research facilities and operational military units are available and should be considered as potential government-furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for any one specific program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should explain as part of their proposals which of these facilities are critical for the project's success.

2. Security Classification -

In order to facilitate intra-program collaboration and technology transfer, the Government will attempt to enable technology developers to work at the unclassified level to the maximum extent possible. If access to classified material will be required at any point during performance, the Offeror must clearly identify such need prominently in its proposal.

3. Department of Defense High Performance Computing Program -

The DoD High Performance Computing Program (HPCMP) furnishes the DoD S & T and RDT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer approval is obtained and if security/screening requirements are favorably completed. Additional information and an application may be found at <http://www.hpcmo.hpc.mil/>.

4. Protection of Proprietary and Sensitive Information -

The parties acknowledge that, during performance of the contract resulting from this BAA, the recipient may require access to certain proprietary and confidential information (whether in its original or derived form) submitted to or produced by the Government. Such information includes, but is not limited to, business practices, proposals, designs, mission or operation concepts, sketches, management policies, cost and operating expense, technical data and trade secrets, proposed Navy budgetary information, and acquisition planning or acquisition actions, obtained either directly or indirectly as a result of the effort performed on behalf of ONR. The recipient shall take appropriate steps not only to safeguard such information, but also to prevent disclosure of such information to any party other than the Government. The recipient agrees to indoctrinate company personnel who will have access to or custody of the information concerning the nature of the confidential terms under which the Government received such information and shall stress that the information shall not be disclosed to any other party or to recipient personnel who do not need to know the contents thereof for the performance of the contract. Recipient personnel shall also be informed that they shall not engage in any other action, venture, or employment wherein this information will be used for any purpose by any other party.

5. Project Meetings and Reviews -

Various program reviews between the ONR sponsor and the performer will be held as necessary. At a minimum, Offerors should expect to support the following reviews:

- Kick-Off Review (at beginning of each Phase)
- System Readiness Review (SRR) (early in Phase I)
- Interim Progress Review (IPR) (middle of each Phase)
- Preliminary Design Review (PDR) (at end of Phase I)
- Test Readiness Review (TRR) (before Contractor testing in Phases II & III)
- Critical Design Review (CDR) (at end of Phase II)
- Final Review (at end of Phase III)

For costing purposes, Offerors should assume that 60% of these meetings will be at or near ONR, Arlington VA and/or Detroit, MI and 40% at the contractor's facilities. Interim meetings are likely, but these will be accomplished via video conferences, telephone conferences, or via web-based collaboration tools.

6. Submission of Questions -

Any questions regarding this solicitation must be provided to either the Project Officer and/or the Business Point of Contact listed in this solicitation. All questions shall be submitted in writing by electronic mail.

Questions regarding **full proposals** must be submitted by 2:00 P.M. EDT on **30 May 2008**. Questions after this date and time may not be answered, and the due date for submission of the proposals will not be extended.