INTRODUCTION

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2), the Department of Defense Grants and Agreements regulations (DoDGARS) 22.315(a) and 35.106, and DoD’s Other Transaction Guide for Prototypes Projects, USD(AT&L), OT Guide, Jan 2001. A formal Request for Proposals (RFP), solicitation, and/or additional information 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 select for award all some or none of the proposals in response to 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 N. Randolph Street
Arlington, VA 22203-1995

2. Research Opportunity Title

Active Transfer Learning (ATL)
3. Program Name
Active Transfer Learning (ATL)

4. Research Opportunity Number
BAA 10-017

5. Response Date
White Papers: June 28, 2010 2PM Local Eastern Time
Full Proposals: September 4, 2010 2PM Local Eastern Time

6. Research Opportunity Description
The Office of Naval Research (ONR) is soliciting white papers and full proposals for the Active Transfer Learning (ATL) program. Work under this BAA will consist of basic research and will be funded under Budget Activity 1 (as defined in DoD Financial Management Regulation Vol. 2B, Ch. 5).

Background & Objectives
The overall objective of this program is to conduct basic research that will help enable robust autonomy and automation in dynamic, unconstrained environments and contexts. The two science problems of interest are how a learning machine may leverage all relevant prior knowledge and how it may leverage occasional in situ availability of a subject matter expert (SME). This leads naturally to the existing research of Transfer Learning and Active Learning. The intent of this Program is to improve upon these two existing areas of research and combine them to produce a novel, powerful learning capability. The primary deficiency of active learning is that it typically involves only labeling exemplars and does not allow the SME to fully impart his/her rich domain knowledge as they would to a human student. A deficiency of transfer learning is that when it fails it is typically not possible for an SME to repair or complete the transfer in situ. By exploiting both of these deficiencies, this Program seeks to fundamentally extend the scope of active learning and incorporate it into the knowledge transfer process. The two specific technical goals are to capitalize on the occasional availability of an SME to enable 1) the robust transfer of knowledge from existing sources and 2) the injection of new knowledge in situ. This first technical goal includes both machine-initiated and human-guided exploration of existing knowledge sources as well as machine-based reasoning on knowledge sufficiency for prompting SME queries. This second technical goal includes both machine-initiated queries of target knowledge as well as SME injection of new, rich domain knowledge into the target.

Technical Focus
Based on these goals, this Program solicits research in Active Transfer Learning, which constitutes performing active learning on the transfer process. Research will occur in two focus areas; the first is transfer diagnosis, which involves uncovering whether a failed transfer is due to inadequate knowledge source exploration or due to missing concepts. The second focus area is transfer repair where the research will depend on the diagnosis. For failures due to inadequate source exploration, both the machine and SME may be employed to search for and discover relevant data and knowledge sources. For failures due to missing concepts, transfer
repair may involve machine-initiated “experimentation” with the SME in the knowledge target or direct injection of knowledge by the SME. A third reason for transfer failure is a deficient mapping between knowledge source and target. While proposals are welcomed to address this failure mode, it is noted that the SMEs are experts in the problem domains and not experts in transfer learning (thus, transfer repair should proceed accordingly).

The expected outcome of this program is to develop ATL technologies that: enable learning systems to succeed in situations where they would normally fail due to lack of appropriate or sufficient knowledge, improve task completion (e.g., performance or time), and provide more focused / meaningful exchanges within the algorithm-SME team. It is anticipated that researchers likely to have expertise that is of relevance to this Program would come from the areas of transfer learning or rich / transferable data representations, active learning, or sparse representations / learning techniques. Additionally, the notion of transfer repair will naturally involve some level of human-machine interface (HMI); however, research in HMI is not the primary focus of this Program and should not constitute the majority of proposed effort.

As an example problem for ATL, consider the domain of interactive target recognition involving the specific targets of improvised explosive devices (IEDs) sensed through one or more modalities. The characteristics of this example that are relevant to this Program include:

- A non-trivial amount of baseline (transferable) knowledge about what constitutes an IED
- The fact that some aspects of what constitutes an IED (e.g., appearance, deployment, usage) will evolve unpredictability and continuously after the recognition algorithm is deployed
- The recognition algorithm will be occasionally exposed to an SME (e.g., a seasoned ordinance disposal technician may use the algorithm “post-sortie” and would thereby have the opportunity to communicate the current state of IED warfare to the algorithm if that were possible)

It should be noted that this BAA is not a solicitation for work solely in target recognition or the IED problem; this example is merely an illustration of the underlying, exploitable opportunity: a rich knowledge base, a difficult and continuously evolving problem, and intermittent availability of (currently under-exploited) human expertise.

Concerning experimental opportunities and example problem domains, performers are encouraged to propose research that leverages their own domain expertise, available data, and experiments (e.g., pattern recognition, planning / action selection, problem solving, etc.). However, work performed under this Program must also address at least one of the government-provided problem domains. The government-provided experimentation opportunities are interactive target recognition and modeling of oceanographic processes. Expertise in the government-provided problem domains is not required since the government will provide data, experimentation opportunities, and access to the appropriate SMEs. Further details on these government-provided opportunities will be provided at the program kickoff. Again, proposing entities are encouraged to consider how their research may apply to at least one of these experimentation opportunities (required) as well as a variety of problem domains with which they have expertise.
The government will provide evaluation metrics and test-bed concepts at program kickoff; however, performers are encouraged to suggest their own preferred evaluation metrics and testing / evaluation mechanisms in their submissions as evaluation of interactive learning technologies is non-trivial and may vary with the scope of the approach. These suggestions will be considered by the government for incorporation into the program; however, the overall priority of the Program is to foster innovation and maximize the quality of science. No other information regarding technology evaluation will be provided during proposal development.

With regard to any restrictions on the conduct or outcome of work funded under this BAA, ONR will follow the guidance on and definition of "contracted fundamental research" as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 26 June 2008. As defined therein the definition of "contracted fundamental research", in a DoD contractual context, includes [research performed under] grants and contracts that are (a) funded by Research, Development, Test, and Evaluation Budget Activity 1 (Basic Research), whether performed by universities or industry. In conformance with the USD(AT&L) guidance and National Security Decision Directive 189, ONR will place no restriction on the conduct or reporting of unclassified fundamental research, except as otherwise required by statute, regulation or Executive Order.

7. **Point(s) of Contact**

Questions of a technical nature shall be directed to the cognizant Technical Point of Contact, as specified below:

Science and Technology Point of Contact:

Jason Stack, Ph.D.
Program Officer
Office of Naval Research
Code 3210E, Suite 1089
875 N. Randolph St
Arlington, VA  22203
jason.stack@navy.mil

Questions of a business nature shall be directed to the cognizant Contract Specialist, as specified below:

Primary Business Point of Contact:

Chris Williamson
Contracting Officer
Office of Naval Research
Acquisition Department, Code BD252
One Liberty Center
875 N. Randolph Street
Arlington, VA  22203-1995
chris.r.williamson@navy.mil
Secondary Business Point of Contact:
Susan Paolini
Contracting Officer
Office of Naval Research
Acquisition Department, Code BD252
One Liberty Center
875 N. Randolph Street
Arlington, VA  22203-1995
Susan.Paolini@navy.mil

Questions of a security nature should be submitted to:
Diana Pacheco
Industrial Security Specialist
Office of Naval Research
Security Department, Code 43
One Liberty Center
875 N. Randolph Street
Arlington, VA 22203-1995
Email Address: diana.pacheco@navy.mil

Note: All questions of an UNCLASSIFIED nature to the Technical Point of Contact (POC) shall be sent via e-mail with a copy to the designated Business POC.
CLASSIFIED questions shall be handled through the ONR Security POC. Specifically, any entity wanting to ask a CLASSIFIED question shall send an email to the ONR Security POC with a copy to both the Technical POC and the Business POC stating that the entity would like to ask a CLASSIFIED question. DO NOT EMAIL ANY CLASSIFIED QUESTIONS. The Security POC will contact the entity and arrange for the CLASSIFIED question to be asked through a secure method of communication.

Answers to questions submitted in response to this BAA will be addressed in the form of an Amendment and will be posted to one or more of the following webpages:

8. Instrument Type(s)
Awards may take the form of contracts, grants, cooperative agreements, and other transaction agreements, as appropriate.

9. Catalog of Federal Domestic Assistance (CFDA) Number
12.300
10. Catalog of Federal Domestic Assistance (CFDA) Title
Department of Defense (DOD) Basic Scientific Research

11. Other Information
FAR Part 35 restricts the use of Broad Agency Announcements (BAAs), such as this, to the acquisition of basic and applied research and that portion of advanced technology development not related to the development of a specific system or hardware procurement. Contracts and grants and other assistance agreements made under BAAs are for scientific study and experimentation directed towards advancing the state of the art and increasing knowledge or understanding.

This announcement is not for the acquisition of technical, engineering or other types of support services.

II. AWARD INFORMATION

This Program will cover a 5-year period beginning in fiscal year 2011 and will consist of a 3-year base period followed by a 2-year option period. The base period should include the bulk of the research and development with appropriate amounts of experimentation and testing. The option period should focus on experimentation and extensions of research founded on lessons learned from the base period. Proposed work should be structured accordingly; however, the amount and period of any individual award may vary depending on the technical content and approach of the offeror. Formal program reviews and evaluations will occur yearly with informal status updates occurring approximately every 6 months or as determined by the Program Officer. At the conclusion of the base period, the government will evaluate each effort and may continue all, some, or none of the efforts into the option period.

It is expected that nominally 4 to 5 awards will be given for $200k to $250k each; however, proposals for smaller individual awards as well as larger teaming efforts are encouraged. The government will also provide data (in the aforementioned areas of experimentation opportunities), access to SMEs in these areas, and additional team members that will be responsible for facilitating experimentation, assisting in evaluation process development, and evaluating all ATL technologies. However, this BAA is not a solicitation for work in these additional support/evaluation areas, and such proposals will not be considered.

For the past three years, Congress has placed limits on the percentage of facilities and administrative (F&A) costs that can be paid by the government using basic research (6.1) funds. Currently, F&A costs paid under contracts and grants for the performance of basic research may not exceed 35 percent. It is unknown at present whether a similar indirect cost restriction will apply to 6.1 funds in FY 2011 or thereafter.

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 either white papers or full proposals in response to this BAA. If any such organization is interested in one or more of the programs described herein, they should contact the technical point of contact in Section I.7. 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.

Some topics cover export controlled technologies. Research in these areas is limited to “U.S. persons” as defined in the International Traffic in Arms Regulation (ITAR) – 22 CFR § 1201.1 et seq. (See Section VII, Other Information)

IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process

Each White Paper should state that it is submitted in response to this announcement. White Papers shall be submitted by email to the Technical Point of Contact (TPOC) identified in Section I.7 by the due date listed in Section I.5. It is the proposing entity’s responsibility to ensure they receive an email from the TPOC confirming receipt of the submission. Each White Paper will be evaluated by the Government to determine whether the proposed technology advancement appears to be of particular value to the Department of the Navy. Government evaluations of the White Papers will be issued via e-mail notification from the TPOC. The White Paper appraisal is intended to give entities a sense of whether their concepts are likely to be funded under this BAA.

A Detailed Full Proposal (Technical and Cost proposals) will be subsequently encouraged from those Offerors whose proposed technologies have been identified through the above reference email as being of particular value to the Government. However, any such encouragement does not assure a subsequent award. Full Proposals may also be submitted by any Offeror whose White Paper was not identified as being of particular value to the Government or any Offeror who did not submit a White Paper. However, it is strongly encouraged that those parties with interest in this Program follow the White Paper submission process to receive appropriate feedback before investing significant effort in the development of a Full Proposal.

Full proposals shall be submitted by the due date is listed in Section I.5.

For Full Proposals that would be awarded via Contracts and other agreements, full proposals shall be submitted by email directly to the TPOC identified in Section 1.7. Again, it is the proposing entity’s responsibility to ensure it receives an email from the TPOC confirming receipt of the submission.

All notifications on all evaluation decisions will be via email from the TPOC.
2. Content and Format of White Papers & Full Proposals

All submissions under this BAA shall be unclassified. 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.

A. WHITE PAPERS

White Paper Format

- Paper Size: 8.5 x 11 inch paper
- Margins: 1 inch
- Spacing: single-spaced
- Font: Times New Roman, 12 point
- Format: PDF format is preferred while Microsoft Word is acceptable
- Page Limit: 8 pages excluding cover page, references, and qualifications.

NOTE: 1) Do not send hardcopies of White Papers (including facsimiles) as only electronic submissions will be accepted and reviewed; 2) Do not send .ZIP files; 3) Do not send password protected files.

White Paper Content

- Cover Page – The Cover Page shall be labeled “WHITE PAPER”, and shall include the BAA number, proposed title, Offeror’s administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet addresses, and shall be signed by an authorized officer (signature not required for Grant applications). Note that titles given to the White Papers/Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

- Background. This section should discuss background, state of the art, and potential naval relevance as appropriate

- Objectives. Briefly discuss the scientific and/or technical objectives.

- Approach. The bulk of the White Paper should be devoted to this section. It should clearly articulate the scientific and/or technical development to be pursued. Additionally, it should provide a concise statement of work (SoW) and highlight the connections to other ONR, Navy, DoD, or government agency programs (if not already covered in Background).

- Program Plan. This section should summarize the schedule, major milestones, required funding, deliverables or planned reports, teaming relationships or subcontractors with management approach (if applicable), and any required facilities or government furnished equipment or information (if applicable). This section should also assert any data rights (if applicable).
• Qualifications. This section shall include vitae of key investigators. It may also include a brief written summary of qualifications if desired.

• References

B. FULL PROPOSALS

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

Full Proposal Content

Volume 1: Technical Proposal

The Full Proposal Technical Content (Volume 1) shall follow the same format and content guidelines as the White Paper (Section IV, 2, A) with the following exceptions:

• **Page Limit**: 25 pages excluding cover page, references, and qualifications.

• **Cover Page**: This should be labeled “Technical Proposal” rather than “White Paper”. The cover page should include the proposed period of performance (identify both the base period and any options, if included) and a signature of the Authorized Representative.

• **Proposal Checklist**: (Not included in page limitations)

  To assist Offerors in the development and submission of their proposals in response to this BAA, a Proposal Checklist for Contracts, Grants, Cooperative Agreements and Other Transactions has been uploaded as an attachment. Offerors should print and complete the checklist to ensure that all required actions have been taken and information included prior to proposal submission. Inclusion of the completed checklist as the first page of your Volume I, Technical Proposal will assist in proposal evaluation and may shorten the time it takes to make an award.

• **Statement of Work**: (This following exception to the SoW only applies to Contracts and not to Grants)

  Within the Approach section, a standalone and severable statement of work (SOW) shall be included. It is anticipated that the proposed SOW will be incorporated as an attachment to the resultant award instrument. Therefore, the SOW must be severable and self-standing without any proprietary restrictions, which can be attached to the contract or agreement award. Include a detailed listing of the technical tasks/subtasks organized by year and a section which lists all proposed deliverables. When options are contemplated, the SOW must clearly identify separate optional tasks.
Submission of the SOW without restrictive markings is your company’s affirmation that the SOW is non-proprietary and releasable in response to Freedom of Information Act (FOIA) requests.

- **Assertion of Data Rights:**
  Authors of Full Proposals have the option to remove their Assertion of Data Rights from the Program Plan section and place them in a standalone section that is not included in the page limitation. This section should include 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:


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.

If it is determined that data rights are not applicable, indicate no assertions are being made in the proposal submission.

- **Deliverables/Reports:**
  Authors of Full Proposals should remove the discussion of deliverables / reports from the Program Plan section and place them in a standalone section that is not included in the page limitation. It should include a detailed list of reports (technical and financial progress reports), presentation materials, proposed hardware or software deliverables, or prototypes. The timeframe for delivery should also be indicated.

  Note that Grants and agreements other than contracts do not include delivery of software, prototypes, or other hardware deliverables.

- **Current and Pending Project and Proposal Submissions:**
  *(Not included in page limitations)*

  Offerors are required to provide information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing contracts, grants, and other assistance agreements. Offerors shall provide the following information on any related or complementary proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations).

  The information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including ONR. Concurrent submission of a proposal to other organizations will not prejudice its review by ONR:

  1) Title of Proposal and Summary;
2) Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants);
3) Percentage effort devoted to each project;
4) Identity of prime Offeror and complete list of subcontractors, if applicable;
5) Technical contact (name, address, phone/fax, electronic mail address);
6) Administrative/business contact (name, address, phone/fax, electronic mail address);
7) Duration of effort (differentiate basic effort);
8) The proposed project and all other projects or activities requiring a portion of time of the Principal Investigator and other senior personnel must be included, even if they receive no salary support from the project(s);
9) The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months or labor hours per year to be devoted to the project, regardless of source of support; and
10) State how projects are related to the proposed effort and indicate degree of overlap.

VOLUME 2: Cost Proposal: INSTRUCTIONS FOR CONTRACTS, COOPERATIVE AGREEMENTS AND OTHER TRANSACTION AGREEMENTS (Does not include Grants)

Note: There is no page limit for Volume 2.

The following information is provided to assist contractors in preparing and submitting an adequate and compliant cost proposal. The purpose of the submission of cost or pricing data is to enable Government personnel to perform cost or price analysis and ultimately negotiate a fair and reasonable cost. Offerors are reminded that the responsibility for providing adequate supporting data and attachments lies solely with the offeror. Further, the offeror must also bear the burden of proof in establishing reasonableness of proposed costs; therefore, it is in the contractor’s best interest to submit a fully supportable and well-prepared cost proposal. The basis and rationale for all proposed costs should be provided as part of the proposal so that Government personnel can place reliance on the information as current, complete and accurate. Further, FAR 15.403-4 sets forth those circumstances in which Offerors are required to submit certified cost or pricing data.

Although not required and provided for informational purposes only, using the cost proposal format spreadsheet (spreadsheet.xls) that is an attachment to this document and the accompanying instructions (spreadsheetinstructions.doc) as the basis of the cost proposal may
significantly decrease the time required to review and award proposals submitted in response to this announcement.

Options: Any proposed options that are identified in either Volume 1 or 2, but are not fully priced out, will not be included in any resulting contract or non-grant assistance agreement. If proposing options, they must be separately priced, and separate spreadsheets should be provided for the base period and each option period.

For pricing purposes, assume that performance will start no earlier than January 2011.

The proposal should include a statement that the company has (or has not) done business with the Government before. If the company has done business with the Government before, the statement should include the date that the accounting system was determined to be adequate. If this will be the company’s first Government contract, please download the Defense Contract Audit Agency’s (DCAA) “Information for Contractors” pamphlet, which can be found at www.dcaa.mil and become familiar with the Federal Acquisition Regulation (FAR) Part 31.205 to ensure that a successful accounting system review can be completed prior to contract award.

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 offeror’s fiscal year and Part 2 will provide a cost breakdown by task/sub-task corresponding to the task numbers in the proposed Statement of Work.

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)
- Proposed period of performance (identify both the base period and any proposed options)

Part 1:
Detailed breakdown of all costs by cost category by calendar or Contractor fiscal year:

- Direct Labor – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.

- Indirect Costs – Fringe Benefits, Overhead, G&A, COM, etc. and their applicable allocation bases. If composite rates are used, provide the calculations used in deriving the composite rates.
• **Travel** – The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organization’s historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principles.

• **Subcontracts/Interorganizational Transfers** – A cost proposal as detailed as the Offeror’s cost proposal will be required to be submitted by all proposed subcontractors and for all interorganizational transfers. For subcontracts or interorganizational transfers over $100,000, the subcontract proposal along with supporting documentation, must be provided via e-mail directly to both the Program Officer and the Business Point of Contact at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract and should include a description of the effort to be performed by the subcontractor. A proposal and supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations. The prime contractor should perform and provide a cost/price analysis of each subcontractor’s cost proposal.* Offerors are required to obtain competition to the maximum extent practicable when selecting subcontractors or interorganizational transfers; if the offeror has obtained competitive quotes, copies should be provided. If the Offeror has selected other than the low bid for inclusion in its proposal or intends to award the subcontract/interorganizational transfer on a sole-source basis, the offeror should provide rationale for its decision. Certified cost or pricing data may be required for subcontractor proposals over $650,000.

*Note: Federal Acquisition Regulation provision 52.215-22 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 subcontractors, the offeror must include the additional information required by the above-cited clause.

• **Consultant** – Provide a breakdown of the consultant’s hours, the hourly rate proposed, any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant’s proposed statement of work if it is not already separately identified in the prime contractor’s proposal.

• **Materials & Supplies** - Provide an itemized list of all proposed materials and supplies for each year including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). If the total cost for materials and supplies exceeds $100,000 per year, then select a sample of the items proposed and provide catalog price lists/quotes/prior purchase orders to support
the price for the items in the sample. All items with a unit price over $10,000, regardless of the total cost for materials and supplies, must be supported with a copy of catalog price lists/quotes/prior purchase orders.

- **Contractor Acquired Equipment or Facilities** – Equipment and/or facilities are normally furnished by the Contractor. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided including: 1) a very specific description of any equipment/hardware that it needs to acquire to perform the work, 2) whether or not each particular piece of equipment/hardware will be included as part of a deliverable item under the resulting award, and 3) the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). The 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 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.

- **Other Directs Costs** – Provide an itemized list of all other proposed other direct costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

- **Fee/Profit** (Contract Proposals Only) – Profit or fee is not allowed on direct costs for facilities or in cost-sharing contracts or assistance agreements.

Note: Indicate if you have an approved Purchasing/Estimating System and/or describe the process used to determine the basis of reasonableness (e.g., competition, market research, best value analysis) for subcontractors, consultants, materials, supplies, equipment/facilities, and other direct costs.

**Part 2:**
Cost breakdown by Government fiscal year and task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. When options are contemplated, options must be separately identified and priced by task/sub-task.

**Volume 2: Cost Proposal: INSTRUCTIONS FOR GRANTS** (Does not include contracts, cooperative agreements and other transaction agreements)

The offeror must use the Grants.gov forms from the application package template associated with the BAA on the Grants.gov web site located at [http://www.grants.gov/](http://www.grants.gov/). If options are proposed, the cost proposal must provide the pricing information for the option periods; failure to include the proposed costs for the option periods will result in the options not being included in the award. Assume that performance will start no
earlier than three (3) months after the date the cost proposal is submitted. A separate Adobe .pdf document should be included in the application that provides appropriate justification and/or supporting documentation for each element of cost proposed.

**Part 1:** The itemized budget must include the following:

- **Direct Labor** – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.

  Administrative and clerical labor – Salaries of administrative and clerical staff are normally indirect costs (and included in an indirect cost rate). Direct charging of these costs may be appropriate when a major project requires an extensive amount of administrative or clerical support significantly greater than normal and routine levels of support. Budgets proposing direct charging of administrative or clerical salaries must be supported with a budget justification which adequately describes the major project and the administrative and/or clerical work to be performed.

- **Fringe Benefits and Indirect Costs** (i.e., F&A, Overhead, G&A, etc.) – The proposal should show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.

- **Travel** – The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organization’s historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principals.

- **Subawards** – Provide a description of the work to be performed by the subrecipients. For each subaward, a detailed cost proposal is required to be submitted by the subrecipient(s). Fee/profit is unallowable on assistance agreement awards to subrecipients. The subawardee’s or subrecipient’s cost proposal can be provided via e-mail directly to both the Program Officer and the business point of contact at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract. A proposal and supporting documentation must be
received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations.

- **Consultants** – Provide a breakdown of the consultant’s hours, the hourly rate proposed, any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant’s proposed statement of work if it is not already separately identified in the prime contractor’s proposal.

- **Materials & Supplies** – Provide an itemized list of all proposed materials and supplies including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

- **Recipient Acquired Equipment or Facilities** – Equipment and/or facilities are normally furnished by the Recipient. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). Allowable items normally would be limited to research equipment not already available for the project. General purpose equipment (i.e., equipment not used exclusively for research, scientific or other technical activities, such as personal computers, office equipment and furnishings, etc.) should not be requested unless they will be used primarily or exclusively for the project. For computer/laptop purchases and other general purpose equipment, if proposed, include a statement indicating how each item of equipment will be integrated into the program or used as an integral part of the research effort.

- **Other Direct Costs** – Provide an itemized list of all other proposed other direct costs such as Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
  
  NOTE: If the grant proposal is for a conference, workshop, or symposium, the proposal should include the following statement: “The funds provided by ONR will not be used for food or beverages.”

- **Fee/Profit** – Fee/profit is unallowable.

**Part 2:** Cost breakdown by Government fiscal year and task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. When options are contemplated, options must be separately identified and priced by task/sub-task.
3. Significant Dates & Times

White Papers due: June 28, 2010  2PM Local Eastern Time
White Paper notifications:* July 22, 2010  2PM Local Eastern Time
Full Proposals due: September 4, 2010  2PM Local Eastern Time
Full Proposal notifications:* September 26, 2010  2PM Local Eastern Time
Target Program Start:* January 2011
Program kickoff meeting:* January 2011

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

4. Submission of Late Proposals (Applicable to White Papers and Full 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

(a) 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

(b) 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

(c) 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 extend 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. Submission of Grant Proposals through Grants.gov

(NOT APPLICABLE TO PROPOSALS FOR CONTRACTS, COOPERATIVE AGREEMENTS, AND OTHER TRANSACTION AGREEMENTS)

The offeror must use the Grants.gov forms from the application package template associated with the BAA on the Grants.gov web site. To be considered for award, Applicants must fill out Block 4 of the SF 424 R&R as follows: Block 4a, Federal Identifier, for new awards, enter N00014; Block 4b, Agency Routing Number, enter the three (3) digit Program Office Code (i.e., 331) and, if known, the Program Officer’s name, last name first, in brackets (i.e., [Shifler, David]). Applicants who fail to provide a Department code identifier may receive a notice that their proposal will be rejected.


By completing Block 17, the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28. Refer to Section VI, “Award Administration Information” entitled “Certifications” for further information.

For electronic submission of grant full proposals, several one-time actions must be completed in order to submit an application through Grants.gov. These include obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registration (CCR), registering with the credential provider, and registering with Grants.gov. See http://www.grants.gov, specifically http://www.grants.gov/GetStarted.
Use the Grants.gov organization Registration Checklist at http://www.grants.gov/applicants/register_your_organization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called “MPIN” are important steps in the CCR registration process. Applicants who are not registered with CCR and Grant.gov should allow at least 21 days to complete these requirements. The process should be started as soon as possible. Any questions relating to the registration process, system requirement, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

Special Notices Relative to Grant Applications to be Submitted Through Grants.gov

All attachments to grant applications submitted through Grants.gov must be in Adobe Portable Document Format (i.e., .pdf files). Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

After proposals are uploaded to Grants.gov, the applicant receives an e-mail indicating the proposal has been submitted and that Grants.gov will take up to two days to validate the proposal. Grants.gov may reject the proposal during the validation process. Therefore, applicants who have registered with Grants.gov are urged to submit their proposals electronically at least three days before the date and time proposals are due so that it will not be received late and be ineligible for award consideration. Such early submission will allow a proposer time to submit its proposal to ONR through an alternative electronic method in the event the proposal is not validated (i.e., accepted) by Grants.gov after two days. See the special notice on alternate submission below.

Special Notice for Waiver:
Process to Obtain a Waiver from the Use of Grant.gov for Submission of Full Grant Proposals: If a prospective grantee is unable to comply with the requirement to use Grant.gov “APPLY” for submission of a grant application under this BAA or finds it would be an excessive burden to comply with this requirement, a waiver request may be submitted not less than 30 calendar days prior to the closing date for receipt of Full Proposals. Such request should be submitted by the Electronic Business Point of Contact listed in the CCR for the organization and should contain the Organization/Individual’s name, address, telephone number, and email address. The request should state the reason for the request in sufficient detail so a decision can be made. The Waiver Request should be submitted to the ONR Acquisition Department point of contact or Grants Officer listed in the BAA. Such request can be sent by registered mail or email. The “postmark” stamp on the envelope of the time annotated on the email will be used to determine timeliness of the request. A decision and response will be issued within 14 calendar days of receipt of the request by ONR. Foreign Grantees who are not registered in CCR may request a waiver on that basis since CCR registration is integral to the Grants.gov application process.

Special Notice on Alternate Submission
The following alternative to submitting proposals to the Grants.gov website is provided for use under this BAA. Proposals using the alternative submission process will be accepted only if Grants.gov is not accepting the proposal and the offeror has called the Grants.gov helpline and received a case ticket number. If Grants.gov has not within two days by return e-mail validated your proposal submission, call Grants.gov (1-800-518-4726) to obtain a case ticket number. An e-mail from Grants.gov indicating rejection of the grant proposal will not be accepted in place of a Grants.gov case ticket number.

a. Upload the proposal using the form on the following website: http://onroutside.onr.navy.mil/aspprocessor/BAAPE/.

b. Use this form to upload your grant proposal directly to the Office of Naval Research. All fields in the form are required to be completed, including the assigned Grants.gov case ticket number. Your completed package should also include a signed, scanned proposal cover sheet with the signature of your authorized organizational representative as part of the ‘Attachments Form’. Submit one file per proposal in PDF format. **DO NOT submit any parts of the proposal separately. Technical proposals, endorsements, etc. should be on the Grant.gov ATTACHMENTS form.**

c. Use the naming convention below for all uploaded proposals.

*Convention:  (ONRBAAXX-XXX_Topic_LeadPI-University.pdf)*

*Example:  ONRBA09-012_NOPP-MSMITH-UNIVRESEARCH.PDF*

d. Once a document has been submitted, a “Thank You” page will appear and an e-mail will be sent to the address provided. If you do not receive an e-mail confirmation, your file has not been properly received. You should immediately contact the business point of contact listed in the BAA or the ONR Grants BAA Administrator.

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) Potential Naval relevance and contributions of the effort to the agency’s specific mission;
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 (1-4 above) are significantly more important than the cost factor (5), with the technical factors all being 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 other than small 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 options for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the options 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. 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”.

21
• CCR - Successful Offerors not already registered in the Central Contractor Registry (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.bpn.gov/ccr/default.aspx.

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

• Certifications – Proposals for contracts and assistance agreements should be accompanied by a completed certification package.

Contracts and Section 845 Other Transaction Agreement Proposals:
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 ONR contract specific representations and certifications. These "ONR 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/Contracts-Grants/submit-proposal/contractsproposal.aspx

Grants, Cooperative Agreements and Regular (non Section 845) Other Transaction Agreements (OTAs):
Grant, Cooperative Agreement and OTA awards greater than $100,000 require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via Grants.gov (complete Blocks 17 and 18). The following certification applies to each applicant seeking federal assistance funds exceeding $100,000:

CERTIFICATION REGARDING LOBBYING ACTIVITIES

(1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(3) The applicant shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Grants not through Grants.gov

Proposers seeking grants who have received Grants.gov waiver approval for awards greater than $100,000 shall complete and submit electronic representations and certifications at the Contracts and Grants Section of the ONR Home Page at http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal.aspx.

VII. OTHER INFORMATION

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

3. Use of Animals and Human Subjects in Research
   If animals are to be utilized in the research effort proposed, the Offeror must complete a DoD Animal Use Protocol with supporting documentation (copies of AAALAC accreditation and/or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. For assistance with submission of animal research related documents, contact the ONR Animal Use Administrator at (703) 696-4046.
Similarly, for any proposal for research involving human subjects, the Offeror must submit or indicate an intention to submit prior to award: documentation of approval from an Institutional Review Board (IRB); IRB-approved research protocol; IRB-approved informed consent form; proof of completed human research training (e.g., training certificate or institutional verification of training); an application for a DoD-Navy Addendum to the Offeror’s DHHS-issued Federal wide Assurance (FWA) or the Offeror’s DoD-Navy Addendum. In the event that an exemption criterion under 32 CFR.219.101 (b) is claimed, provide documentation of the determination by the Institutional Review Board (IRB) Chair, IRB vice Chair, designated IRB administrator or official of the human research protection program including the category of exemption and short rationale statement. This documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. Information about assurance applications and forms can be obtained by contacting ONR_343_contact@navy.mil. If the research is determined by the IRB to be greater than minimal risk, the Offeror also must provide the name and contact information for the independent medical monitor. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official at (703) 696-4046.

For contracts and orders, the award and execution of the contract, order, or modification to an existing contract or order serves as notification from the Contracting Officer to the Contractor that the HRPO has approved the assurance as appropriate for the research under the Statement of Work and also that the HRPO has reviewed the protocol and accepted the IRB approval or exemption determination for compliance with the DoD Component policies. See, DFARS 252.235-7004.

4. Reserved

5. Department of Defense High Performance Computing Program
The DoD High Performance Computing Program (HPCMP) furnishes the DoD S & T and DT & E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts, grants, and assistance instruments 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/.

6. Organizational Conflicts of Interest
All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any ONR technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be
rejected without technical evaluation and withdrawn from further consideration for award. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with ONR by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact in Section I, item 7 above, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively avoided or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

7. Project Meetings and Reviews

Individual program reviews between the ONR sponsor and the performer may be held as necessary. Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country. For costing purposes, offerors should assume that 40% of these meetings will be at or near ONR, Arlington, VA and 60% at other contractor or government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

8. Other Guidance, Instructions and Information

None