ONR BAA Announcement # ___ONRBAA12-001____
Date: 28 September 2011

Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology

INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016, the Department of Defense Grants and Agreements regulations (DoDGARS) 22.315(a) 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.

This BAA is intended for proposals related to basic research, applied research, or advanced technology development. For Funding Opportunity Announcements (FOA) for NAVY and Marine Corps Science, Technology, Engineering & Mathematics (STEM) programs, refer to ONRBAA12-002, which can be found at the ONR Broad Agency Announcement (BAA) webpage-
http://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx .

This announcement will remain open for approximately one (1) year from the date of publication or until replaced by a successor BAA. Proposals may be submitted at any time during this period. This announcement replaces ONRBAA11-001 dated 24 September 2010.

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I. GENERAL INFORMATION

1. Agency –

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

2. Research Opportunity Title –

Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science & Technology

3. Program Name –

Not Applicable (N/A)

4. Research Opportunity Number –

ONRBAA12-001

5. Response Date –

This announcement will remain open until 30 September 2012 or until replaced by a successor BAA, whichever first occurs. Proposals may be submitted at any time during this period.

6. Research Opportunity Description –

The Office of Naval Research (ONR) is interested in receiving proposals for Long-Range Science and Technology (S&T) Projects which offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines. A brief description of the ONR Program Codes and the science and technology thrusts that they are pursuing is provided below. Additional information can be found at the ONR website at http://www.onr.navy.mil/Science-Technology/Departments.aspx.

Potential Offerors are urged to check the program areas that they are interested in throughout the year for updates to thrust areas and research priorities on the ONR website @ www.onr.navy.mil. Prior to preparing proposals, potential offerors are strongly encouraged to contact the ONR point of contact (POC). To identify the POC, follow the link for the appropriate code or division listed below and then click on the link to the thrust or topic area that you wish to submit a proposal for. Each thrust or topic area will provide a POC or e-mail address.

Expeditionary Maneuver Warfare & Combating Terrorism Department (Code 30): Develops and transitions technologies to enable the Navy-Marine Corps team to win and survive on the battlefield. The department invests primarily in asymmetric and irregular warfare, distributed operations, information superiority and communications, and survivability and self defense. Specific thrusts and the associated research areas are:

1) Command, Control, Computers and Communication (C4), which seeks to provide tomorrow's small unit naval expeditionary war fighters with the precise information they need, when they need it, especially in complex, hybrid warfare environments. Warfighters must have nearly-ubiquitous communications and availability of information to maneuver units, long-reach on–the-move communications enabling technologies that allow lower-echelon war fighters to exploit the global network, and technology to allow small unit war fighters to gain timely, accurate, and nearly complete situational awareness (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/C4.aspx). Technology Investment Areas include:

a) Network-centric warfare/Interoperability
b) Over-the-horizon communications/Gateways
c) Small-unit technologies.

2) Fires, which seeks to enable warfighters employed in small, distributed units with tools to locate and decisively destroy larger enemy forces by applying timely, reliable, precise, and accurate fires from a myriad of platforms. Research areas are integrated, lightweight optics and sensors to see through all battlefield conditions and lightweight, organic, advanced weapons for the flexible, effective application of firepower (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Fires.aspx). Technology investment areas include:

a) Targeting and engagement;
b) Advanced ammunition and energetics
c) Advanced weapons

3) Force Protection seeks to develop and mature technologies that provide protection from myriad modes of enemy attack through the spectrum of warfare, including concepts such as asymmetric and irregular warfare and distributed operations which concentrate on the small unit and individual warfighters. End products will include protective systems expeditionary in nature, lightweight, and capable of providing a far greater degree of performance than any comparable system currently available. The functional areas of investigation are explosive hazard defeat through detection, breaching and neutralization of all explosive hazards, counter sniper, counter rocket, artillery and mortar, counter-bomber and personal protective equipment. Technology investment areas include detection, neutralization and mitigation (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Force-Protection.aspx).

4) Human, Social, Culture and Behavior Modeling, which seeks to build capability through development of a knowledge base, building models and training capacity in order to understand, predict and shape human behavior cross-culturally. Specifically, the program seeks to: a) understand the human, social, cultural and behavioral factors that influence human behavior and to improve our ability to model these influences and understand their impact on human behavior at the individual, group and society-levels; b) Improve computational modeling and simulation capabilities, visualization software toolsets, and training/mission rehearsal systems that provide forecasting capabilities for socio-cultural responses; and c) develop and demonstrate an integrated set of model description data (metadata), information systems, and procedures that will facilitate assessment of the software engineering quality of sociocultural behavior models, their theoretical foundation and the translation of theory into model constructs (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Human-Behavioral-Sciences.aspx).

5) Human Performance Training and Education (HPT&E), seeks to understand the science of improving human performance in order to prepare warfighters for the complex and chaotic joint operating environment. HPT&E will focus on developing training technologies, knowledge products, architectures, and training systems that accelerate mental, emotional and cognitive decision making skills for Expeditionary Warfighters, who are ready to deploy anywhere in the world on short notice, function as part of an effective team, and assume greater leadership responsibilities. Our priorities for research are to develop more skilled small unit leaders, small unit teams and individuals through efforts to improve decision making, resiliency and readiness. Technology investment areas include (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Human-Performance-Training.aspx):

a) Decision making and expertise development
b) Mental resiliency and cognitive adaptability
c) Enhanced physical readiness.

6) Intelligence, Surveillance and Reconnaissance, which seeks to develop and leverage advanced technologies for applications in future intelligence, surveillance and reconnaissance systems, as well as to enhance situational awareness to enable real-time tactical decision making for distributed operations, and provide proactive and predictive capabilities for asymmetric and irregular warfare. Technology investment areas include a) sensor fields, sensor data collection and networking gaps, entity recognition and urban domain; b) relevant and situational information on demand to address capability gaps associated with the tactical processing of sensor data in order to enable indications and warning such as tag, track and locate; and c) actionable intelligence for expeditionary and irregular warfare to address gaps associated with the translation of information to actionable intelligence. Specific research thrusts include: biometrics, agile tactical sensor networks, acoustic collection and processing, calculation of area atmospherics, and decision prediction (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Intelligence-Surveillance-ISR.aspx).

7) Logistics, which seeks to provide Marines of the future with a precisely tailored level of sustained logistic support from sea-based platforms to rapidly transport forces ashore. Logistic delivery systems of the future will be more responsive and flexible, enabling Marines to out-pace

rapidly changing operational scenarios. Likewise, delivered logistic commodities will provide more operational value per unit weight, enhancing combat unit self-sufficiency and maneuverability. Operational units will benefit from technologies that maximize equipment readiness by minimizing both down-time and maintenance requirements (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Logistics.aspx). Technology investment areas include:

a) Logistics Handling and Transport
b) Fuel Efficiency
c) Portable Electric Energy
d) Water Purification
e) Maintenance reduction

8) Maneuver, which explores technologies to increase the warfighting capabilities and effectiveness of the Marine Corps Air Ground Task Force with emphasis on developing affordable Autonomy technologies for unmanned systems, increasing survivability of ground vehicles, improving off-road mobility and reducing fuel consumption, in both decentralized and asymmetric warfare (http://www.onr.navy.mil/Science-Technology/Departments/Code-30/All-Programs/Maneuver.aspx). Technology investment areas are:

a) Autonomy
b) Survivability
c) Mobility

Command, Control Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) (Code 31): Focuses on experimental and theoretical research and technology in these areas with applications across near-, mid- and far-term applications. The department invests primarily in Information Dominance , distributed operations, and assure access and hold at risk technologies. The goal of Information Dominance is to enable the war-fighter to take immediate, appropriate action at any time against any desired enemy, target, or network by assuring that autonomous, continuous analyses of intelligence, persistent surveillance, and open information sources have, at all times, optimized the possible courses of action based on commander's intent. The Information Dominance area includes 1) Information Space for Integrated C2, ISR, and Combat Systems Decision Making, 2) Spectrum Dominance, 3) Information Operations, 4) Communications and Networks, and 5) Computational Environment Architectures.

Specific thrusts and focused research areas are:

1) Mathematics, Computers and Information Research, which sponsors basic and applied research, and advanced technology development efforts in mathematics, computer and information sciences that address Navy and Department of Defense needs in computation, information processing, information operation, information assurance and cybersecurity, decision tools, and command and control with specific focus on enabling rapid, accurate decision making in network centric environments

(http://www.onr.navy.mil/Science-Technology/Departments/Code-31/All-Programs/311-Mathematics-Computers-Research.aspx).

Specific scientific and technical areas include:

a) Applied computational analysis;
b) Command and control;
c) Image analysis and understanding;
d) Information integration;
e) Intelligent and autonomous systems;
f) Mathematical optimization and operations research;
g) Signal processing for networked sensing; and
h) Software and computing systems.

2) Electronics, Sensors and Network Research, which conducts an integrated program of basic and applied research and advanced technology development into technologies that enable new and innovative uses of the electromagnetic spectrum in areas of surface and aerospace surveillance, communications, electronic combat, and navigation. All of these areas are supported by a broad research program in electronics which is focused on the reduction of the cost, weight and size of transmit and receive systems. Two overarching goals are the development of technologies and techniques to support adaptive persistent surveillance, and the development of digital/radio frequency technologies and techniques to support active aperture phased arrays capable of performing multiple functions simultaneously (http://www.onr.navy.mil/Science-Technology/Departments/Code-31/All-Programs/312-Electronics-Sensors.aspx).

Specific scientific and technical areas include:

a) Active aperture array;
b) Atomic, molecular and quantum physics;
c) Communications and networking;
d) Electronic materials and magnetics;
e) Electronic warfare;
f) Electro-optical/infrared sensors and sensor processing;
h) Nanoscale electronics;
i) Navigation and timekeeping;
j) Radar and signal processing;
k) Mixed signal (radio frequency and digital) processing devices, circuits and architecture;
l) Radio frequency superconducting technologies;
m) Radio frequency semiconductors, radio frequency solid state amplifiers and wide bandgap materials;

3) Applications and Transitions, which supports programs in surface and aerospace surveillance, communications, and electronic combat. Research areas in surface and aerospace surveillance include sensors, primarily radar and electro-optical/infrared, and

associated sign and image processing methods. Areas of interest in communications include military radio communications with emphasis on anti-jam and low-probability-of-intercept techniques, radio networks, and dynamic internetworking. Electronic combat research areas include threat warning systems, electronic support measures, decoys and electronic countermeasures. Navigation research includes GPS anti-jam and associated inertial navigation techniques (http://www.onr.navy.mil/Science-Technology/Departments/Code-31/All-Programs/313-applications-transitions.aspx).

Ocean Battlespace Sensing (Code 32) explores science and technology in the areas of oceanographic and meteorological observations, modeling and prediction in the battlespace environment; submarine detection and classifications (anti-submarine warfare); and mine warfare applications for detecting and neutralizing mines in both the ocean and littoral environment. Specific thrusts and focused research areas are:

1) Ocean Sensing and Systems Application, which conducts an extensive program of scientific inquiry and technology development in maritime sensing, ocean engineering and marine systems, and undersea signal processing (http://www.onr.navy.mil/Science-Technology/Departments/Code-32/All-Programs/Ocean-Systems-321.aspx). Specific technical areas are:

    a) Maritime sensing;
    b) Ocean engineering & marine systems; and
    c) Undersea signal processing.

2) Ocean, Atmosphere and Space Research, which concentrates on improving Navy and Marine Corps understanding of environmental evolution, assimilation of data, and the limits of predictability by planning, fostering and encouraging scientific inquiry and technological development in fields ranging from littoral geosciences to high latitude dynamics (http://www.onr.navy.mil/Science-Technology/Departments/Code-32/All-Programs/Atmosphere-Research-322.aspx). Specific technical areas are:

    a) Coastal geosciences and environmental optics;
    b) Marine mammals and sound in the ocean;
    c) Marine meteorology and atmospheric effects;
    d) Ocean acoustics;
    e) Physical oceanography;
    f) Space environment;
    g) Special research awards in ocean acoustics; and
    h) Arctic and integrated prediction.

The *Sea Warfare and Weapons Department (Code 33)* develops and delivers technology to enable superior warfighting capabilities for surface and sub-surface naval platforms and undersea weaponry. Code 33 develops and delivers technology to reduce total life cycle cost of naval platforms, to minimize the energy footprint of Naval forces, and to develop new scientists and engineers for Navy-unique technological areas. Specific thrusts and focused research areas are:

1) Ship Systems and Engineering Research: Focused on providing technologically superior warfighting capabilities at reduced total ownership costs for surface and subsurface platforms through investments in basic and applied research and advanced technology development of programs in: a) hydrodynamics, b) survivability c) electrical and thermal systems and d) platform structures. The division is also responsible for the National Naval Responsibility in Naval Engineering (NNR-NE). The NNR-NE supports fundamental and early applied research in the areas of propulsion, platform structures, hydrodynamics, automation control and system engineering, design tools, naval power systems and ensuring strong a healthy academic infrastructure. Specific research themes are:

   a. Hydrodynamics: Theory, computation, and experiments in the lab and at-sea are utilized to develop understanding and prediction capabilities for all hydrodynamic phenomena around a surface ship, their effects on ship performance, and concepts for modification. Understand the physics of flow around propulsors and their interactions to improve propulsor design capability that would result in improved mobility, efficiency, and affordability. Predict and control of various types of cavitation on propulsors and appendages. Develop predictive capability of cavitation inception, thrust breakdown and erosion phenomenon and scaling laws. Science and technology efforts in the area of Subsurface Hydrodynamics include identifying, understanding, predicting, and controlling flow physics, as well as turbulence and stratified wakes. This is further applied to Subsurface Maneuvering Technologies, and understanding the Dynamics of Interacting Platforms.

   b. Survivability: Investigate and understand electromagnetic (EM) sources (including major ferro and non-ferromagnetic sources, eddy currents, and Corrosion Related Magnetic Fields (CRM)) that are associated with naval platforms. Develop understanding of EM field propagation relationships and analysis aids, and technologies to predict the electromagnetic properties of a naval platform. Advance physics based understanding of platform acoustics. Discover and develop algorithms and methods that will enable the development of improved design, analysis, and prediction tools for enhanced acoustic performance. Understand, design and develop optical and acoustic metamaterials to control light and sound propagation over a large frequency range. New architectures to overcome challenges associated with loss, bandwidth, and scalability are being explored. Design and develop models, algorithms, and integrated development environments for simulation and control of complex, interdependent, distributed shipboard machinery systems to enable integrated, autonomous operation and reconfiguration of shipboard machinery systems. Support research understanding the behavior of highly-rate sensitive polymers under extreme conditions to improve survivability to blast and ballistic penetration for application to ships, vehicles and head protection against Traumatic Brain Injury.

   c. Electrical and Thermal Systems: Provide a scientific foundation for a reconfigurable electric warship including physical properties, control laws, stability criteria,

modeling and simulation, advanced design and development methods. Develop new machinery integration concepts. Develop simulation based Verification, Validation and Accreditation (VV&A) methods and technologies. Contribute to system reconfiguration. Design a ship electrical system architecture based on a main bus that distributes "rough" DC power throughout the ship at nominally 10 KV. Conduct fundamental research necessary for enabling scientific progress and breakthroughs in shipboard and expeditionary power & energy technology. Development of macro- and atomic-scale multi-physics models is being pursued to enhance understanding of materials processing & performance, energy conversion mechanisms, cyber-physical energy concepts, and power management. Advanced magnetics, material surface science, and solid-state conversion concepts are of interest, and alternative energy approaches for powering Navy equipment of the future are being investigated. Advance thermal science and technology through fundamental studies of multi-phase heat transfer, fluid dynamics, and nanostructured materials in order to efficiently acquire, transport and reject heat and enable higher power density electronic systems associated with Advanced Naval Power Systems. System-level studies focus on the scalability and reliability of component technologies. Another thrust is the development of tools to model heat transfer at multiple length scales allowing for simulation of heat flow through the ship in order to evaluate the impact of power conversion electronics, sensors, and weapons on the overall thermal balance of the vessel.

d. Platform Structures: Structural reliability focuses on time-varying, structural reliability analysis and prediction for a ship structural system; advanced global hull strength, local panel strength, fatigue and fracture strength prediction models; seaway loads application and translation into a load effect for high-speed/high-performance ships and vessels; structural health monitoring of large, complex geometries with low spatial density of sensors in support of damage identification and prediction through signal processing or (inverse) modeling. Computational mechanics focuses on improving the accuracy and efficiency of the modeling of linear and nonlinear mechanical behavior of complex structures. Hybrid structures focuses on understanding structural performance of naval platforms under quasi-static seaway conditions as well as extreme loads, dynamic shock and wave impact loads, and the exploitation of composites and lightweight materials in ship design, such as hybrid ship hull concepts, composite topside structures, and energy absorbing structures; addressing development of multi-scale computations and FE methods for dynamic crack propagation, damage of composites structures, hybrid composite-to-steel joints, and testing of small elements and large structural models in understanding failure mechanisms of large structures and joints.

(http://www.onr.navy.mil/Science-Technology/Departments/Code-33/All-Programs/331-ship-systems-engineering.aspx).

2) Naval Materials Science and Technology: Focused on a full spectrum of activities from long-range, fundamental scientific and engineering research in the design and realization of new materials and systems to fulfilling the unique requirements of marine and military

applications. Experimental work is closely coupled with the development of models and predictive capabilities for materials properties and behavior. Specific research areas include:

a. Functional Materials (Electrochemical power sources, Capacitors for pulsed power applications, Electronic and optical ceramics, and Functional polymeric organic materials)

b. Structural Materials (Bulk nanostructured materials, Composite materials development and processing; Fracture and fatigue damage of Naval structural materials focuses on two areas: fatigue of structural materials and deformation/fracture in nanostructured materials; High temperature turbine materials, Ultra-high temperature materials, Solid Mechanics, Structural cellular materials, Structural Metals, and Non-Destructive Evaluation, Structural Health Monitoring, Prognostics)

c. Environmental Quality (Environmentally benign marine antifouling coatings and Environmental quality waste treatment/reduction)

d. Pervasive Materials S&T (Computer Aided Materials Design and Integrated Computational Materials Engineering)

e. Water Desalination (http://www.onr.navy.mil/Science-Technology/Departments/Code-33/All-Programs/332-naval-materials.aspx).

3) Sea Platforms and Weapons: Focused on coordinating the transition of technologically superior systems and equipment that will enhance warfighting capabilities.

a. Sea Weapons Program: Accomplished through the University Laboratory Initiative, which was established in part to increase the number of engineers and scientists in Navy laboratories and University Affiliated Research Centers that conduct research and development of undersea weapon technology. Core technology areas for applied research and technology development include: guidance and control; sensors; signal processing; planning and control algorithms; signal management for undersea distributed network systems (UDNS); weapon energy conversion; batteries, air-independent fuel cells and hybrids; motors; otto fuel replacements; vehicle technology; liquid fuels for "gas and go" concepts; corrosion and anti-fouling coatings; hydrodynamics; control surfaces; propulsors; drag and noise reduction; projectiles; warheads; explosives; detonators; and fuses .

b. Sea Platforms Program: Focused on the development of knowledge base for naval architecture, ocean engineering and marine engineering, Corrosion control and prevention S&T, and Autonomy for unmanned vehicles.
(http://www.onr.navy.mil/Science-Technology/Departments/Code-33/All-Programs/333-sea-platforms-weapons.aspx).

4) The Naval Alternative Energy and Fuels Program: Focused on understanding the physical effects of incorporating Alternative Fuels into Naval Systems. Research Challenges and Opportunities include**:**
   a. Modeling/Simulation Tools: development and validation of tools that predict the engine performance/degradation using wide variety of alternative fuels.
   b. Increasing the knowledge of physical properties and chemical reactions of alternative fuels in a maritime environment.

Warfighter Performance (Code 34) enhances warfighter effectiveness and efficiency through bioengineered and biorobotic systems, medical technologies, improved manpower, personnel, training and system design. There are two divisions: Human & Bioengineered Systems and Warfighter Protection & Applications.

1) Human and Bioengineered Systems covers cognitive science, computational neuroscience, bioscience and bio-mimetic technology, social/organizational science, training, human factors, and decision making. The goals are: sustained and improved warfighter performance and enhanced decision making in all environments through training; creating options for future (perhaps unanticipated) naval decisions, based upon fundamental understanding gained from cognitive and neuroscience; supporting integrated interdisciplinary research program; and cultivating transition of findings to government and industry via advanced technology development, small business and acquisition projects (http://www.onr.navy.mil/Science-Technology/Departments/Code-34/All-Programs/human-bioengineered-systems-341.aspx). Specific thrusts and focused research are:

   a) Affordable human behavior modeling;
   b) Agile and reconfigurable organizational structures for command and control;
   c) Applied instructional research;
   d) Bio-energy harvesting;
   e) Biometrics in the maritime domain;
   f) Biorobotics;
   g) Cognitive science of learning;
   h) Computational neuroscience;
   i) Human activity recognition;
   j) Human robot interaction;
   k) Marine biofouling;
   l) Multi-echelon command decision making;
   m) Perception, metacognition and cognitive control;
   n) Representing and reasoning about uncertainty;
   o) Skill acquisition;
   p) Social network analysis for combating terrorist networks;
   q) Synthetic biology;
   r) Theoretical foundations for socio-cognitive architectures; and
   s) Virtual technologies and environments.

2) Warfighter Protection and Applications covers bioscience and bio-mimetic technology; biomaterials; biomedical technologies; expeditionary and undersea medicine; physiology and biophysics; immunology; applied manpower, personnel, training, and education; marine mammal health; and noise induced hearing loss. The division conducts research and technology demonstration programs directed at maintaining the survival, health and performance of Navy and Marine Corps personnel during training, routine and special operations, and in time of war. The goals are to: increase the survival of casualties through intermediate, life-saving treatment and stabilization; prevent personnel injury caused by the stresses of demanding Naval occupations and environments; enhance cognitive and physiological performance of Navy and Marine Corps personnel in military environments; prepare Sailors and Marines to fight and win in an information rich, distributed battlespace; get the right warfighters into the right job, at the right time with the right tools; and provide a 21st century learning environment designed to deliver the right training (http://www.onr.navy.mil/Science-Technology/Departments/Code-34/All-Programs/warfighter-protection-applications-342.aspx). Specific thrusts and topics of interest are:

a) Basic biomedical science;
b) Biomaterials and bionanotechnology;
c) Biomedical technologies;
d) Biophysics;
e) Bioscience and bio-mimetic technology;
f) Casualty care and management;
g) Casualty prevention;
h) Human systems integration (HSI);
i) Manpower and personnel;
j) Marine mammal health;
k) Metabolic engineering;
l) Next generation antibiotics;
m) Noise induced hearing loss;
n) Stress physiology; and
o) Undersea medicine.

Naval Air Warfare and Weapons (Code 35) supports the Navy's power projection needs, fostering the technology development of naval aircraft, structures, propulsion, autonomy, energetic, directed energy and electric weapons. Specific thrusts and areas of research are:

1) Aerospace science research focuses on weapons and aerospace technologies which directly support naval science and technology requirements for joint strike warfare involving air superiority and precision attack, and air and surface battlespace requirements of joint littoral aircraft involving aircraft, naval surface fire support and ship self defense. The focus is on basic and applied research and advanced technology development programs in the following areas:

a) Advanced aerospace propulsion;

b) Naval Aviation technology (structures, ship interfaces and operations, flight control, aerodynamics, air refueling, and design tools and analysis);
c) Combat safe insensitive munitions;
d) Counter directed energy;
e) Energetic Materials;
f) Advanced combustion;
g) Disruptive energy release;
h) High-energy dense oxidizers;
i) High-speed weapons;
j) Intelligent autonomy seeks to develop technologies for safe, reliable, and scalable control of heterogeneous unmanned naval air systems based on high-level mission tasking. The focus is on new autonomy technologies that impact on shipboard operations, supervisory control of teams of heterogeneous unmanned systems, shared use of multiple unmanned system resources by multiple customers, and autonomous control with minimal need for human intervention in complex, unstructured environments. Note that the focus of this effort is not the development of new platform types, sensors, or hardware of any kind.
k) Maritime laser demonstration;
l) Maritime WMD detection;
m) Science of Autonomy seeks to develop new multi-disciplinary autonomy methods and principles to enable systems of heterogeneous unmanned systems to robustly perform complex naval missions with greatly reduced need for human intervention, while promoting effective collaboration with humans. The focus of the program is on multidisciplinary research that is relevant to a wide range of naval platform types and missions. This involves autonomy for different autonomous system domains that have traditionally been somewhat separated (air, sea, undersea, ground), control theory, computational intelligence, human factors engineering, and related fields such as biology/animal behavior/cognition, cognitive science/psychology, and neuroscience. A key goal of this program is to enable new research teaming arrangements across the relevant disciplines. Note that the focus of this effort is not the development of new platform types, sensors, or hardware of any kind.
n) Turbine engines; and
o) Unmanned air systems.

2) Air warfare and naval weapons applications focus on applied research and advanced technology development aligned with current and future naval capability gaps and innovative naval prototypes in the following areas:

a) Air platform safety;
b) Applied electromagnetic;
c) Autonomy for collaborating systems;
d) Directed energy, including solid state and free electron lasers;
e) Discriminate terminal guidance;
f) Electromagnetic railgun;

g) Enhanced weapons systems;
h) Free electron laser;
i) Future naval capabilities;
j) Helicopter low-level operations (HELO);
k) Multiple-Mode Seeker Technologies which support increased weapon autonomy against moving and relocatable targets.
l) Technologies that aid autonomous weapon navigation/targeting independent of GPS
m) Novel weapons Anti-Tamper technologies
n) Strike weapons, submarine self-defense weapons and UAV assets which can be launched from submarine large diameter tubes
o) Laser-Based Helicopter Landing Aids (LBHLA).
p) High-Speed Weapons technology
q) High-density reactive materials

Basic Research Challenge/Special Opportunity Notices: From time to time throughout Fiscal Year 2012, ONR Program Officers will issue Special Opportunity Notices soliciting program-specific basic research proposals which expand on one of the topic areas discussed above. These Special Opportunity Notices will be posted to the ONR website under special notices, to www.fbo.gov/ and to www.grants.gov/, as applicable, and will make reference to this BAA for submission instructions. Each Special Opportunity Notice will provide a description of the specific research effort being solicited, the application process to be used, as well as the recommended dates for submission of proposals. Proposals submitted in response to the Special Opportunity Notices shall use this BAA's application package and shall be submitted under this BAA following the instructions contained in Section IV of this BAA and will be evaluated in accordance with the criteria set forth in Section V. Interested parties are urged to periodically check the ONR website, Federal Business Opportunities and Grants.gov websites for new Special Opportunity Notices.

7. Point(s) of Contact –

Questions of a technical nature should be submitted to the ONR POC whose program best matches the offeror's field of interest as listed in paragraph 6 above. Through the ONR POC, prospective offerors will be connected to the cognizant ONR Program Officer.

Questions of a business nature should be submitted to:

Cheryl Nagowski
Contract Specialist
Office of Naval Research
Acquisition Department, Code BD252
One Liberty Center
875 N. Randolph Street
Arlington, VA 22203-1995
Email Address: cheryl.nagowski@navy.mil

Questions of a security nature should be submitted to:

Diana Pacheco
Information 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 UNCLASSIFIED communications shall be submitted via e-mail to the Technical Point of Contact (POC), 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.

Amendments will be posted to one or more of the following web pages:

-Federal Business Opportunities (FEDBIZOPPS) Webpage – https://www.fbo.gov/
-Grants.gov Webpage – http://www.grants.gov/
-ONR Broad Agency Announcement (BAA) Webpage - http://www.onr.navy.mil/en/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx

8. Instrument Type(s) –

Awards may take the form of contracts, grants, cooperative agreements, and other transaction agreements, as appropriate.

Any contract awards resulting from this BAA will incorporate the most current FAR, DFARs, NMCARS and ONR clauses. Examples of model contracts can be found on the ONR website at the following link: http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/contract-model-awards.aspx .

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

12.300

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

Department of Defense (DOD) Basic and Applied Scientific Research

11. Other Information –

Work funded under a BAA may include basic research, applied research and some advanced research. 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 24 May 2010.

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 or (b) funded by Budget Activity 2 (Applied Research) and performed on campus at a university. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant.

Pursuant to DoD policy, research performed under grants and contracts that are a) funded by Budget Activity 6.2 (Applied Research) and NOT performed on-campus at a university or b) funded by Budget Activity 6.3 (Advanced Research) does not meet the definition of "contracted fundamental research." In conformance with the USD(AT&L) guidance and National Security Decision Direction 189, ONR will place no restriction on the conduct or reporting of unclassified "contracted fundamental research," except as otherwise required by statute, regulation or Executive Order. For certain research projects, it may be possible that although the research being performed by the prime contractor is restricted research, a subcontractor may be conducting "contracted fundamental research." In those cases, it is the ***prime contractor's responsibility*** in the proposal to identify and describe the subcontracted unclassified research and include a statement confirming that the work has been scoped, negotiated, and determined to be fundamental research according to the prime contractor and research performer.

Normally, fundamental research is awarded under grants with universities and under contracts with industry. Non-fundamental research is normally awarded under contracts and may require restrictions during the conduct of the research and DoD pre-publication review of such research results due to subject matter sensitivity. Potential Offerors should consult with the appropriate ONR POCs to determine whether the proposed effort would constitute basic research, applied research or advanced research.

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 AND OTHER TYPES OF SUPPORT SERVICES.

II. AWARD INFORMATION

1. Amount and Period of Performance-

The amount and period of performance of each selected proposal may vary depending on the research area and the technical approach to be pursued by the selected offeror.

2. Peer Reviews-

In the case of proposals funded as basic research, ONR may utilize peer reviewers from academia, industry, and Government agencies to assist in the periodic appraisal of performance under the awards, as outlined in ONR Instruction 3966.1. Such periodic program reviews monitor the cost, schedule and technical performance of funded basic research efforts. The reviews are used in part to determine which basic research projects will receive continued ONR funding. Peer reviewers who are not U.S. Government employees must sign nondisclosure agreements before receiving full or partial copies of proposals and reports submitted by the basic research performers. Offerors may include travel costs for the Principal Investigator (PI) to attend the peer review.

3. Production and Testing of Prototypes-

In the case of funded proposals for the production and testing of prototypes, ONR may during the contract period add a contract line item or contract option for the provision of advanced component development or for the delivery of additional prototype units. However, such a contract addition shall be subject to the limitations contained in Section 819 of the National Defense Authorization Act for Fiscal Year 2010.

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, 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.

University Affiliated Research Centers (UARC) are eligible to submit proposals under this BAA unless precluded from doing so by their Department of Defense UARC contracts.

Teams are also encouraged and may submit proposals in any and all areas. However, Offerors 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 § 120.1 et seq.

For Grant, Cooperative Agreement and Other Transaction Agreement applications:

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252, requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR 33.110. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or other transaction agreements) as either a prime or sub-recipient under this BAA must provide information in its proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR 33.220. An entity is **exempt** from this requirement **UNLESS** in the preceding fiscal year it received: a) 80 percent or more of its annual gross revenue in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; b) $25 million or more in annual gross revenue from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and c) the public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 or section 6104 of the Internal Revenue Code of 1986.

IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process -

"White Papers" are frequently desired by ONR Program Officers. Offerors should consult the cognizant ONR Program Officer regarding the desirability of "White Paper" submissions or Oral Presentations. The various scientific divisions of ONR are identified at

http://www.onr.navy.mil/en/Science-Technology/Contacts.aspx.

2. Content and Format of White Papers/Full Proposals -

White Papers and Full Proposals submitted under the BAA are expected to be unclassified; however, classified proposals are permitted. If a classified proposal is submitted, the resultant contract will be unclassified.

Unclassified Proposal Instructions:

Unclassified proposals shall be submitted in accordance with paragraphs 5 and 6 of Section IV.

Classified Proposal Instructions:

Classified proposals shall be submitted directly to the attention of ONR's Document Control Unit at the following address and marked in the following manner:

OUTSIDE ENVELOPE (no classification marking):
"Office of Naval Research
Attn: Document Control Unit
ONR Code 43
875 North Randolph Street
Arlington, VA 22203-1995"

The inner wrapper of the classified White Paper and/or Full Proposal should be addressed to the attention of the TPOC, ONR Code XX and marked in the following manner:

INNER ENVELOPE (stamped with the overall classification of the material)

"Program:
Office of Naval Research
ATTN: ONR Program Officer Name
ONR Code: ONR Program Officer Code
875 North Randolph Street
Arlington, VA 22203-1995"

An 'unclassified' Statement of Work (SOW) must accompany any classified proposal.

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.

IMPORTANT NOTE: 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.

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
- Copies – Electronic (email) submissions should be sent to the attention of the TPOC at: Email Address of the TPOC, e.g. Jane.Doe@navy.mil. The subject line of the email shall read "ONR BAA 12-001 White Paper Submission". The white paper must be a Microsoft Word 2003 or .PDF format attachment to the email.

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 12-001, proposed title, technical points of contact, telephone number, facsimile number, and e-mail address.

- **Technical Concept:** A description of the technology innovation and technical risk areas.

For Basic Research

- **Future Naval Relevance (where applicable):** A description of potential Naval relevance and contributions of the effort to the agency's specific mission.

For Applied Research and Advanced Technology Development

- **Operational Naval Concept (where applicable):** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.

- **Operational Utility Assessment Plan (where applicable):** 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.

b. FULL PROPOSALS

i. INSTRUCTIONS FOR CONTRACTS, COOPERATIVE AGREEMENTS AND OTHER TRANSACTION AGREEMENTS (Does not include Grants)

NOTE: *Submission instructions for BAAs issued after FY 2010 have changed significantly from previous requirements. Potential Offerors are advised to carefully read and follow the instructions below. The new format and requirements have been developed to streamline and ease both the submission and the review of proposals.*

All proposals must include the following three documents:
(1) Technical Proposal Template (pdf)
(2) Technical Content (word)
(3) Cost Proposal Spreadsheet (excel)

The documents can be found at: http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx

All have instructions imbedded into them that will assist in completing the documents. Also, both the Template and the Spreadsheet require completion of cost-related information. Please note that all the attachments listed can be incorporated into the Technical proposal template for submission.

The format requirements for any attachments to the Technical and Cost Proposal Template are as follows:

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

The Cost Proposal Spreadsheet can be found by following this link: http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx . Click on the "proposal spreadsheet" link and save a copy of the spreadsheet. Instructions for completion have been embedded into the spreadsheet. Any proposed options that are identified in the Technical Proposal Template or Technical Content, but are not fully priced out in the Cost Proposal Spreadsheet will not be included in any resulting contract or other transaction. If proposing options, they **must** be separately priced and separate spreadsheets should be provided for the base period and each option period. In addition to providing summary by period of performance (base and any options), the Contractor is also responsible for providing a breakdown of cost for each task identified in the Statement of Work. The sum of all costs by task worksheets MUST equal the total cost summary.

For proposed subcontracts or interorganizational transfers over $150,000, Offerors must provide a separate fully completed Cost Proposal Spreadsheet in support of the proposed costs. This spreadsheet, along with supporting documentation, must be provided either in a sealed envelope

with the prime's proposal or 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.

Offerors should submit an appropriate number of hard copies as discussed with the cognizant Program Officer, of their Technical and Cost Proposal package. The electronic Technical and Cost Proposal should be submitted in a secure, pdf-compatible format, except for the electronic file for the Cost Proposal Spreadsheet which should be submitted in a Microsoft Excel 2007 compatible format. All attachments should be submitted in a secure, pdf-compatible format.

The secure, pdf-compatible format is intended to prevent unauthorized editing of the proposal prior to any award. A password should not be required for opening the proposal document, but the Government must have the ability to print and copy text, images, and other content. Offerors may also submit their Technical and Cost Proposal in an electronic file that allows for revision (preferably in Microsoft Word) to facilitate the communication of potential revisions. Should an offeror amend its Technical and Cost Proposal package, the amended proposal should be submitted following the same hard and electronic copy guidance applicable to the original proposal.

The electronic submission of the Excel spreadsheet should be in a "useable condition" to aid the Government with its evaluation. The term "useable condition" indicated that the spreadsheet should visibly include and separately identify within each appropriate cell any and all inputs, formulas, calculations, etc. the Offeror should not provide "value only spreadsheets" similar to a hard copy.

ii. INSTRUCTIONS FOR GRANTS (Does not include contracts, cooperative agreements and other transaction agreements)

The following information must be completed as follows in the SF 424 located on www.grants.gov to ensure that the application is directed to the correct individual for review: Block 4a, Federal Identifier: Enter the previous ONR award number, or N00014 if the application is not a renewal or expansion of an existing award; Block 4b, Agency Routing Number, Enter the three (3) digit Program Office Code and the Program Officer's name, last name first, in brackets (i.e., 331 [Shifler, David]). Applicants who fail to provide a Program Officer code identifier may receive a notice that their proposal will be rejected.

To attach the technical proposal in Grants.gov, download the application package
Click on "Research and Related Other Project Information"
Click on "Move form to Submission List"
Click on "Open Form"
You will see a new PDF document titled "Research & Related Other Project Information"
Block 7 is the Project Summary/Abstract -> click on "Add attachment" and attach the project summary/abstract. (You will not be able to type in the box, therefore, save the file you want to attach as Project Summary or Abstract).
Block 8 is the Project Narrative -> click on Add attachment and attach the technical proposal. (Save the file as Volume I- Technical Proposal since you will not be able to type in the box).

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

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing – single spaced
- Font – Times New Roman, 12 point
- Discuss the limit on the number of pages for Volume I with the cognizant Program Officer. There are no page limitations to the Cost Proposal, Volume 2.
- Copies – the full proposal should be submitted electronically at http://www.grants.gov/ as delineated in paragraph 5 below.

Volume 1: Technical Proposal

• **Cover Page:** This should include the words "Technical Proposal" and the following:

1) BAA number 12-001;
2) Title of Proposal;
3) Identity of prime Offeror and complete list of subawards, 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) Proposed period of performance (identify both the base period and any options, if included).

• **Table of Contents:** An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.

• **Technical Approach and Justification:** The major portion of the proposal should consist of a clear description of the technical approach being proposed. This discussion should provide the technical foundation/justification for pursuing this particular approach/direction and why one could expect it to enable the objectives of the proposal to be met.

Include for Basic Research, if it applies.

• **Future Naval Relevance (where applicable):** A description of potential Naval relevance and contributions of the effort to the agency's specific mission.

For Applied Research and Advanced Technology Development, if it applies.

• **Operational Naval Concept (where applicable):** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.

• **Operational Utility Assessment Plan (where applicable):** 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.

• **Project Schedule and Milestones:** A summary of the schedule of events and milestones:
• **Reports:**

The following are sample data reports that are typically required under a research effort:

- Technical and Financial Progress Reports
- Final Report

Grants and other agreements do not include the delivery of software, prototypes, and other hardware deliverables.

• **Management Approach:** Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort, along with a description of any Government Furnished Equipment/Hardware/ Software/Information required, by version and/or configuration.

• **Current and Pending Project and Proposal Submissions:** 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 of 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/subreceipients, if applicable;
5) Technical contact (name, address, phone/fax, electronic mail address)
6) Administrative/business contact (name, address, phone/fax, electronic mail address);
7) Period of performance (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.

• **Qualifications:** A discussion of the qualifications of the proposed Principal Investigator and any other key personnel. Include resumes or curricula vitae for the Principal Investigator, other key personnel and consultants. The resumes/curricula vitae shall be attached to the proposal.

Volume 2: Cost Proposal

The offeror must use the Grants.gov forms (including the Standard Form (SF) Research and Related (R&R) Budget Form) from the application package template associated with the BAA on the Grants.gov web site located at 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 (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 organizations 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. Offerors may include travel costs for the Principal Investigator to attend the peer reviews described in Section II of this BAA.

- 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). The proposed subawardee's or subrecipient's cost proposal can be provided in a sealed envelope with the recipient's cost proposal or 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 for either a subcontract or a sub-agreement. 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, 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, laptops, office equipment) 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).

- Fee/Profit – Fee/profit is unallowable under assistance agreements at either the prime or subaward level but may be permitted on any subcontracts issued by the prime awardee.

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/subtask.

3. Significant Dates and Times –

This announcement will remain open until 30 September 2012 or until replaced by a successor BAA, whichever occurs first. Proposals may be submitted any time during this period.

4. Submission of Late Proposals –

Not applicable (N/A)

5. Submission of Grant Proposals through Grants.gov

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

Detailed instructions entitled "Grants.Gov Electronic Application and Submission Information" on how to submit a Grant proposal through Grants.gov are under the Acquisition Department — Submitting a Proposal section of the website at http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-gov.aspx.

As stated in Section IV.2 (pages 16-17), White Papers should not be submitted through the Grants.gov Apply process but rather should be sent directly to ONR. White paper submissions should be e-mailed directly to the appropriate ONR Program Officer/Program Manager. White paper format requirements are found in Section IV, item 2a above.

By completing Block 17 of the SF 424 R&R 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, there are several one-time actions that 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 Registry (CCR), registering with the credential provider, and registering with Grants.gov. See www.grants.gov, specifically www.grants.gov/GetStarted.

Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/applicants/register_your_orgaanization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (E-Biz POC) and obtaining a special password called 'MPIN' are important steps in the CCR registration process. Applicants who are not registered with CCR and Grants.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 requirements, 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. Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

Proposal Receipt Notices:

After a full proposal is submitted through Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three e-mails. It is extremely important that the AOR watch for and save each of the e-mails. You will know that your proposal has reached ONR when the AOR receives e-mail Number 3. You will need the Submission Receipt Number (e-mail Number 1) to track a submission. The three e-mails are:

Number 1 – The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted.

Number 2 – The applicant will receive an e-mail indicating that the proposal has been validated by Grants.gov within two days of submission (This means that all of the required fields have been completed). After an institution submits an application, Grants.gov generates a submission receipt via email and also sets the application status to "Received." This receipt verifies the Application has been successfully delivered to the Grants.gov system. Next, Grants.gov verifies the submission is valid by ensuring it does not contain viruses, the opportunity is still open, and the applicant login and applicant DUNS number match. If the submission is valid, Grants.gov generates a submission validation receipt via email and sets the application status to "Validated." If the application is not validated, the application status is set to "Rejected." The system sends a rejection email notification to the institution, and the institution must resubmit the application package. Applicants can track the status of their application by logging in to Grants.gov.

Number 3 – The third notice is an acknowledgment of receipt in e-mail form from ONR within ten days from the proposal due date, if applicable. The e-mail is sent to the authorized representative for the institution. The e-mail for proposals notes that the proposal has been received and provides the assigned tracking number.

6. Submission of White Papers and Full Proposals for Contracts, Cooperative Agreements, and Other Transaction Agreements.

Full Proposals for Contracts, Cooperative Agreements, and Other Transaction Agreements can be sent to the Office of Naval Research at the following address:

Office of Naval Research
Attn*:_____
ONR Department Code**:_____
875 North Randolph Street
Arlington, VA 22203-1995

Cognizant ONR Program Officer/Point of Contact (POC)
****Cognizant ONR POC's Code***

Electronic submissions of White Papers (for Contracts, Grants, Cooperative Agreements and Other Transaction Agreements), if requested, and Full Proposals for Contracts, Cooperative Agreements, and Other Transaction Agreements can be emailed to the Program Officer directly. A list describing each of the ONR Department Codes can be found at http://www.onr.navy.mil/ on the right side of the screen. Select the appropriate code or division listed and then click on the link to the thrust or topic area. You will find at the bottom of the screen, the Program Officer's POC and email address.

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. Criteria 1 through 4 are significantly more important than Criterion 5, and Criteria 1 through 4 are of equal value.

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 objects; and
5) The realism of the proposed costs and availability of funds.

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.

The ultimate recommendation for award of proposals is made by ONR's scientific/technical community. Recommended proposals will be forwarded to the contracts department will perform costs analysis prior to any ensuing negotiations. Any notification received from ONR that indicates that the Offeror's full proposal has been recommended, does not ultimately guarantee an award will be made. This notice indicates that the proposal has been selected in accordance with the evaluation criteria above and has been sent to the contracting department to conduct cost analysis, determine the offeror's responsibility, and any take any other relevant steps necessary prior to commencing negotiations with the offeror.

2. Commitment to Small Business –

The Office of Naval Research is strongly committed to providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small businesses, veteran-owned small business, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions through its awards.

For proposed awards to be made as contracts (that exceed $650K) to other than small businesses, the Offeror is required to submit a Small Business Subcontracting Plan in accordance with FAR 52.219-9.

For proposed awards made as contracts to small businesses at any value or to other than Small Businesses that are less than $650,000, the Offeror shall provide a statement which demonstrates how they intend to provide meaningful subcontracting opportunities to support this policy.

3. Options-

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.

4. 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. 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 –

- North American Industry Classification System (NAICS) code – The NAICS code for this announcement is "541712" with a small business size standard of "500 employees".

- Central Contractor Registration: All Offerors submitting proposals or applications must:

(a) be registered in the Central Contractor Registration (CCR) prior to submission;
(b) maintain an active CCR registration with current information at all times during which it has an active Federal award or an application under consideration by any agency; and
(c) provide its DUNS number in each application or proposal it submits to the agency.

- Access to your Grant, Cooperative Agreement, Other Transaction and Contract Award

  Hard copies of award/modification documents will no longer be mailed to Offerors. All Office of Naval Research (ONR) award/modification documents will be available via the Department of Defense (DoD) Electronic Document Access System (EDA).

  EDA

  Effective 01 October 2011, EDA is a web-based system that provides secure online access, storage, and retrieval of awards and modifications to DoD employees and vendors.

  If you do not currently have access to EDA,you may complete a self-registration request as a "Vendor" via http://eda.ogden.disa.mil following the steps below:

  Click "New User Registration" (from the left Menu)
  Click "Begin VENDOR User Registration Process"
  Click "EDA Registration Form" under Username/Password (enter the appropriate data)
  Complete & Submit Registration form

  Allow five (5) business days for your registration to be processed. EDA will notify you by email when your account is approved.

  Registration questions may be directed to the EDA help desk toll free at 1-866-618-5988, Commercial at 801-605-7095, or via email at cscassig@csd.disa.mil (Subject: EDA Assistance).

NOTE: Central Contractor Registry (CCR), Subcontracting Plan requirements and Certification requirements are all set forth in the ONR Technical and Cost Proposal Template.

Grants, Cooperative Agreements and Normal Other Transaction Agreements (OTAs) Certification Requirements:
Grant and Cooperative Agreement awards greater than $100,000, as well as OTAs not under Section 845, 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 Block 17). The following certification applies likewise to each cooperating agreement and normal OTA 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/~/media/BDBA1ACF9F534C10BE2A9C9AD9AA7F12.ashx .

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 indicate in the Technical and Cost Proposal Template, Section II, Blocks 8 and 9, 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 in Section II, Block 11 of the Technical and Cost Proposal Template.

Normally, work under a grant does not require access to classified material.

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 AALAC 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 documentation, 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. Recombinant DNA

Proposal which call for experiments using recombinant DNA must include documentation of compliance with Department of Human and Health Services (DHHS) recombinant DNA regulations, approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter.

5. Use of Arms, Ammunition and Explosives

Safety
The Offeror is required to be in compliance with DoD manual 4145.26-M, *DoD Contractor's Safety Manual for Ammunition and Explosives* if ammunitions and/or explosives are to be utilized under the proposed research effort. (See DFARS 223.370-5 and DFARS 252.223-7002)
If ammunitions and/or explosives (A&E) are to be utilized under the proposed research effort, the Government requires a preaward safety survey in accordance with DFARS PGI 223.370-4(C)(iv) entitled *Preaward survey*. The Offeror is solely responsible for contacting the cognizant DCMA office and obtaining a required preaward safety survey before proposal submission. The Offeror should include required preaward safety surveys with proposal submissions.

If the Offeror proposes that the Government provide Government-furnished A&E containing any nitrocellulose-based propellants and/or nitrate ester-based materials (such as nitroglycerin,) or other similar A&E with a tendency to become chemically unstable over time, then NMCARS 5252.223-9000 will also apply to a resulting contract award. (See NMCARS 5223.370-5)

Security
If arms, ammunition and explosives (AA&E) are to be utilized under the proposed research effort, the Government requires a preaward security survey. The Offeror is solely responsible for contacting the cognizant DCMA office and obtaining a required preaward security survey before proposal submission. The Offeror should include a required preaward security survey with proposal submission. (See DoD manual 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition and Explosives*, paragraph C1.3.1.4)

If AA&E are to be utilized under the proposed research effort, the Government may require the Contractor to have perimeter fencing around the place of performance in accordance with DoD 5100.76-M, Appendix 2.

If AA&E are to be utilized under the research effort, the Offeror is required to provide a written copy of the Offeror's AA&E accountability procedures in accordance with DoD 5100.76-M. If the Offeror is required to provide written AA&E accountability procedures, the Offeror should provide the respective procedures with its proposal submission. See DoD 5100.76-M Appendix 2.12.

6. 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, grants, and other 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/.

7. 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 will be rejected without technical evaluation and withdrawn from further consideration for award. Additional ONR OCI guidance can be found at http://www.onr.navy.mil/About-ONR/compliance-protections/Organizational-Conflicts-Interest.aspx. 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 Contracting Officer after full consideration of the circumstances, any conflict situation cannot be effectively avoided, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

8. 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.

9. Executive Compensation and First-Tier Subcontract Reporting (APPLIES ONLY TO CONTRACTS)

Section 2(d) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law

requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, (and any modifications to these subcontracts that change previously reported data), the Contractor shall report the following information at http://www.fsrs.gov for each first-tier subcontract:

(a) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has one.

(b) Name of the subcontractor.

(c) Amount of the subcontract award.

(d) Date of the subcontract award.

(e) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(f) Subcontract number (the subcontract number assigned by the Contractor).

(g) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(h) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(i) The prime contract number, and order number if applicable.

(j) Awarding agency name and code.

(k) Funding agency name and code.

(l) Government contracting office code.

(m) Treasury account symbol (TAS) as reported in FPDS.

(n) The applicable North American Industry Classification System (NAICS) code.

By the end of the month following the month of a contract award, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for the Contractor's preceding completed fiscal year at http://www.ccr.gov, if –

(a) In the Contractor's preceding fiscal year, the Contractor received –

(i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of a first-tier subcontract with a value of $25,000 or more, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for each first-tier subcontractor for the subcontractor's preceding completed fiscal year at http://www.fsrs.gov, if –

(a) In the subcontractor's preceding fiscal year, the subcontractor received –

(i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards. Likewise, if a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards to that subcontractor.