AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES	
U	1	2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
10	24-Feb-2017	1300466841	N/A

6. ISSUED BY CODE N00014

Office of Naval Research
875 N. Randolph St
Arlington VA 22203-1995

7. ADMINISTERED BY *(If other than Item 6)* CODE S2404A
SCD: C

DCMA Manassas
14501 George Carter Way, 2nd Floor
Chantilly VA 20151

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State, and Zip Code)*

Strategic Insight
2461 South Clark Street, Ste 320
Arlington VA 22202

CAGE CODE 1DY16 FACILITY CODE

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

[X]

10A. MODIFICATION OF CONTRACT/ORDER NO.
N00178-04-D-4129 / N00178-04-D-4129-EE01

10B. DATED *(SEE ITEM 13)*
08-Dec-2014

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[ ] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

SEE SECTION G

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(*) [ ]	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
[ ]	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc)*SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
[ ]	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
[X]	D. OTHER *(Specify type of modification and authority)* FAR 43.103(b) Unilateral Modification IAW FAR 52.232-22 Limitation of Funds

E. IMPORTANT: Contractor [X] is not, [ ] is required to sign this document and return __ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible)*

SEE PAGE 2

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
		Tracie L Simmons, Contracting Officer	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY /s/Tracie L Simmons *(Signature of Contracting Officer)*	16C. DATE SIGNED 24-Feb-2017

GENERAL INFORMATION

The purpose of this modification is to:

1) Add an increment of funding in the amount of $572,383 to CLIN 7206,

2) Add an increment of funding in the amount of $4,000 to CLIN 9203, and

3) Revise Section G, Paragraph 1.3 Allotment of Funds to reflect funding applied.

Accordingly, said Task Order is modified as follows: A conformed copy of this Task Order is attached to this modification for informational purposes only.

The Line of Accounting information is hereby changed as follows:

The total amount of funds obligated to the task is hereby increased from $1,942,210.00 by $576,383.00 to $2,518,593.00.

CLIN/SLIN	Type Of Fund	From ($)	By ($)	To ($)
720602	RDT&E	0.00	136,267.00	136,267.00
720603	RDT&E	0.00	385,000.00	385,000.00
720604	RDT&E	0.00	51,116.00	51,116.00
920302	RDT&E	0.00	4,000.00	4,000.00

The total value of the order is hereby increased from $4,436,295.00 by $0.00 to $4,436,295.00.

The Period of Performance of the following line items is hereby changed as follows:

CLIN/SLIN	From	To

SECTION B SUPPLIES OR SERVICES AND PRICES

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7006	R408	Base for Year 1 - Electric Weapon Systems: Engineering, Analytical and Programmatic Support Services for Electric Weapon Systems programs in accordance with the Task Order Statment of Work. This CLIN does not include costs for the SME category. (RDT&E)	9200.0	LH			$893,614.00
700601	R408	ACRN: AA (1300466841) $300,000 (RDT&E)					
700602	R408	ACRN: AB (1300466841) $73,160 (RDT&E)					
700603	R408	ACRN: AB (1300466841) $429,628 (RDT&E)					
7007	R408	Base for Year 1 - Electric Weapon Systems: Subject Matter Experts in accordance with the Task Order Statment of Work. (RDT&E)	2530.0	LH			$442,550.00
7106	R408	Option for Year 2 - Electric Weapon Systems: Engineering, Analytical and Programmatic Support Services for Electric Weapon Systems programs in accordance with the Task Order Statment of Work. This CLIN does not include costs for the SME category. (RDT&E)	9200.0	LH			$902,549.00
710601	R408	ACRN: AC (1300466841) $398,200 (RDT&E)					
710602	R408	ACRN: AD (1300466841) $408,100 (RDT&E)					
710603	R408	ACRN: AE (1300466841) $64,700 (RDT&E)					
7107	R408	Option for Year 2 - Electric Weapon Systems: Subject Matter Experts in accordance with the Task Order Statment of Work. (RDT&E)	2530.0	LH			$442,550.00
7206	R408	Option for Year 3 - Electric Weapon Systems: Engineering, Analytical and Programmatic Support Services for Electric Weapon Systems programs in accordance with the Task Order Statment of Work. This CLIN does not include costs for the SME category (RDT&E)	9200.0	LH			$911,574.00
720601	R408	ACRN: AF (1300466841) $259,486 (RDT&E)					
720602	R408	ACRN: AF (1300466841) $136,267 (RDT&E)					
720603	R408	ACRN: AG (1300466841) $385,000 (RDT&E)					
720604	R408	ACRN: AH (1300466841) $51,116 (RDT&E)					

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7207	R408	Option for Year 3 - Electric Weapon Systems: Subject Matter Experts in accordance with the Task Order Statment of Work. (RDT&E)	2530.0	LH			$442,550.00
7306	R408	Option for Year 4 - Electric Weapon Systems: Engineering, Analytical and Programmatic Support Services for Electric Weapon Systems programs in accordance with the Task Order Statment of Work. This CLIN does not include costs for the SME category. (RDT&E)	9200.0	LH			$920,688.00
		Option					
7307	R408	Option for Year 4 - Electric Weapon Systems: Subject Matter Experts in accordance with the Task Order Statment of Work. (RDT&E)	2530.0	LH			$442,550.00
		Option					
7406	R408	Option for Year 5 - Electric Weapon Systems: Engineering, Analytical and Programmatic Support Services for Electric Weapon Systems programs in accordance with the Task Order Statment of Work. This CLIN does not include costs for the SME category. (RDT&E)	9200.0	LH			$929,898.00
		Option					
7407	R408	Option for Year 5 - Electric Weapon Systems: Subject Matter Experts in accordance with the Task Order Statment of Work. (RDT&E)	2530.0	LH			$442,550.00
		Option					

For ODC Items:

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9003	R408	Base for Year 1 - Electric Weapon Systems: Travel, Other Direct Costs and NMCI Seats associated with performance(includes applicable G&A and Material & Handling) (no subcontractor or consultant costs) (RDT&E)	1.0	LO	$133,636.00
900301	R408	ACRN: AB (1300466841) $5,436 (RDT&E)			
9103	R408	Option for Year 2 - Electric Weapon Systems: Travel, Other Direct Costs and NMCI Seats associated with performance(includes applicable G&A and Material & Handling) (no subcontractor or consultant costs) (RDT&E)	1.0	LO	$133,636.00
910301	R408	ACRN: AC (1300466841) $1,800 (RDT&E)			
910302	R408	ACRN: AD (1300466841) $700 (RDT&E)			

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9203	R408	Option for Year 3 - Electric Weapon Systems: Travel, Other Direct Costs and NMCI Seats associated with performance(includes applicable G&A and Material & Handling) (no subcontractor or consultant costs) (RDT&E)	1.0	LO	$133,636.00
920301	R408	ACRN: AF (1300466841) $1,000 (RDT&E)			
920302	R408	ACRN: AH (1300466841) $4,000 (RDT&E)			
9303	R408	Option for Year 4 - Electric Weapon Systems: Travel, Other Direct Costs and NMCI Seats associated with performance(includes applicable G&A and Material & Handling) (no subcontractor or consultant costs) (RDT&E)	1.0	LO	$133,636.00
		Option			
9403	R408	Option for Year 5 - Electric Weapon Systems: Travel, Other Direct Costs and NMCI Seats associated with performance(includes applicable G&A and Material & Handling) (no subcontractor or consultant costs) (RDT&E)	1.0	LO	$133,636.00
		Option			

SECTION C DESCRIPTIONS AND SPECIFICATIONS

1.0 GENERAL

1.1 Introduction. The Office of Naval Research (ONR) seeks to provide Engineering and Analytical support as well as programmatic management support to Code 35, 351, 352 and other Codes within ONR if necessary, as well as support for ONR sponsored development projects.

1.2 Background. The Office of Naval Research (ONR) Air Warfare & Weapons Science and Technology Department (Code 35) is responsible for fostering, planning, managing and executing scientific research and technology development on behalf of the Navy and Marine Corps. These responsibilities include the management of Basic Research, Applied Research, Advanced Technology Development and Future Naval Capabilities associated with Naval Air Vehicles and Weapons.

A complete listing of current Code 35 programs can be found at:
http://www.onr.navy.mil/Home/Science-Technology/Departments/Code-35.aspx.

1.3 Scope

The contractor must be able to perform a variety of duties to include program management, scientific analysis, technical support, and engineering.

The following are examples of the types of support required:

- Program/project planning assistance
- Program staff coordination
- Systems engineering and integration assistance
- Program, project, and financial reviews
- Technology assessments
- Data analyses
- Planning and coordination of conferences, seminars, workshops, and program reviews with ONR's Conferences, Events & Exhibits Communications Manager or the Director of the Corporate Strategic Communications Office to ensure compliance with ONR Instruction 5050.7B.
- Assistance with program-specific technical and programmatic issues
- The requirement also includes assistance and support with preparing and drafting analyses, presentations, speeches, and reports relative to project and program management goals, objectives, and results.
- This support will assist in formulating, executing and managing an investment strategy to address the most responsive and promising technology opportunities and solutions.
- There may be a need to support other Codes within ONR under this contract for the technology areas described in this section.

2.0 TECHNOLOGY AND PROGRAM AREAS TO SUPPORT

Contractor support is required for various technical assistance positions. The following section details the programs and research areas that require scientific analysis, engineering, technical support,

and program management.

ONR anticipates awarding up to four (4) task orders to support the following Program Areas: Directed & Counter Directed Energy; Aircraft & Autonomous Systems; Conventional Weapons; and Electric Weapon Systems, with the anticipation of only one award per each Program Area. Offerors can propose under one, some or all program areas. Offerors can propose as either a Prime Offeror or as a subcontractor (per teaming agreements) under one, some or all program areas.

2.1 Directed & Counter Directed Energy Program Area

2.1.1 Counter Directed Energy Weapons (CDEW), Code 351

The support in this area relates to research programs focused on investigating basic and applied research topics in countering threats from directed energy weapons systems, such as high-power lasers or microwaves. Basic research topics include potential airborne, surface, ground and underwater applications that will focus on providing operational effectiveness in defending against various known and potential future Directed Energy Weapons (DEW) systems. Programs include examinations of new material, optical, and electronic technologies, techniques, tactics and procedures. The research programs examine both material and non-material solutions, and their implications when related to the employment of directed weapon concepts. Program studies will include various modeling of effects to address concerns for human safety, as well as total systems integration with existing platforms.

2.1.2 Solid State Laser Technology Maturation, Code 352

Solid-State Laser technology with weapons-level effects has been maturing rapidly, and recent advancements by the scientific and commercial sectors have begun to show that a potential application on surface combatants is possible. In particular, the ONR Maritime Laser Demonstration (MLD) for the first time in 2011 took a laser to sea and successfully conducted a mission scenario against a representative threat small boat, while underway. Further, support for a continuation of competitive programs like LaWS (Laser Weapon System), the MLD and MK 38 Tactical Laser System continues to garner interest and generate discussion. The start of the SSL-TM Program has been strongly encouraged by Navy leadership to enhance expertise and develop programmatic focus. A key goal of SSL-TM is to align the S&T program thresholds and objectives with future R&D/acquisition planning processes and requirements, meeting current budgetary constraints. The goal of the SSL-TM Program is to produce multiple demonstration-level events with prototype quality systems in a competitive environment.

2.1.3 Free Electron Laser Innovative Naval Prototype (INP), Code 352

The Free Electron Laser (FEL) provides naval platforms with a highly effective and affordable defense capability against surface and air threats, future antiship cruise missiles and swarms of small boats. Utilization of FEL also allows an unlimited magazine with speed-of-light delivery. FEL generates high-intensity laser light by utilizing the energy from unbound accelerated high-energy electrons. This technology is commonly used in the Department of Energy’s particle colliders for basic subatomic research. The FEL program is an investment by the Office of Naval Research to

transition the accelerator technology from particle colliders to a future ship self-defense weapon system.

2.1.4 High Power Radio Frequency and High Power Microwave, Code 352

The general S&T approach for HPRF/HPM technology development bridges the full spectrum from the core science, the advanced component research to effects. Some specific areas include the development of innovative HPRF/HPM sources for improved weaponization and development of HPRF/HPM susceptibility/lethality profiles. A major S&T goal is to gain a complete physical understanding of the thermal, mechanical, electrical, and RF properties of electro-optical materials and guidance systems especially in sea-state conditions. A related effort is the investigation and understanding of the basic physics of sensors and electronic faults under intense (HPRF/HPM induced) electric fields as well as developing an associated database. The capability of future Directed Energy (DE) systems will be affected significantly by the emergence of new technologies. Future DE systems will benefit from advances in power generation, power conversion, energy storage, microwave and laser source development, advanced IED detection/location/tracking systems, and by more sophisticated and capable robotic platforms. Knowledge of these new technologies will be important because advanced threat systems will employ different topologies, materials, and miniaturization.

2.2 Aircraft & Autonomous Systems Program Area

2.2.1 Aircraft Technology, Code 351

This area is for Sea-Based Aviation National Naval Responsibility in Aircraft Technology. Aircraft technology includes fixed-wing, rotary wing, and Vertical/Short Takeoff and Landing (V/STOL) vehicle technologies, ship/aircraft dynamic interface, air vehicle management and control, aerodynamics, aeromechanics, sub-systems, modeling and simulation, conceptual design, and analysis tools.

2.2.2 Airframe Structures and Materials, Code 351

This area is for Sea-Based Aviation National Naval Responsibility in Airframe Structures and Materials. It includes design, materials selection, fabrication, inspection and maintenance of structures and materials. Research includes efforts in durability, structural life, sustainment, ready-for-tasking effectiveness, and affordability. Most airframe technology challenges are not platform or design specific; they are represented in both current new-build and planned next-generation platform designs.

2.2.3 Autonomy and Autonomous Systems, Code 351

Autonomous areas of interest include but are not limited to Human Collaboration with Autonomous Systems, Perception and Intelligent Decision-Making, Scalable Distributed Collaboration, and Intelligent Architectures. These challenges need to be addressed relative to critical aspects of the Naval domain including: operations in spatially and temporally variable and uncertain environments with limiting manning, communications, and other resources; users with a wide range of skills and

experience including getting unmanned system services to support small tactical units; diverse environments encompassing air, sea surface, undersea and ground systems and hybrid concepts in between; platforms with highly limited and intermittent communications; complex missions with heterogeneous platforms and sensors including significant differences in physical and sensing capabilities; rapid and dynamic responses to user needs and changes in the operating space; the need for automation to explain its capabilities to the user and reliably execute the required tasks in the required time.

2.2.4 Propulsion, Code 351

There are three principle propulsion program areas.

- Sea-Based Aviation National Naval Responsibility – Propulsion: Propulsion systems touch on every aspect of air vehicle operations and are the primary source of vehicle performance capability. Turbine propulsion systems typically are the primary fleet readiness driver and are the largest cost driver in operational systems since they require extensive development and maintenance/support. The Propulsion focus area provides innovative research and technology in five sub-areas of 1) Energy-Efficient Processes and Subsystems, 2) Turbomachinery and Drive Systems with Enhanced Maintainability, 3) Jet Noise Reduction for TACAIR, 4) Hot-Section Materials and Coatings and 5) Small UAV Propulsion.
- Variable Cycle Advanced Technology - The VCAT Program is an effort to realize the potential benefits of recent advancements in variable/adaptive cycle turbine engine technology. Advancements in propulsion system technology are essential to meet needs for future carrier-based aircraft systems. This program was conceived to provide the anticipated enhanced mission capability, energy security, and jet noise reduction requirements expected of future aircraft systems.
- Jet Noise Reduction (JNR) - The JNR Project is part of the ONR's Noise-Induced Hearing Loss (NIHL) Program. The effort supports the development of theoretical noise models, prediction tools, noise control strategies, diagnostic tools, and enhanced source localization and propagation techniques. Additionally, work continues on developing noise-measurement standards for military aircraft.

2.2.5 Autonomous Aerial Cargo Utility System (AACUS) INP, Code 352

The AACUS explores advanced autonomous capabilities for reliable resupply/retrograde and, in the long term, casualty evacuation by an unmanned air vehicle under adverse conditions. Key features of AACUS include a vehicle autonomously avoiding obstacles while finding and landing at an unprepared landing site in dynamic conditions, with goal-directed supervisory control by a field operator with no special training. The program supports efforts ranging from basic research to applied and advanced technology, including the Autonomous Aerial Cargo Utility System Innovative Naval Prototype Program.

2.3 Conventional Weapons Program Area

2.3.1 Energetic Materials, Code 351

Energetic Materials (EM) weapon systems can increase warfighters' lethality and area of dominance. Catastrophic damage improves battlefield damage assessment and reduces sorties. Smaller weapons optimize internal carry and facilitate higher weapon load outs. Future new ordnance must be adaptable in size to fit a family of delivery systems, contain sufficient energy to defeat the target, and

be affordable.

The vast majority of explosives use energetic materials to some degree. Energetic materials are used safely in actuators, demolition charges, aircrew escape, missile deployment applications, starter cartridges, gas generators, and airbags. EM research, development and manufacturing technology encompass a broad science and engineering spectrum including basic molecular chemistry, detonation physics, combustion processes, pyrotechnic mapping, material science, lethality effects, process chemistry and engineering, and manufacturing technology.

Another EM thrust is related to advanced blast and propellant compositions which rely on Ammonium Perchlorate (AP) to assist combustion and detonation characteristics. Current AP systems have reached their engineered maximum efficiency, mandating the requirement for new ingredients to continue performance and sensitivity property advances.

2.3.2 High Speed / Hypersonic Weapon Technologies, Code 351

High Speed / Hypersonic Weapon Technologies address science and technology (S&T) gaps in Naval Fires, Time Critical Strike, Suppression of Enemy Air Defenses, and Precision Global Strike. The Navy's S&T challenge is a 50% increase in range capability for vertical launch system (VLS) high speed weapons. Navy investments provide a robust path to range and speed. With increased range, temperature robustness of materials must be improved, since a solution based on increasing conventional insulation would eliminate much of the gain otherwise achieved.

2.3.3 Future Naval Capabilities, Code 352

Initiated by the Department of the Navy in 2002, the Future Naval Capabilities (FNC) program is a science and technology (S&T) program designed to develop and transition cutting-edge technology products to acquisition managers within a two- to four-year timeframe. The program aims to deliver mature products for integration into platforms, weapons, sensors or specifications that improve Navy and Marine Corps warfighting and support capabilities.

Through the FNC program, the Office of Naval Research (ONR) responds to S&T capability gaps by proposing technology investments called enabling capabilities (ECs). ECs consist of one or more interrelated products, which together provide a distinct capability that addresses one or more gaps. These investments begin at a point where analytical proof-of-concept or component/breadboard validation has been established in the laboratory, and are subsequently matured during their three- to five-year development cycle such that a model or prototype can be demonstrated in a relevant environment.

Once technologies are demonstrated, acquisition sponsors take responsibility for conducting any additional research, development, test and evaluation (RDT&E) necessary to engineer and integrate the product into an acquisition program of record, or other program that will ultimately deploy the new capability into the fleet or force.

Code 35 is co-lead for the Sea Strike FNC area, which covers weapons, and aircraft and expeditionary

warfare technologies that provide precise and persistent offensive power.

2.4 Electric Weapon Systems Program Area

2.4.1 Electromagnetic Railgun and Hypervelocity Projectile, Code 352

Electromagnetic Railgun and Hypervelocity Projectile (HVP): The Department of the Navy's science and technology corporate board chartered the Innovative Naval Prototype (INP) construct to foster game-changing and disruptive technologies ahead of the normal requirements process.

The Electromagnetic Railgun INP was initiated in 2005. The goal during Phase I was a proof-of-concept demonstration at 32 mega-joule muzzle energy which has been achieved. A future weapon system at this energy level would be capable of launching a 100-nautical mile projectile. This launch energy has the advantage of being able to stress many components to evaluate full-scale mechanical and electromagnetic forces.

Phase I was focused on the development of launcher technology with adequate service life, development of reliable pulsed power technology and component risk reduction for the projectile.

Phase II, which started in 2012, will advance the technology for transition to an acquisition program. Phase II technology efforts will concentrate on demonstrating a rep-rate fire capability. Thermal management techniques required for sustained firing rates will be developed for both the launcher system and the pulsed power system.

The railgun is a true warfighter game changer. Wide-area coverage, exceptionally quick response and very deep magazines will extend the reach and lethality of ships armed with this technology.

The HVP is a next-generation, common, low drag, guided projectile capable of completing multiple missions for gun systems such as the Navy 5-Inch, 155-mm, and future railguns. Types of missions performed will depend on gun system and platform. The program goal is to address mission requirements in the areas of Naval Surface Fire Support, Cruise Missile Defense, Anti-Surface Warfare and other future Naval mission areas. Mission performance will vary from gun system, launcher or ship. HVP's low drag aerodynamic design enables high-velocity, maneuverability and decreased time-to-target. These attributes coupled with accurate guidance electronics provide low-cost mission effectiveness against current threats and the ability to adapt to air and surface threats of the future.

The high-velocity compact design relieves the need for a rocket motor to extend gun range. Firing smaller more accurate rounds improves danger close/collateral damage requirements and provides potential for deeper magazines and improved shipboard safety. Responsive wide area coverage can be achieved using HVP from conventional gun systems and future railgun systems.

The modular design will allow HVP to be configured for multiple gun systems and to address different missions. The HVP is being designed to provide lethality and performance enhancements to current and future gun systems. A HVP projectile for multiple systems will allow for future

technology growth while reducing development, production, and total ownership costs.

2.5 Technical and Program Support Tasks/Requirements

2.5.1 Engineering and Program Management Support, Code 35

- Supports the Program Officer in strategic analyses, market research, special studies and road mapping activities for improving planning, processes and S&T program investments.
- Conceptualizes technology development strategies, creates integrated program plans including interdependencies and products from companion projects. Develops options tailored to various opportunities or constraints.
- Assists in technology assessments and evaluations
- Supports the Program Officer in the development and analyses of requirements, matching technologies to Naval Aviation and Weapons Warfare for Discovery and Invention and Future Naval Capabilities
- Provides input to the Program Officer in meeting the objectives of his programs and in carrying out associated technical and program management responsibilities, including assessments of the current state of the art, assistance in evaluation of white papers (in an advisory capacity, vice as an evaluator) that may be submitted from universities/industry in response to Broad Agency Announcements or other calls for proposals.
- Organizes and administers technical reviews, including coordinating and tracking of certifications, proposals, and completed reviews
- Assists the program officer in the formulation and execution of science and technology programs;
- Monitors both the technical and programmatic progress of various performers and keep the program officer informed, including participation in teleconferences and meetings, such as design reviews, program and financial status reviews, or technical interchange meetings. Additionally, the contractor will keep the program manager abreast of progress through monthly reports and other reports as needed.
- Assists in the planning and execution of conferences, symposiums and workshops, steering groups, program reviews, technical meetings and other events as required.
- Attends meetings; coordinates with government organizations; organizes, coordinates schedules of invitees, hosts and coordinates meetings; prepare program presentations; and provides audio-visual services/equipment at meetings.
- Attends design reviews and coordinate key demonstrations and testing.
- Provides input to draft briefings, and draft letters for the Program Officer, enabling him to respond to inquiries related to the relevant programs.
- Works with the ONR PM and personnel from other relevant DoD agencies to plan and execute Technology Area Working Group meetings, and generate follow on packages for attendees.
- Monitors and support the management of project activities and resources to mitigate risk throughout the project life cycle
- Supports program management of ONR sponsored awards. Must track and anticipate spend rates and funding short fall to assist in completion awards.
- Conducts program and operational assessments;
- Prepares briefings, reports, literature reviews and documents to support the development and approval of new program concepts and technologies.
- Uses SharePoint and Viewnet to setup and modify pages and upload briefs, reports, papers, etc.

- Coordinates and consolidates departmental responses to Requests for Information from Congress and other relevant government organizations, such as OSD, DON, Senior ONR management, relevant Joint Technology Offices, DARPA, Naval Directed Energy Steering Group (NDESG), ASN (RDA), etc.
- Assists in preparation for internal reviews of ONR sponsored programs. The Contractor will gather information and data on progress and accomplishments from the various performers and assemble information for use in internal reviews.
- Attends and assist the program manager in conducting peer reviews of existing basic research programs, as well as workshops and annual program reviews. The contractor will assist in identifying subject-matter-experts to serve as peer reviewers, preparing and providing background information of each project for the peer reviewers, providing logistical support for the review, and gathering the results and assembling a report for the program manager to document the process and results.
- Travels in support of reviews of projects, program reviews, and workshops.
- Drafts, reviews, and edits high level communications products to include PowerPoint presentations, white papers, technical reports, ghost emails, etc.
- Interfaces within the Department of the Navy, examples include OPNAV N84, N96, N98, N2N6, NAVAIR, NAVSEA 05T, PMS405, PEO IWS, & PEO Ships, surface warfare community, Naval Aviation Enterprise (NAE), NAE CTO office, and other key partners and stakeholders, such as OPNAV, OSD, Congressional Liaison, etc.
- Interfaces effectively with physicists, scientists and engineers from Department of Energy Laboratories, Department of Defense Laboratories, Industry, Academia, as well as OPNAV, NAVAIR, NAVSEA, OSD, Congressional Liaison, and other key partners and stakeholders.
- Organizes and facilitates teams comprised of technical subject matter experts, acquisition and business professionals
- Liaises with and drafts documents for technical program managers, business ops personnel, legal and contractual personnel and administrative support staff.
- Advises departmental leadership on policy and process
- Compiles periodic technical progress reports from all performers. The frequency of the reporting will be at the discretion of the Program Manager.
- Collects data from research developers and collating inputs into program-level reports.
- Manages information, including maintaining electronic copies of papers, reports, and presentations in a reasonable structure within the ONR's application of Sharepoint system.
- Tracks, obtains approval of appropriate offices and maintaining database of all technical abstracts, papers, journals, briefs and posters on work performed on program funds. Coordinates with all performers to ensure that any publication on work funded by program is reviewed by program manager, management, public affairs office and security as appropriate.
- Advises on policy and process
- Studies a variety of administrative or management functions in an effort to provide feedback on how to structure program funding, timing and overall execution
- Communicates clearly and effectively complex issues verbally and in writing for senior executive audiences, both inside and outside of (DoD and other agencies representatives) commands.
- Compiles and coordinates paperwork for human subject and animal use in research
- Provides the Program Managers guidance and assistance to FNC Enabling Capabilities (EC) /Product Managers
- Assists in the development of annual FNC execution program plans

- Facilitates the development of Technology Transition Agreements
- Assists in New-Start FNC process
    - Coordinates developing of EC programs for review/approval during the POM cycle
    - Assists in proposal development (create drafts, review, edit, and manage control of submissions)
- Supports FNC program reviews and planning
- Facilitates execution of on-going FNC programs
- Plans and coordinates ONR FNC S&T experiments as required
- Supports and coordinates public release requests with ONR public affairs, security points of contact, and other relevant parties.
- Provides Subject Matter Experts (SME) on an ad hoc/partial year basis in order to provide critical technical and Navy programmatic knowledge. SME support is dependent on future programs within the Naval Air Warfare and Weapons Department, but is to provide key skills in the areas of physics, aerospace materials, energetic, surface and air launched weapons, kinetic and directed energy weapons, robotics and unmanned aerial systems, air vehicle design, structures and subsystems, air vehicle structures and subsystems, vehicle self-protection and survivability and air vehicles design, modeling and simulation. SME support is primarily used for the INP programs, but may be provided for other programs, as required. SME support provides insightful alternatives to program options prior to decision making milestones. Collects, advises and informs through information collected.

3.0 PERSONNEL QUALIFICATIONS

3.1 General Requirements

The Contractor shall provide qualified personnel to manage and execute all aspects of the statement of work. ONR requires contractors with a diverse set of management and technical abilities, to assist in technical formulation and execution of science and technology programs; to assist in conducting program and operational assessments, and to work both independently and within a team environment.

All contractors provided must also:

- Communicate, clearly and effectively, complex issues verbally and in writing
- Be a US Citizen
- Possess a SECRET level security clearance at time of award, unless otherwise stated in this solicitation.
- Monitor and report on project activities and resources to mitigate risk throughout the project life cycle.
- Perform a variety of duties concerned with the assisting in the evaluation of the effectiveness of different ONR programs and operations.
- Be proficient in the use of commercial software packages such as Microsoft Office (in particular Word, Power Point, Project, Outlook and Excel) and Sharepoint.
- It is estimated that 50% of the required support will not be physically working at ONR. However,

even for personnel not normally working in ONR spaces, it is required that all full time support personnel under this effort be able to commute to ONR with a minimum of one (1) day notice with no additional cost to the government. Part time positions may have travel to ONR covered on a case by case basis.

Education and Years of Experience Requirements: Unless specified in the "Position" narratives below the following table states the labor categories requirements for years of experience and education:

Senior Program Engineer	7 Years of Experience w/ a PhD in specified area; 10 Years of Experience with a MS in specified area; or 15 Years of Experience with a BS in Specified Area
Mid-Level Program Engineer	5 Years of Experience with a MS in specified area or 10 years of Experience with a BS in Specified Area
Junior Engineer	2 Years of Experience with a BS Degree in Specified Area or 1 Year of Experience with MS in Specified Area

NOTE: Consideration will be given for relevant military experience (in lieu of technical degree).
Consideration will also be given for more advanced degrees.
Consideration will also be given for full time internships in which the documented work being performed during the intership was within an engineering field (as opposed to admin/clerical).

3.2 Specific Requirements & Qualifications

The positions below are shown under the technology/program areas in which the majority of their support is expected to be provided. However, support may be provided for any other area in this Statement of Work, as required. Offerors can propose under one, some or all program areas.

3.2.1 Directed & Counter Directed Energy

Note: Even though Position 1 is included with the Directed & Counter Directed Energy program area, the position is intended to provide Code 35-wide Departmental Support rather than specifically providing support related to Directed & Counter Directed Energy programs.

Position 1: Senior Program Engineer – Code 35 Departmental Support (1 FTE)-Gov't Site

The Senior Program Engineer provides high-level coordination for the Deputy Chief of Naval Research, Naval Air Warfare and Weapons and his Division Heads.

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Prior Senior Military Service desired (O-6) with Naval Aviation experience.
   - Possession of a Top SECRET Clearance at time of award is required.
   - Comfortable briefing Flag Officers and Senior Executives.
   - Expert in Microsoft PowerPoint; competent with all Microsoft Office Products including SharePoint.
   - Familiarity with data visualization techniques preferred.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in a technical area; 10 years of experience with a MS in a technical area; or 15 years of experience with a BS in a technical area.
3. Additional Considerations:
   - None

3.2.1.1 Counter Directed Energy Weapons (CDEW)

Position 2: Senior Program Engineer (0.75 FTE) – Contractor Site

The 0.75 FTE of support can be provided by a single qualified individual, or by multiple individuals. (The Government's intent is to allow the Offeror to propose the most efficient and cost-effective solution for Position 2. Proposed individual(s) must be capable of performing General Requirements and Technical and Program Support Tasks/Requirments per the SOW.)

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - An understanding of CDEW technologies and systems that will protect and defend naval forces against attacks by current and future high energy laser (HEL) and high power microwave (HPM) directed energy weapons are required.
   - Relevant expertise and understanding in the technical areas of optics, applied electromagnetics, optical components and systems, RF technology, atmospheric propagation, material science and lasers are required.
2. Education:
   - Should have 7 Years of Experience in program management w/ a PhD in engineering, optics, physics or related field; 10 Years of Experience with a MS in in engineering, optics, physics or related field; or 15 Years of Experience with a BS in in engineering, optics, physics or related field.
3. Additional Consideration:
   - None

3.2.1.2 Solid State Laser Technology Maturation

Position 3: Senior Program Engineer (1 FTE) – Gov’t Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field with at least two years expertise noted in optical systems and reconnaissance, laser range finding, optical data collection and/or infrared target recognition or weapons development or guidance technologies related to optical systems is required. Military service of a technical nature may be substituted.
   - Three years of equivalent experience as a business or program manager is required.
   - Demonstrated experience and the ability to articulate defense acquisition strategies and contracting options obtained from previous experiences are required.
   - Experience with briefing Flag Officers and Senior Executives is required.
   - Possession of TOP SECRET Clearance at time of award is required.
   - Documented expertise in Microsoft Project is required.
   - Ability to work both independently or collaboratively is required.
2. Education:
   - As specified in the table above, should have 7 years of experience w/ a PhD in physics, engineering, computer science or mathematics; 10 years of experience with a MS in physics, engineering, computer science or mathematics; or 15 years of experience with a BS in in physics, engineering, computer science or mathematics.
3. Additional Consideration:
   - Familiarity with Earned Value Management System (EVMS), Contracts Lifecycle Management Strategy, and DOORS (Dynamic Object-Oriented Requirements System) database is required.
   - Additional consideration will be given to candidate(s) with Military Service and/or Command Experience.
   - Additional consideration will be given for advanced degrees.
   - Additional considered will be given for personnel either:
     a. meeting the training requirements for DAU Level 3 certification in SPRDE or Systems Engineering
     b. having at least 3 years of equivalent defense acquisition experience related to an ACAT level I program and have completed an Advanced Project Management (APM) program or equivalent certificate program (e.g. Program Management Professional (PgMP) certificate.)

Position 4: Senior Program Engineer (.5 FTE) – Contractor Site

The .5 FTE of support can be provided by a single ½ time individual or a mix of individuals not to exceed .5 FTE.
(The Government's intent is to allow the Offeror to propose the most efficient and cost-effective solution for Position 2. Proposed individual(s) must be capable of performing General Requirements and Technical and Program Support Tasks/Requirments per the SOW.)

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Effectively articulate critical gate milestones of S&T programs
   - Monitor and manage project activities and resources to mitigate risk throughout the project life cycle.
   - Perform a variety of business functions on different technical programs
   - Possession of SECRET clearance at time of award, with the capability of obtaining and holding TOP

SECRET Clearance is required.

- Expertise in Microsoft products including Word, PowerPoint and Excel, competent with Windows/PC computing environments including data visualization techniques
- Clearly and effectively communicate issues verbally and in writing for program staff.

2. Education:
   - As specified in table above, should have 7 years of experience w/ a PhD in physics, engineering, computer science, mathematics or Business; 10 years of experience with a MS or MBA in physics, engineering, computer science, mathematics or Business Administration; or 15 years of experience with a BS in in physics, engineering, computer sciences, mathematics. If advanced degree is in business, must have technical degree at the bachelor's level.
3. Additional Considerations:
   - DAU Level 1 certification in SPRDE or systems engineering and be able to articulate acquisition strategies from previous experiences.

3.2.1.3 Free Electron Laser INP

Position 5: Mid-level Program Engineer (.5 FTE) – Contractor Site

The .5 FTE of support can be provided by a single qualified individual with broad experience in both structural engineering and materials science, or a split between two qualified personnel.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have experience in directed energy research and technology developmental efforts.
2. Education:
   - As specified in the table above, 5 years of experience with a MS in in engineering, optics, physics or related field; 10 years of experience with a BS in engineering, optics, physics or related field**.**
3. Additional Consideration:
   - Additional consideration will be given for advanced degrees in Engineering, Physics, or a closely related field.
   - Additional consideration will be given for direct government S&T experience.

REMARKS: Position 5 for Free Electron Laser INP may not be filled at the time of award.

3.2.1.4 High Power Radio Frequency and High Power Microwave

Position 6: Mid-Level Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Minimum of 5 years of experience in science and technology, acquisition, engineering, or other

technical field is required. Military service of technical nature may be substituted.

- Demonstrate aptitude in directed energy technologies; specifically RF propagation, M&S, antenna design and candidate source generation technologies
- Possess knowledge of Navy operations, concepts of employment of weapons related technologies and threat interactions
- Possession of SECRET Clearance at time of award, with the capability of acquiring and holding TOP SECRET clearance is required.
- Ability to work effectively independently or collaboratively is required.
- Experience interacting and leading teams comprised of technical SMEs, acquisition and business professionals is required.

2. Education:
   - As specified in the table above, 5 years of experience with a MS in engineering, physics, mathematics; 10 years of experience with a BS in in engineering, physics or mathematics. Demonstrated military experience in relevant areas may be substituted.
3. Additional Consideration:
   - Additional consideration will be given for higher education levels than listed above.
   - Additional consideration will be given for familiarity with data visualization techniques.

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Position 7: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by multiple qualified individuals with broad experience in both structural engineering and materials science.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have experience in Naval Air Warfare & Weapons Science and Technology developmental efforts.
2. Education:
   - As specified in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for advanced degrees in Engineering, Physics, or a closely related field.
   - Additional consideration will be given for direct government S&T experience.

REMARKS: Surge Support may not be filled at the time of award.

3.2.2 Aircraft & Autonomous Systems

3.2.2.1 Aircraft Technology

Position 8: Junior Program Engineer (1 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have excellent skills in his/her technical field, science and technology management, and systems analysis.
   - Should have a minimum of two years of relevant experience in Science and Technology development or S&T support.
2. Education:
   - Should have a Bachelor's degree in aerospace engineering, mechanical engineering, or a closely related technical discipline.
3. Additional Consideration:
   - Additional consideration will be given for related experience within the Office of Naval Research, other DoD components, internships, and/or advanced academic degrees.

3.2.2.2 Airframe Structures and Materials

Position 9: Mid-level Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by a single qualified individual with broad experience in both structural engineering and materials science, or a split between two qualified personnel.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have a minimum 5-years' experience in DoD or related Government or Original Equipment Manufacturer (OEM) environment.
   - Must have experience in strength/stress analysis, material degradation, or composites.
   - Must have experience in setting up and managing R&D efforts.
2. Education:
   - As stated in the table above , 5 Years of experience with a MS in Structural Engineering, Materials Engineering, or a closely related field or 10 years of experience with a BS in Structural Engineering, Materials Engineering, or a closely related field.
3. Additional Consideration:
   - Additional consideration will be given for a Doctorate in Structural Engineering, Materials Engineering, or a closely related field and direct government S&T experience.

REMARKS: Position 9 for Airframe Structures and Materials may not be filled at the time of award.

3.2.2.3 Autonomy and Autonomous Systems

Position 10: Mid-level Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by a single qualified individual with broad experience in both structural engineering and materials science, or a split between two qualified personnel.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have experience in setting up and managing R&D efforts in Autonomy and/or Autonomous Systems.
2. Education:
   - As stated in the table above, 5 Years of experience with a MS in Engineering, Mathematics, or a closely related field, or 10 years of experience with a BS in Engineering, Mathematics, or a closely related field.
3. Additional Consideration:
   - Additional consideration will be given for S&T Experience or advanced degrees

REMARKS: Position 10 for Autonomy and Autonomous Systems may not be filled at the time of award.

3.2.2.4 Propulsion

Position 11: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field, except as noted in the education paragraph below. Military service of technical nature may be substituted.
   - Requires the ability to work effectively, both independently and with a team.
   - Requires familiarity with data visualization techniques.
   - Experience working with teams comprised of technical subject matter experts, acquisition and business professionals.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering; 10 years of experience with a MS in engineering; or 15 years of experience with a BS in engineering.
3. Additional Consideration:
   - Additional consideration will be given for experience in research and technology related to gas turbine engines.

Position 12: Mid-Level Program Engineer (1 FTE) - Contractor Site

The contractor can provide either a single individual qualified individual or multiple individuals for this 1 FTE of support.
(The Government's intent is to allow the Offeror to propose the most efficient and cost-effective solution for Position 2. Proposed individual(s) must be capable of performing General Requirements

and Technical and Program Support Tasks/Requirments per the SOW.)

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field, except as noted in the education paragraph below
   - Requires the ability to work effectively, both independently and with a team.
   - Requires familiarity with data visualization techniques.
   - Requires experience working with teams comprised of technical subject matter experts, acquisition and business professionals.
2. Education:
   - As stated in the table above, 5 years of experience with a MS in Engineering or closely related field or 10 years of experience with a BS in Engineering or closely related field
3. Additional Consideration:
   - Additional consideration will be given for experience in research and technology related to gas turbine engines.

3.2.2.5 Autonomous Aerial Cargo Utility System (AACUS) INP

Position 13: Senior Program Engineer (1 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field is required. Military service of technical nature may be substituted.
   - Ability to brief Flag Officers and Senior Executives is required.
   - Ability to lead teams comprised of technical SMEs, acquisition and business professionals is required.
   - Expertise in Autonomy, Autonomous systems, and/or Robotics.
   - Experience in working with other scientists and engineers in autonomy and robotic technology.
   - Some travel required (two days / month on average).
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field.; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field
3. Additional Consideration:
   - Ph.D. in autonomy or autonomous systems engineering preferred.
   - Experience with unmanned aerial systems desired, not required.

REMARKS: Position 13 may not be filled at the time of award.

Position 14: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field is required. Military service of technical nature may be substituted.
   - Ability to brief Flag Officers and Senior Executives is required.
   - Ability to lead teams comprised of technical SMEs, acquisition and business professionals is required.
   - Some travel required (two days / month on average).
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field
3. Additional Consideration:
   - Experience with unmanned aerial systems desired, not required.

Position 15: Junior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Expertise in Microsoft PowerPoint and competency with all Microsoft Office Products including Sharepoint 2007/2010 are required.
   - Ability to effectively work independently or collaboratively is required.
2. Education:
   - As stated in the table above, 2 years of experience with a BS Degree in science, engineering or technical program management or 1 year of experience with a MS Degree in science, engineering or technical program management.
3. Additional Consideration:
   - Additional consideration will be given for familiarity with data visualization techniques **(i.e. powerpoint).**

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Position 16: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by multiple qualified individuals with broad experience in both structural engineering and materials science.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:

- Must have experience in Naval Air Warfare & Weapons Science and Technology developmental efforts.

2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for advanced degrees in Engineering, Physics, or a closely related field.
   - Additional consideration will be given for direct government S&T experience.

REMARKS: Surge Support may not be filled at the time of award.

3.2.3 Conventional Weapons

3.2.3.1 Energetic Materials

Position 17: Senior Program Engineer (1 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Knowledge of Energetic Materials and Chemical Propulsion is required.
   - Documented experience in the review and evaluation of proposed solutions in a related technical area is required.
   - A minimum of 7 years of experience in technical and management disciplines to provide support for basic and applied research and development of energetic material programs is required.
   - Ability to work with a team of technical experts in the accomplishment of complex tasks is required.
   - Good analytical ability is required
   - Ability to work without administrative or clerical support to produce work documents including Power Point briefings and other relevant materials is required.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in chemical or materials engineering or a closely related field; 10 years of experience with a MS in chemical or materials engineering or a closely related field; or 15 years of experience with a BS in chemical or materials engineering or a closely related field.
3. Additional Consideration:
   - None

REMARKS: Position 17 for Energetic Materials may not be filled at the time of award.

3.2.3.2 High Speed / Hypersonic Weapon Technologies

Position 18: Mid-level Program Engineer (1 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in missile science and technology, acquisition, engineering. Military service of technical nature may be substituted.
   - Must be effective both working independently or collaboratively.
   - Must have familiarity with data visualization techniques.
2. Education:
   - As stated in the table above, 5 years of experience with a MS in engineering or closely related field or 10 years of experience with a BS in engineering or closely related field
3. Additional Consideration:
   - None

3.2.3.3 Future Naval Capabilities

Position 19: Senior Program Engineer (1.5 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

The .5 FTE of support can be provided by a single ½ time individual or a mix of individuals not to exceed .5 FTE.
(The Government's intent is to allow the Offeror to propose the most efficient and cost-effective solution for Position 2. Proposed individual(s) must be capable of performing General Requirements and Technical and Program Support Tasks/Requirments per the SOW.)

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field, as noted in the education paragraph below. Military service of technical nature may be substituted.
   - Requires the ability to work effectively, both independently and with a team.
   - Requires extensive familiarity with data visualization techniques.
   - Requires experience working with teams comprised of technical subject matter experts, acquisition and business professionals.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for experience in research and technology related to the Future Naval Capabilities program within ONR

REMARKS: Position 19 for Future Naval Capabilities may not be filled at the time of award.

Position 20: Mid-Level Program Engineer (1 FTE) – Gov't Site

The 1 FTE of support must be provided by a single qualified individual.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field, except as noted in the education paragraph below. Military service of technical nature may be substituted.
   - The position requires ability to work effectively, both independently and with a team
   - The position requires extensive familiarity with data visualization techniques
   - The position requires experience working with teams comprised of technical subject matter experts, acquisition and business professionals.
2. Education:
   - As stated in the table above, 5 years of experience with a MS in engineering or closely related field or 10 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for experience in research and technology related to the Future Naval Capabilities program within ONR

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Position 21: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by multiple qualified individuals with broad experience in both structural engineering and materials science.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have experience in Naval Air Warfare & Weapons Science and Technology developmental efforts.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for advanced degrees in Engineering, Physics, or a closely related field.
   - Additional consideration will be given for direct government S&T experience.

REMARKS: Surge Support may not be filled at the time of award.

3.2.4 Electric Weapon Systems

3.2.4.1 Electromagnetic Railgun and Hypervelocity Projectile

Position 22: Senior Program Engineer (Electromagnetic Railgun) (2 FTEs) – Gov't Site

The 2 FTEs of support must be provided by two qualified individuals.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field is required. Extensive military service of technical nature may be substituted.
   - Knowledge of DoD transition process and the Navy requirements and resource processes are required.
   - Experience in the ability to analyze, evaluate, formulate, coordinate, and implement unique, non-traditional development approaches for technological innovation is required.
   - Possession of a TOP SECRET Clearance at time of award is required.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for Military Service. Naval surface force operational experience and naval engineering subspecialty preferred.
   - Additional consideration will be given for OPNAV experience.

Position 23: Mid-level Program Engineer (Hypervelocity Projectile) (2 FTEs) – Gov't Site

The 2 FTEs of support must be provided by two qualified individuals.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Experience in science and technology, acquisition, engineering, or other technical field is required. Extensive military service of technical nature may be substituted.
   - Knowledge of DoD transition process and the Navy requirements and resource processes are required.
   - Experience in the ability to analyze, evaluate, formulate, coordinate, and implement unique, non-traditional development approaches for technological innovation is required.
   - Possession of SECRET Clearance at time of award, with the capability of acquiring and holding a TOP SECRET Clearance is required.
2. Education:
   - As stated in the table above, 5 years of experience with a MS in engineering or closely related field or 10 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for Military Service. Naval surface force operational experience and naval engineering subspecialty preferred.
   - Additional consideration will be given for OPNAV experience.

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Position 24: Senior Program Engineer (1 FTE) – Contractor Site

The 1 FTE of support can be provided by multiple qualified individuals with broad experience in both structural engineering and materials science.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Must have experience in Naval Air Warfare & Weapons Science and Technology developmental efforts.
2. Education:
   - As stated in the table above, 7 years of experience w/ a PhD in engineering or closely related field; 10 years of experience with a MS in engineering or closely related field; or 15 years of experience with a BS in engineering or closely related field.
3. Additional Consideration:
   - Additional consideration will be given for advanced degrees in Engineering, Physics, or a closely related field.
   - Additional consideration will be given for direct government S&T experience.

REMARKS: Surge Support may not be filled at the time of award.

3.2.5 Subject Matter Expert (SME) Support

Position 25: Subject Matter Expert (5.5 FTE) – Contractor Site

The 5.5 FTEs of SME support, divided equally among the four (4) program areas (see Section B – CLIN Structure), will be needed on an ad hoc or partial year basis primarily for the INP programs, but could be provided in any of the program areas discussed above.

Qualifications:

1. Experience, Knowledge, Abilities, Certifications, and/or Clearance Requirements:
   - Knowledge and oversight of national programs.
   - Program management experience in Navy, Marine Corps, and Air Force systems acquisition programs. Experience in management of technology. Experience in analyzing, evaluating, formulating, coordinating, and implementing unique, non-traditional operational actions on a wide variety of security, logistical, financial and administrative support issues from the Department of the Navy (DON), the Department of Defense (DoD) and other U.S. Government agencies.
   - Person must have unique skills and experience in fostering, planning, managing and/or executing scientific research and technology development in the areas of physics, aerospace materials, energetic, surface and air launched weapons, kinetic and directed energy weapons, robotics and unmanned aerial systems, air vehicle design, structures and subsystems, air vehicle structures and subsystems, vehicle self-protection and survivability and air vehicles design, modeling and simulation may be sought.

- The ability to conduct special studies in area of expertise (e.g. weapons control or naval combatant and ship systems integration) and provide a senior level review of Navy plans and issues relating to emerging technologies related to Directed Energy and Conventional Weapons deployed from Naval Platforms (Ships & Aircraft) that support mission requirements.
- The ability to prepare activity reports, briefing materials for the Senior Review Board, semi-annual reports to DoD, and other projects as assigned.
- Candidate must be able to effectively communicate orally and in writing.
- Possession of SECRET Clearance at time of award is required, with the capability of acquiring and holding a TOP SECRET Clearance.

2. Education:
   - Should have a minimum of a Master's degree from a fully accredited institution in Engineering, Physics or Physical Sciences and at least 15 years of relevant experience or a PhD in Engineering, Physics or Physical Sciences and 10 years of experience.
3. Additional Consideration:
   - None

3.2.6 FTE Summary Table: (30.75 FTEs)

Job Category	FTE	Number of People sought	Supported Program area(s)
Senior Program Engineer	14.75	9 FTEs = 9 persons, full time, and .5 FTEs = One or More People .75 FTE = One or More People 4 FTEs = One or more persons for each FTE position	3.2.1 - Code 35-wide (1 FTE) 3.2.1.1 – CDEW (0.75 FTE) 3.2.1.2 – SSLTM (1.5 FTEs) 3.2.2.4 – Propulsion (1 FTE) 3.2.2.5 – AACUS (2 FTEs) 3.2.3.1 – EM (1 FTE) 3.2.3.3 – FNC (1.5 FTEs) 3.2.4.1 – ERHP (2 FTEs) Surge (4 FTEs)
Mid-Level Program Engineer	8.5	5 FTEs = 5 persons, full time 3 FTEs = One or more persons for each FTE position. .5 FTE = One or more persons	3.2.1.3 – FEL INP (.5 FTE) 3.2.1.4 – HPRF/HPM (1 FTE) 3.2.2.2 – Airframe Structure & Materials (1 FTE) 3.2.2.3 Autonomy & Autonomous Systems (1 FTE) 3.2.2.4 – Propulsion (1 FTE) 3.2.3.2 – HS/HWT (1 FTE) 3.2.3.3 – FNC (1 FTE) 3.2.4.1 – ERHP (2 FTEs)

Junior Program Engineer	2	2 FTEs = 2 persons, full time	3.2.2.1 – Aircraft Technology (1 FTE) 3.2.2.5 – AACUS (1 FTE)
Subject Matter Experts	5.5	No specific number of persons, persons will be Ad Hoc/Partial Year	Subject Matter Experts are equally divided among the four (4) Program Areas

NOTE: One (1) FTE is equivalent to 1,840 hours taking into account vacation/holidays

4.0 REPORTING REQUIREMENTS AND DELIVERABLES

The following deliverables are required to support this project. Electronic submission is encouraged for all reports, unless otherwise requested by ONR.

4.1 Technical reports. The contractor shall provide evaluations, technical reports, briefing packages, other reports, memoranda and papers, as required.

ONR will specify formats as necessary. For other reports, contractor format is acceptable.

4.2 Data and Reports. The contractor shall provide data, studies and analysis, and summaries of information provided by ONR, including financial data on grants and contracts.

ONR will specify formats as necessary. For other reports, contractor format is acceptable.

4.3 Individual Travel Reports. The contractor shall provide, prior to any travel, a work sheet detailing the costs of that travel to the program officer as well as the COR for prior approval. Travel must meet the requirements of the Joint Travel Regulations.

Contractor format is acceptable, with approval on format from the Contracting Officer Representative.

4.4 Master Travel Log Reports. The contractor shall maintain a master log of completed travel for all individuals traveling under this task order. The log shall include travel dates, destination, purpose, and cost breakdown to include airfare/mileage, lodging, meals, rental car/taxi, and other miscellaneous costs.

This report shall be made available to ONR within 14 days of request. Contractor format is acceptable.

4.5 Progress and Status Reports. The Contractor shall provide monthly progress and status reports

to the COR and the Contract Specialist. Contractor format is acceptable (with COR approval), but shall include the following information:

- List of the level of effort performed per person/category for the reporting period and cumulative for the CLIN period through the reporting period.
- Fully burdened hourly rate (includes all indirect costs, profit/fee, and all pass-through charges, if any) to represent full hourly cost of each person provided to the government.
- Resulting monthly costs (including fee) and cumulative cost (including fee) for the CLIN period per person.
- Provide the average labor rate under the CLIN through the reporting period. The average labor rate is the total labor costs incurred through the reporting period (i.e., cumulative) under the labor CLIN divided by total hours expended under the CLIN through the reporting period. The total labor costs include all direct labor costs, relevant indirect(s) applied to labor costs, fixed fee/profit, subcontractor labor costs and relevant subcontractor indirect labor, subcontractor fixed fee/profit, and pass-through costs applied to subcontractor labor. The contractor shall provide this number and show it next to the contract CLIN average rate (i.e., total estimated cost for CLIN divided by the total level of effort required for CLIN).
- The report shall also include a summary of work accomplished during the reporting period and a forecast of work products for the coming month.
- Details of the monthly costs of ODCs and Travel expended and total cumulative amount of ODCs expended per CLIN period. Details shall contain dates, locations of travel, purpose, total cost breakdown including travel, per diems, hotel costs, car rental costs, etc., with unusual cost items (including registration fees) specifically set forth, tasks performed, and accomplishments. If publications or proceedings documentation were distributed a copy may be included with the progress portion of this report.
- List of new or departing personnel during the reporting period. The Contractor shall provide copies of all signed NDAs for new individuals and signed departing debriefs for those individuals departing. (NOTE: Signed NDAs need to also be provided to the COR prior to any person starting work under the contract.)

4.6 Quality Control Plan. The Contractor shall provide quality control plan to the COR within 60 days after contract award. This report shall define policies and procedures for managing productivity, quality, and cost control.

4.7 Government Furnished Equipment, Government Furnished Materials, and Government Furnished Information (GFE/GFM/GFI) Report

The Contractor shall maintain accountability and inventory records of all GFE/GFM/GFI either purchased under the ODC CLINs of this effort or furnished by the Government. This report shall be provided as required (but no more frequently than annually) and with the final monthly progress report of the final Option CLIN.

4.8 Enterprise-Wise Contractor Manpower Reporting Application (ECMRA) Reports. See Section H for requirements for this reporting.

SECTION D PACKAGING AND MARKING

Packaging and marking shall be in accordance with Section D of the IDIQ contract.

SECTION E INSPECTION AND ACCEPTANCE

Inspection and Acceptance of deliveries under this Task Order will be accomplished by the Contracting Officer's Representative listed in Section G, who shall have thirty (30) days after contractual delivery for acceptance.

SECTION F DELIVERABLES OR PERFORMANCE

The periods of performance for the following Items are as follows:

7006	12/8/2014 - 12/7/2015
7007	12/8/2014 - 12/7/2015
7106	12/8/2015 - 12/7/2016
7107	12/8/2015 - 12/7/2016
7206	12/8/2016 - 12/7/2017
7207	12/8/2016 - 12/7/2017
9003	12/8/2014 - 12/7/2015
9103	12/8/2015 - 12/7/2016
9203	12/8/2016 - 12/7/2017

Electric Weapon Systems:

1. The support services performed under the Base Period (CLINs 7006, 7007, and 9003) shall be performed from 8 DEC 2014 through 7 DEC 2015.

2. The support services performed under the Option for Year 2 (CLINs 7106, 7107, and 9103) shall be performed from 08 December 2015 through 07 December 2016.

3. The support services performed under the Option for Year 3 (CLINs 7206, 7207, and 9203) shall be performed from 08 December 2016 through 07 December 2017.

4. If exercised, the support services performed under the Option for Year 4 (CLINs 7306, 7307, and 9303) shall be performed from effective date of option exercise through twelve (12) months.

5. If exercised, the support services performed under the Option for Year 5 (CLINs 7406, 7407, and 9403) shall be performed from effective date of option exercise through twelve (12) months.

6. Distribution, consignment and marking instructions for all reports listed in Section C, Statement of Work, shall be FOB Destination to the cognizant Contracting Officer's Representative listed in Section G.

7. Place of Performance

Work will be performed at the Office of Naval Research and company site locations as noted in the Level of Effort in Section G, paragraph 7.0 (a). Basic facilities such as work space and its associated operating requirements (i.e., phones, desks, and utilities) will be provided while working in Government facilities.

SECTION G CONTRACT ADMINISTRATION DATA

1.0 PAYMENT AND INVOICE INSTRUCTIONS (COST REIMBURSEMENT)

1.1 DFARS 252.232-7006 Wide Area WorkFlow Payment Instructions.

As prescribed in 232.7004(b), use the following clause:

WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (JUN 2012)

(a) *Definitions.* As used in this clause—

"Department of Defense Activity Address Code (DoDAAC)" is a six position code that uniquely
identifies a unit, activity, or organization.
"Document type" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).
"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) *Electronic invoicing*. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) *WAWF access*. To access WAWF, the Contractor shall—

(1) Have a designated electronic business point of contact in the Central Contractor Registration at https://www.acquisition.gov; and

(2) Be registered to use WAWF at https://wawf.eb.mil/ following the step-by-step procedures for self-registration available at this web site.

(d) *WAWF training*. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at https://wawf.eb.mil/

(e) *WAWF methods of document submission*. Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) *WAWF payment instructions*. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:

(1) *Document type*. The Contractor shall use the following document type(s).

Cost Voucher

Note: If a "Combo" document type is identified but not supportable by the Contractor's business systems, an "Invoice" (stand-alone) and "Receiving Report" (stand-alone) document type may be used instead.)
(2) *Inspection/acceptance location*. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.
Destination/Destination
(3) *Document routing*. The Contractor shall use the information in the Routing Data Table below

only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

Field Name in WAWF	*Data to be entered in WAWF*
Pay Official DoDAAC	HQ0338
Issue By DoDAAC	N00014
Admin DoDAAC	S2404A
Inspect By DoDAAC	N/A (Leave this field blank)
Ship To Code	N/A (Leave this field blank)
Ship From Code	N/A (Leave this field blank)
Mark For Code	N/A (Leave this field blank)
Service Approver (DoDAAC)	S2404A
Service Acceptor (DoDAAC)	N/A (Leave this field blank)
Accept at Other DoDAAC	N/A (Leave this field blank)
LPO DoDAAC	N/A (Leave this field blank)
DCAA Auditor DoDAAC	HAA391
Other DoDAAC(s)	N/A (Leave this field blank)

(4) *Payment request and supporting documentation.* The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (*e.g*. timesheets) in support of each payment request.

(5) *WAWF email notifications*. The Contractor shall enter the e-mail address identified below in the “Send Additional Email Notifications” field of WAWF once a document is submitted in the system.

Not applicable

(g) *WAWF point of contact.*

(1) The Contractor may obtain clarification regarding invoicing in WAWF from the following Contracting activity’s WAWF point of contact.

For clarification regarding invoicing contact: Navy WAWF Help Line: 1-877-251-WAWF (9293)

For Payment Issues Only contact: ONR_21@navy.mil.

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.
(End of clause)

1.2 Payment of Allowable Costs and Fixed Fee

As consideration for the proper performance of the work and services required under this contract, the Contractor shall be paid as follows
(a) Costs, as provided for under the contract clause entitled "Allowable Cost and Payment," shall not exceed the amount set forth as "Estimated Cost" in Section B, and is subject to the contract clause entitled "Limitation of Cost" or "Limitation of Funds" whichever is applicable.
(b) A fixed fee, in the amount set forth as ‘Fixed Fee’ in Section B, in accordance with the contract clause FAR 52.216-8 “Fixed Fee”, shall be paid upon completion of the work and services required under this contract and upon final acceptance by the Contracting Officer. However, the Contractor, may bill on each voucher the amount of the fee bearing the same percentage to the total fixed fee as the amount of cost billed bears to the total estimated cost not to exceed the amount set forth as "Fixed Fee" in Section B. The total fixed fee billed, shall not exceed the total fixed fee specified in Section B and is subject to the contract clause entitled "Limitation of Cost" or "Limitation of Funds" whichever applies.
(c) In accordance with FAR 52.216-8, “Fixed Fee”, the Administrative Contracting Officer (ACO), in order to protect the Government’s interest, shall withhold 10% of the fixed fee amount set forth in Section B or until a reserve is set aside in the amount of $100,000.00, whichever is less. The fixed fee withhold should be applied to each voucher. The ACO shall release the withhold in accordance with the provisions of FAR 52.216-8.

1.3 Allotment of Funds

(a) It is hereby understood and agreed that this contract will not exceed a total amount of $4,436,295.00, including an estimated cost of [redacted] and a fixed fee of [redacted]
(b) It is hereby understood and agreed that CLIN 7006 will not exceed a total amount of $893,614.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7006 of this contract is $802,788.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. It is estimated that the amount allotted of [redacted] will cover the period from 08 DEC 2014 through 07 DEC 2015.
(c) It is hereby understood and agreed that CLIN 7007 will not exceed a total amount of $442,500.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7007 of this contract is $0.00, including an estimated cost of $0.00 and a fixed fee of $0.00. It is estimated that the amount allotted of $0.00 will cover the period from 08 DEC 2014 through TBD months.

(d) It is hereby understood and agreed that CLIN 7106 will not exceed a total amount of $902,549.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7106 of this contract is $871,000.00; including an estimated cost of [redacted] and a fixed fee of [redacted]. It is estimated that the amount allotted of $871.000.00 will cover the period from 08 DEC 2015 through 07 NOV 2016.

(e) It is hereby understood and agreed that CLIN 7107 will not exceed a total amount of $442,500.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7107 of this contract is $0.00, including an estimated cost of $0.00 and a fixed fee of $0.00. It is estimated that the amount allotted of $0.00 will cover the period from 8 DEC 2015 through TBD.
(f) It is hereby understood and agreed that CLIN 9003 will not exceed a total amount of $133,636.00 (no fixed fee). The total amount presently available for payment and allotted to CLIN 9003 is $5,436.00. It is estimated that the amount allotted of $5,436.00 will cover the period from 8 DEC 2014 through 8 FEB 2015.

(g) It is hereby understood and agreed that CLIN 9103 will not exceed a total amount of $133,636.00 (no fixed fee). The total amount presently available for payment and allotted to CLIN 9103 is $2,500.00. It is estimated that the amount allotted of $2,500.00 will cover the period from 08 DEC 2015 through 07 APR 2016.

(h) It is hereby understood and agreed that CLIN 7107 will not exceed a total amount of $442,500.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7107 of this contract is $0.00, including an estimated cost of $0.00 and a fixed fee of $0.00. It is estimated that the amount allotted of $0.00 will cover the period from 8 DEC 2016 through 12 months.

(i) It is hereby understood and agreed that CLIN 7206 will not exceed a total amount of $911,574.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7206 of this contract is $831,869.00; including an estimated cost of [redacted] and a fixed fee of [redacted]. It is estimated that the amount allotted of $831,869.00 will cover the period from 08 DEC 2016 through 07 NOV 2017.

(j) It is hereby understood and agreed that CLIN 7207 will not exceed a total amount of $442,500.00, including an estimated cost of [redacted] and a fixed fee of [redacted]. The total amount presently available for payment and allotted to CLIN 7207 of this contract is $0.00, including an estimated cost of $0.00 and a fixed fee of $0.00. It is estimated that the amount allotted of $0.00 will cover the period from 08 DEC 2016 through TBD .

(k**) It is hereby understood and agreed that CLIN 9203 will not exceed a total amount of $133,636.00 (no fixed fee). The total amount presently available for payment and allotted to CLIN 9203 is $5,000.00. It is estimated that the amount allotted of $5,000.00 will cover the period from 08 DEC 2016 through 28 FEB 2017.**

2.0 PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS

These instructions are provided for the Contract Payment Office (DFAS Columbus) only, and are not contractor instructions.

DFARS PGI Reference	Indicate applicable CLIN (s)	Instruction for Use

	or SLIN(s)	
252.204-0004 Line Item Specific: by Fiscal Year (SEP 2009)	All CLINs	If there is more than one ACRN within a contract line item, [(i.e. informational sub-line items contain separate ACRNs)], and the contracting officer intends the funds to be liquidated using the oldest funds first

3.0 ORDER DETAILS

3.1 Other Direct Costs (ODCs)

ODCs (including supplies, travel, NMCI Seats, etc.) will be reimbursed at cost plus G&A and Material & Handling (if applicable) without profit or fee. Purchases of items (other than consumable materials or supplies) must be approved in advance by the Contracting Officer's Representative (COR). All travel must be approved (7 days) in advance by the Program Officer and Contracting Officer's Representative (COR). The total ODC amount is Not-to-Exceed (NTE) $133,636 (inclusive of G&A and Material & Handling (if applicable), but without profit or fee), per 12-month period of performance.

The purchase of any computer or magnetic media (i.e. hard drives, flash drives) must be approved by the COR prior to purchase. Per Navy Telecommunication Directive 03-11, ANY such device connected to the Navy Marine Corps Intranet Network shall be turned over to the Government for disposal at the end of the contract performance. To prevent forfeit of ownership, the contractor should NOT connect any privately-owned device to a Government network.

Forfeit of ownership per Navy Telecommunication Directive 03-11 shall not, however, grant the Government any rights, title, or interest in any intellectual property embodied within a forfeited device. Nor shall a forfeit of ownership alter any responsibility that the Government may have to prevent unauthorized use, release, or disclosure of proprietary information that may be embodied within a forfeited device.

3.1.1 Travel and Per Diem

Travel will be required to support this Statement of Work. In accordance with the contract requirements, direct costs associated with the Contractor's travel should not exceed the applicable rates found in the Joint Travel Regulations (JTR). All travel arrangements under the Contractor's responsibility include: clearance requests, hotel accommodations, travel orders, and visa/passport requirements, unless otherwise stated by the Government sponsor. The contractor shall make every effort to make all travel arrangements at least 21 days in advance. As stated in paragraph 4.3 of Section C, the contractor shall provide a work sheet detailing the cost of that travel to the program officer as well as the COR for prior approval.

3.1.2 Other Direct Costs (Other than Travel and Per Diem)

ODCs may be required to fully support this task requirement. At this time, the specific items cannot be identified; however the ODC and Travel cost total cannot exceed the NTE amount stated in Section G, paragraph 3.1.

3.1.3 Subject Matter Experts (SMEs)

SMEs will be reimbursed at cost plus any applicable indirect rates and fee or profit. All SMEs must be approved in advance by the Contracting Officer's Representative (COR). The total SME amount is not to exceed (NTE) $442,550 (excluding proposed fixed fee) per each of the four (4) Program Areas, per 12-month period of performance. This NTE amount should be proposed and included as part of the cost total (inclusive of indirect rates) in every proposal submitted under this solicitation. The SMEs are divided equally between the four Program Areas and must be bid within each of their respective Program Areas. ONR Tripwire guidance applies to SMEs. Please refer to Section L, paragraph 1 for information pertaining to ONR tripwire guidance.

3.1.4 Parking and Local Transportation

Parking facilities are not provided at ONR; however, several private (pay) parking facilities are located in the area. The ONR facility is within walking distance of the Ballston Metro Station. Monthly parking fees or any other type of transportation expenses (metro farecards) for proposed personnel to commute to and from the place of performance should not be charged to the Order as a direct cost.

3.1.5 Conference and Meeting Space

Throughout the performance of the technical tasks/requirements, the contractor may be required to identify a space for meetings/conferences. The contractor should have access to meeting space that can accommodate events for up to 50 attendees. Offerors can either allow for utilization of meeting space as an indirect charge of a direct charge. However, if charged as a direct cost the offeror must increase the ODC amount in Section G.3.1 for each program area proposed to cover any expenses related to providing the meeting space for this award.

It is preferred that the space be within ten (10) driving miles from the ONR headquarters location in Arlington, VA. Additional consideration will be given to classified meeting space, particularly TOP SECRET facility availability.

Contractor personnel shall be located in both ONR provided contractor space within Code 35 spaces at ONR, and contractor site(s), preferably located within a ten mile radius of the ONR facility located at One Liberty Center, 875 North Randolph Street, Arlington, VA 22203.

The contractor shall not incur any direct costs for conference or meeting space under this award without the prior written concurrence of the ONR's Conferences, Events & Exhibits Communications Manager or the Director of the Corporate Strategic Communications Office, who will ensure compliance with ONR Instruction 5050.7B. The Contracting Officer Representative (COR) listed in your order will obtain the written concurrence from the individuals above.

3.1.6 Printing and High Speed High Volume Duplicating

The scope of this order does not include printing and high speed high volume duplicating. Defense Logistics Agency shall serve as the manager for printing and high speed high volume duplicating. Requests shall be forwarded to the COR for review one month before the required due date. The COR will then submit approved requests to ONR BD042 two to three weeks before the required due date.

3.1.7 Food

All costs for food, not including the per diem rate for meals and incidental expenses, are unallowable under this order.

3.2 Government Furnished Resources (GFR)

The Government will provide information, material and forms unique to the Government for supporting the task. The Government furnished resources necessary to perform the statement of work should be identified and requested through the designated Contracting Officer's Representative (COR).

The availability of any required computer resources while working on Government facilities should be verified in advance with the designated Contracting Officer's Representative (COR). The Government will provide an NMCI-approved computer that adheres with NMCI and Navy IT regulations for contractor personnel working on government facilities. Please note that contractor support work previously performed at an off-site location may now need to be performed and/or implemented on-site at ONR in order to comply with all Navy regulations (e.g., Wikis, websites, etc.).

With the exception to the basic facility terms items noted above and in accordance with the general guidance in FAR Part 45.102, Contractors are required to furnish all property necessary to perform on Government contracts or orders. The purchase of computer equipment should not be proposed as a direct charge under this solicitation. For security purposes, computers may be required to be authorized and approved for use by ONR. Contractors will be required to obtain Navy Marine Corps Intranet (NMCI) seats to perform the Task Order Statement of Work. During the performance of the Order, if either party (Government or Contractor) identifies additional NMCI seat requirements for the Contractor to obtain an NMCI seat to perform its duties, ONR officials will work with the Contractor to obtain an NMCI seat in a timely manner and, if necessary, will pursue a mutually satisfactory agreement in regards to any formal modifications or changes to the dollar values of the Order as a result of the emerging NMCI requirements. General information regarding NMCI can be obtained at: http://www.nmcieds.com /index.asp.

3.3 Security Requirements and Data Protection

a) Clearance Requirements. During the performance of the effort, the Contractor may be required to perform one, or several of the following actions: have access, receive, and or generate classified information up to the Top Secret level. Contractor facilities used in support of this effort must have ***(or: be eligible to receive)*** a Top Secret facility clearance level (FCL) with Safeguarding eligibility up to the Top Secret level ***(if safeguarding requirements are applicable)***. Offerors are not required to have Top Secret safeguarding at the time of award. However, if during the performance of this effort, the access requirements are upgraded, a revised DD254 will be issued to support the elevated access requirement prior to the contractor personnel accessing, receiving and or generating information. For personnel, a minimum clearance of Secret is required for all labor categories unless a higher level is stated within the Personnel Qualifications sections of this solicitation. The Personnel Qualifications section of this solicitation lists the personnel labor categories, with clearance requirements described therein. A DD Form 254 (Attachment 3) will be required prior to access or production of any classified information. Additionally, the Contractor is required to safeguard the information labeled as proprietary.

b) Privacy Act. All Contractor personnel assigned to this task will have access to information that may be subject to the Privacy Act of 1974. The Contractor is required to ensure the proper safeguarding of such information to prevent unauthorized release.

c) Nondisclosure Agreement. In the course of its work, each employee of the selected Contractor will be required to execute a Nondisclosure Agreement (NDA) (Attachment 1) as outlined in

Section L of this solicitation.

3.4 Organizational Conflict of Interest (OCI)

3.4.1 Limitations on Providing Support Services

All Offerors and proposed subcontractors must affirm whether they are conducting Research and Development efforts funded by the Office of Naval Research through an active contract or subcontract. All affirmations must identify ONR's Technical Point of Contact 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. This information shall be included with Volume III (Cost/Price) either as its own a separate attachment, within the Volume III cover page, or any other document (except Attachment Number 5: Cost Proposal Spreadsheet) submitted with Volume III that has cost narrative. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be rejected without technical evaluation and withdrawn from further consideration for award. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with ONR by sending his/her contact information and a summary of the potential conflict by e-mail to the Contracting Office identified in the solicitation 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 or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award. Additional information regarding ONR's guidelines on OCI can be found at http://www.onr.navy.mil/en/About-ONR/compliance-protections/Organizational-Conflicts-Interest.aspx.

3.4.2 Safeguarding Information

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

3.4.3 Organizational Restrictions

Support contractor's knowledge of competition sensitive information, described in paragraph above, may unfairly affect its competitive position in future ONR research solicitations. The Contractor understands that, during performance of the contract resulting from this Order solicitation and for a period of up to two years after the completion of its performance of the contract, the Contractor, any affiliate of the Contractor, any joint venture involving the Contractor, any entity into or with which the Contractor may merge of affiliate, or any other successor or assignee of the Contractor may not be eligible to participate as a prime Contractor, subcontractor, consultant, joint venture, partner, or other agreements directly impacted by the Office of Naval Research programs.

4.0 PROCURING OFFICE REPRESENTATIVES

In order to expedite administration of this order, the Administrative Contracting Officer should direct inquiries to the appropriate office listed below. Please do not direct routine inquiries to the person listed in Block 21 of the signature page of this order.

Contract Negotiator – [redacted], ONR 254, [redacted], DSN [redacted],
E-Mail Address: [redacted]

Inspection and Acceptance – Designated Contracting Officer's Representative (COR)

Security Matters- [redacted], ONR 43, [redacted], DSN [redacted], E-Mail Address: [redacted]

Task Order Ombudsman (as per FAR 16.505(b)(5)) - [redacted] ONR 02, ([redacted]

5.0 ONR 55252.242-9720 CONTRACTING OFFICER'S REPRESENTATIVE (COR) (SEP 1996)

The COR for this contract is: [redacted]
Code: 35
Mailing Address: Office of Naval Research, 875 North Randolph Street, Arlington, VA 22203-1995
The Alternate COR for this contract is: N/A
Code: 35
Mailing Address: Office of Naval Research, 875 North Randolph Street, Arlington, VA 22203-1995

The COR will act as the Contracting Officer's representative for technical matters, providing technical direction and discussion as necessary with respect to the specification or statement of work, and monitoring the progress and quality of contractor performance. The COR is not an Administrative Contracting Officer and does not have authority to take any action, either directly or indirectly, to change the pricing, quantity, quality, place of performance, delivery schedule, or any other terms and conditions of the contract (or delivery order), or to direct the accomplishment of effort which goes beyond the scope of the statement of work in the contract (or delivery order). When, in the opinion of the contractor, the COR requests effort outside the existing scope of the contract (or delivery order), the contractor shall promptly notify the contracting officer (ordering officer) in writing. No action shall be taken by the contractor until

the contracting officer (or ordering officer) has issued a modification to the contract (or delivery order) or has otherwise resolved the issue. In the absence of the COR named above (due to reasons such as leave, illness, official travel), all responsibilities and functions assigned to the COR shall be the responsibility of the alternate COR acting on behalf of the COR.

6.0 CONTRACT TYPE

This is a cost-plus-fixed-fee term task order.

7.0 NAVSEA 5252.216-9122 LEVEL OF EFFORT (DEC 2000)

(a) The Contractor agrees to provide the level of effort specified below in performance of the work described in the PWS of this order. The level of effort for the performance of this task order shall be man-hours of direct labor, including subcontractor direct labor for those subcontractors specifically identified in the Contractor's proposal as having hours included in the proposed level of effort.

CLIN Period	**Hours Per Period**	**Anticipate Work Location (Gov't Site/Contractor Site)**
Base Period		
CLIN 7000 – Directed & Counter Directed Energy - 5.75 FTEs	10,580	Position 1 – Gov't Site Position 2 – Contractor Site Position 3 – Gov't Site Position 4 – Contractor Site Position 5 – Contractor Site Position 6 – Contractor Site Position 7 – Contractor Site
CLIN 7001 – SME – Directed and Counter Directed Energy – 1.375 FTE – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7002 – Aircraft & Autonomous Systems - 9 FTEs	16,560	Position 8 – Gov't Site Position 9 – Contractor Site Position 10 – Contractor Site Position 11 – Contractor Site Position 12 – Contractor Site Position 13 – Gov't Site Position 14 – Contractor Site Position 15 – Contractor Site Position 16 – Contractor Site
CLIN 7003 – SME – Aircraft & Autonomous Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7004 – Convention Weapons – 5.5 FTEs	10,120	Position 17 – Gov't Site Position 18 – Gov't Site Position 19 – **Contractor Site** Position 20 – Gov't Site

		Position 21 – Contractor Site
CLIN 7005 – SME – Conventional Weapons – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7006 – Electric Weapon Systems – 5 FTEs	9,200	Position 22 – Gov't Site Position 23 – Gov't Site Position 24 – Contractor Site
CLIN 7007 – SME – Electric Weapon Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
Base Period Total	**56,580**	
Option for Year 2		
CLIN 7100 – Directed & Counter Directed Energy - 5.75 FTEs	10,580	Position 1 – Gov't Site Position 2 – Contractor Site Position 3 – Gov't Site Position 4 – Contractor Site Position 5 – Contractor Site Position 6 – Contractor Site Position 7 – Contractor Site
CLIN 7101 – SME – Directed and Counter Directed Energy – 1.375 FTE – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7102 – Aircraft & Autonomous Systems - 9 FTEs	16,560	Position 8 – Gov't Site Position 9 – Contractor Site Position 10 – Contractor Site Position 11 – Contractor Site Position 12 – Contractor Site Position 13 – Gov't Site Position 14 – Contractor Site Position 15 – Contractor Site Position 16 – Contractor Site
CLIN 7103 – SME – Aircraft & Autonomous Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7104 – Conventional Weapons - 5.5 FTEs	10,120	Position 17 – Gov't Site Position 18 – Gov't Site Position 19 – Contractor Site Position 20 – Gov't Site Position 21 – Contractor Site

CLIN 7105 – SME – Conventional Weapons – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7106 – Electric Weapon Systems – 5 FTEs	9,200	Position 22 – Gov't Site Position 23 – Gov't Site Position 24 – Contractor Site
CLIN 7107 – SME – Electric Weapon Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
Option for Year 2 Total	**56,580**	
Option for Year 3		
CLIN 7200 – Directed & Counter Directed Energy - 5.75 FTEs	10,580	Position 1 – Gov't Site Position 2 – Contractor Site Position 3 – Gov't Site Position 4 – Contractor Site Position 5 – Contractor Site Position 6 – Contractor Site Position 7 – Contractor Site
CLIN 7201 – SME – Directed and Counter Directed Energy – 1.375 FTE – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7202 – Aircraft & Autonomous Systems - 9 FTEs	16,560	Position 8 – Gov't Site Position 9 – Contractor Site Position 10 – Contractor Site Position 11 – Contractor Site Position 12 – Contractor Site Position 13 – Gov't Site Position 14 – Contractor Site Position 15 – Contractor Site Position 16 – Contractor Site
CLIN 7203 – SME – Aircraft & Autonomous Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7204 – Conventional Weapons - 5.5 FTEs	10,120	Position 17 – Gov't Site Position 18 – Gov't Site Position 19 – Contractor Site Position 20 – Gov't Site Position 21 – Contractor Site

CLIN 7205 – SME – Conventional Weapons – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7206 – Electric Weapon Systems – 5 FTEs	9,200	Position 22 – Gov't Site Position 23 – Gov't Site Position 24 – Contractor Site
CLIN 7207 – SME – Electric Weapon Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
Option for Year 3 Total	**56,580**	
Option for Year 4		
CLIN 7300 – Directed & Counter Directed Energy - 5.75 FTEs	10,580	Position 1 – Gov't Site Position 2 – Contractor Site Position 3 – Gov't Site Position 4 – Contractor Site Position 5 – Contractor Site Position 6 – Contractor Site Position 7 – Contractor Site
CLIN 7301 – SME – Directed and Counter Directed Energy – 1.375 FTE – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7302 – Aircraft & Autonomous Systems - 9 FTEs	16,560	Position 8 – Gov't Site Position 9 – Contractor Site Position 10 – Contractor Site Position 11 – Contractor Site Position 12 – Contractor Site Position 13 – Gov't Site Position 14 – Contractor Site Position 15 – Contractor Site Position 16 – Contractor Site
CLIN 7303 – SME – Aircraft & Autonomous Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7304 – Conventional Weapons - 5.5 FTEs	10,120	Position 17 – Gov't Site Position 18 – Gov't Site Position 19 – Contractor Site Position 20 – Gov't Site Position 21 – Contractor Site

CLIN 7305 – SME – Conventional Weapons – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7306 – Electric Weapon Systems – 5 FTEs	9,200	Position 22 – Gov't Site Position 23 – Gov't Site Position 24 – Contractor Site
CLIN 7307 – SME – Electric Weapon Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
Option for Year 4 Total	**56,580**	
Option for Year 5		
CLIN 7400 – Directed & Counter Directed Energy - 5.75 FTEs	10,580	Position 1 – Gov't Site Position 2 – Contractor Site Position 3 – Gov't Site Position 4 – Contractor Site Position 5 – Contractor Site Position 6 – Contractor Site Position 7 – Contractor Site
CLIN 7401 – SME – Directed and Counter Directed Energy – 1.375 FTE – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7402 – Aircraft & Autonomous Systems - 9 FTEs	16,560	Position 8 – Gov't Site Position 9 – Contractor Site Position 10 – Contractor Site Position 11 – Contractor Site Position 12 – Contractor Site Position 13 – Gov't Site Position 14 – Contractor Site Position 15 – Contractor Site Position 16 – Contractor Site
CLIN 7403 – SME – Aircraft & Autonomous Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7404 – Conventional Weapons - 5.5 FTEs	10,120	Position 17 – Gov't Site Position 18 – Gov't Site Position 19 – Contractor Site Position 20 – Gov't Site Position 21 – Contractor Site

CLIN 7405 – SME – Conventional Weapons – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
CLIN 7406 – Electric Weapon Systems – 5 FTEs	9,200	Position 22 – Gov't Site Position 23 – Gov't Site Position 24 – Contractor Site
CLIN 7407 – SME – Electric Weapon Systems – 1.375 FTEs – to be proposed per Government Cost Estimate	2,530	Position 25 – Contractor Site
Option for Year 5 Total	**56,580**	

(b) Listed above are both compensated and uncompensated man-hours associated with this order. Uncompensated effort is defined as hours provided by personnel in excess of 40 hours per week without additional compensation for such excess work. Total Time Accounting (TTA) effort is included in this definition. All other effort is defined as compensated effort. If no effort is indicated in the above table, uncompensated/ TTA effort performed by the Contractor shall not be counted in fulfillment of the level of effort obligations under this contract.

(c) Effort performed in fulfilling the total level of effort obligations specified above shall only include effort performed in direct support of this contract and shall not include time and effort expended on such things as (local travel to and from an employee's usual work location), uncompensated effort while on travel status, truncated lunch periods, work (actual or inferred) at an employee's residence or other non-work locations (except as provided in paragraph (j) below), or other time and effort which does not have a specific and direct contribution to the tasks described in Sections B and C.

(d) The level of effort for this contract shall be expended at an average rate of approximately (see table below) hours per week.

Program Title	**Hours Per Week**
Directed & Counter Directed Energy	203
Aircraft & Autonomous Systems	318
Conventional Weapons	195
Electric Weapon Systems	177
SMEs – Directed & Counter Directed Energy	49
SMEs – Aircraft & Autonomous Systems	49
SMEs – Conventional Weapons	49
SMEs – Electric Weapons Systems	49
Total	**1089**

It is understood and agreed that the rate of man-hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total man-hours of effort prior to the expiration of the term hereof, except as provided in the following paragraph.

(e) If, during the term hereof, the Contractor finds it necessary to accelerate the expenditure of

direct labor to such an extent that the total man hours of effort specified above would be used prior to the expiration of the term, the Contractor shall notify the Contracting Officer in writing setting forth the acceleration required, the probable benefits which would result, and an offer to undertake the acceleration at no increase in the estimated cost or fee together with an offer, setting forth a proposed level of effort, cost breakdown, and proposed fee, for continuation of the work until expiration of the term hereof. The offer shall provide that the work proposed will be subject to the terms and conditions of this contract and any additions or changes required by then current law, regulations, or directives, and that the offer, with a written notice of acceptance by the Contracting Officer, shall constitute a binding contract. The Contractor shall not accelerate any effort until receipt of such written approval by the Contracting Officer. Any agreement to accelerate will be formalized by contract modification.

(f) The Contracting Officer may, by written order, direct the Contractor to accelerate the expenditure of direct labor such that the total man hours of effort specified in paragraph (a) above would be used prior to the expiration of the term. This order shall specify the acceleration required and the resulting revised term. The Contractor shall acknowledge this order within five days of receipt.

(g) If the total level of effort specified in paragraph (a) above is not provided by the Contractor during the period of this contract, the Contracting Officer, at its sole discretion, shall either (i) reduce the fee of this contract as follows:

Fee Reduction = Fee X (Required LOE - Expended LOE)

Required LOE

or (ii) subject to the provisions of the clause of this contract entitled "LIMITATION OF COST" (FAR 52.232-20) or "LIMITATION OF COST (FACILITIES)" (FAR 52.232-21), as applicable, require the Contractor to continue to perform the work until the total number of man hours of direct labor specified in paragraph (a) above shall have been expended, at no increase in the fee of this contract.

(h) The Contractor shall provide and maintain an accounting system, acceptable to the Administrative Contracting Officer and the Defense Contract Audit Agency (DCAA), which collects costs incurred and effort (compensated and uncompensated, if any) provided in fulfillment of the level of effort obligations of this contract. The Contractor shall indicate on each invoice the total level of effort claimed during the period covered by the invoice, separately identifying compensated effort and uncompensated effort, if any.

(i) Within 45 days after completion of the work under each separately identified period of performance hereunder, the Contractor shall submit the following information in writing to the Contracting Officer with copies to the cognizant Contract Administration Office and to the DCAA office to which vouchers are submitted: (1) the total number of man hours of direct labor expended during the applicable period; (2) a breakdown of this total showing the number of man hours expended in each direct labor classification and associated direct and indirect costs; (3) a breakdown of other costs incurred; and (4) the Contractor's estimate of the total allowable cost incurred under the contract for the period. Within 45 days after completion of the work under the contract, the Contractor shall submit, in addition, in the case of a cost underrun; (5) the amount by which the estimated cost of this contract may be reduced to recover excess funds and, in the

case of an underrun in hours specified as the total level of effort; and (6) a calculation of the appropriate fee reduction in accordance with this clause. All submissions shall include subcontractor information.

(j) Unless the Contracting Officer determines that alternative worksite arrangements are detrimental to contract performance, the Contractor may perform up to 10% of the hours at an alternative worksite, provided the Contractor has a company-approved alternative worksite plan. The primary worksite is the traditional “main office” worksite. An alternative worksite means an employee’s residence or a telecommuting center. A telecommuting center is a geographically convenient office setting as an alternative to an employee’s main office. The Government reserves the right to review the Contractor’s alternative worksite plan. In the event performance becomes unacceptable, the Contractor will be prohibited from counting the hours performed at the alternative worksite in fulfilling the total level of effort obligations of the contract. Regardless of the work location, all contract terms and conditions, including security requirements and labor laws, remain in effect. The Government shall not incur any additional cost nor provide additional equipment for contract performance as a result of the Contractor’s election to implement an alternative worksite plan.

(k) Notwithstanding any of the provisions in the above paragraphs, the Contractor may furnish man hours up to five percent in excess of the total man hours specified in paragraph (a) above, provided that the additional effort is furnished within the term hereof, and provided further that no increase in the estimated cost or fee is required.

8.0 SSP 5252.216-9775 INCREASE IN LEVEL OF EFFORT (COST-REIMBURSEMENT) (MAR 1992)

(a) In addition to any other option rights that may be provided to the Government by this contract, the Government shall have the right, within any given contract period established in Section F of this task order, to increase the level of effort by up to thirty percent (30%) of the total level of effort for that period at the same labor mix as proposed in the task order for that period. The Contractor agrees to accept such increase in the level of effort at an increase in the estimated cost and an increase in the fixed fee which are calculated as follows:

IEC = (ILOE/LOE) x EC

IFF = (ILOE/LOE) x FF

IEC = The increase in the estimated cost.

ILOE = The increase in the level of effort.

LOE = The level of effort contracted for the contract year in which the level of effort is increased.

EC = The estimated cost contracted for in the contract year in which the level of effort is increased.

IFF = The increase in the fixed fee.

FF = The fixed fee contracted for in the contract year in which the level of effort is increased.

This option may be exercised at any time or times prior to the end of the affected period provided however, that the exercise of such option must give the Contractor sufficient time to provide all of the man-hours for that period, including the increase, by the end of the affected period.

(b) Any exercise by the Government of its option rights under this clause shall be affected by written notice from the Contracting Officer.

(c) The exercise of the option shall be formally reflected by a modification to this task order increasing the estimated cost and fixed fee and adjusting the Level of Effort provision for the affected contract period.

9.0 PERSONNEL QUALIFICATIONS

The Contractor shall provide qualified personnel to manage and execute all aspects of the statement of work. All personnel performing under the contract must meet or exceed the personnel qualifications of those personnel proposed at the time of proposal submission. The Government shall have a minimum of seven (7) calendar days to review the qualifications of substitute/replacement personnel prior to reporting to work. The Contractor shall be prepared to provide other personnel within seven (7) calendar days should any of the substitute/replacement personnel be considered unqualified.

10.0 COMMON ACCESS CARD (CAC) FOR CONTRACTOR EMPLOYEES

All new contractor employees shall be "CAC Card Ready" before any direct labor charges may be accumulated under this contract. "CAC Card Ready" includes:

1) Subject's fingerprints have been submitted to the Office of Personnel Management (OPM) and determined favorable,

2) Subject has an initiated or completed NACI or equivalent investigation type, and

3) Visit request has been submitted to ONR Security and approved by the appropriate ONR Code Administrative Officer (AO).

```
Accounting Data

SLINID   PR Number                                          Amount
-------- ------------------------------------------------- ---------------------
700601   1300466841             300000.00
LLA :
AA 1741319 W1AE 251 00014 0 050120 2D 000000 A00002633125


BASE Funding 300000.00
Cumulative Funding 300000.00

MOD 01 Funding 0.00
Cumulative Funding 300000.00

MOD 02

700602   130046684100003        73160.00
LLA :
AB 1751319 W2DA 251 00014 0 050120 2D 000000 A10002633125

900301   130046684100004        5436.00
LLA :
AB 1751319 W2DA 251 00014 0 050120 2D 000000 A10002633125


MOD 02 Funding 78596.00
Cumulative Funding 378596.00

MOD 03 Funding 0.00
Cumulative Funding 378596.00

MOD 04

700603   130046684100005                                    429628.00
LLA :
AB 1751319 W2DA 251 00014 0 050120 2D 000000 A10002633125
```

MOD 04 Funding 429628.00
Cumulative Funding 808224.00

MOD 05 Funding 0.00
Cumulative Funding 808224.00

MOD 06

710601 130046684100006 398200.00
LLA :
AC 1761319 W2DA 251 00014 0 050120 2D 000000 A20002633125

910301 130046684100007 1800.00
LLA :
AC 1761319 W2DA 251 00014 0 050120 2D 000000 A20002633125

MOD 06 Funding 400000.00
Cumulative Funding 1208224.00

MOD 07

710602 130046684100008 408100.00
LLA :
AD 1761319 W1AE 251 00014 0 050120 2D 000000 A30002633125

910302 130046684100009 700.00
LLA :
AD 1761319 W1AE 251 00014 0 050120 2D 000000 A30002633125

MOD 07 Funding 408800.00
Cumulative Funding 1617024.00

MOD 08

710603 130046684100010 64700.00
LLA :
AE 1761319 W2DB 251 00014 0 050120 2D 000000 A40002633125

MOD 08 Funding 64700.00
Cumulative Funding 1681724.00

MOD 09

720601 130046684100011 259486.00
LLA :
AF 1771319 W1AE 251 00014 0 050120 2D 000000 A50002633125

920301 130046684100012 1000.00
LLA :
AF 1771319 W1AE 251 00014 0 050120 2D 000000 A50002633125

MOD 09 Funding 260486.00
Cumulative Funding 1942210.00

MOD 10

720602 130046684100013 136267.00
LLA :
AF 1771319 W1AE 251 00014 0 050120 2D 000000 A50002633125

720603 130046684100014 385000.00
LLA :
AG 1771319 W2DA 251 00014 0 050120 2D 000000 A60002633125

720604 130046684100015 51116.00
LLA :
AH 1771319 W2DE 251 00014 0 050120 2D 000000 A70002633125

920302 130046684100016 4000.00
LLA :
AH 1771319 W2DE 251 00014 0 050120 2D 000000 A70002633125

MOD 10 Funding 576383.00
Cumulative Funding 2518593.00

SECTION H SPECIAL CONTRACT REQUIREMENTS

This is a 100% Small Business Set aside, and at least 50 percent of the contract cost for personnel must be performed by the prime contractor's own employees. This includes Labor & SME CLINs.

1.0 NOTIFICATION CONCERNING DETERMINATION OF SMALL BUSINESS SIZE STATUS

For the purposes of FAR clauses 52.219-6, NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE, 52.219-3, NOTICE OF TOTAL HUBZONE SET-ASIDE, 52.219-18, NOTIFICATION OF COMPETITION LIMITED TO ELIGIBLE 8(A) CONCERNS, and 52.219-27 NOTICE OF TOTAL SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS SET-ASIDE, the determination of whether a small business concern is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation, and further, meets the definition of a HUBZone small business concern, a small business concern certified by the SBA for participation in the SBAs 8(a) program, or a service disabled veteran-owned small business concern, as applicable, shall be based on the status of said concern at the time of award of the SeaPort-e MACs and as further determined in accordance with Special Contract Requirement H-19..

2.0 CONTRACTOR IDENTIFICATION

All Contractors performing under this task order are required to clearly distinguish themselves from Federal employees through identification of their "Support Contractor" status. Identification includes, but is not limited to, the following: distinct badges; distinct office name plates and marking of office space; identification of "Support Contractor" in all forms of formal and informal communication as well as in e-mail signature blocks, in telephone conversations, in voicemail greetings, when using Government letterhead and fax cover sheets, and on business cards. Letterhead, fax cover sheets, and business cards may include the "Office of Naval Research" name but shall not include the Office of Naval Research logo or any related graphic.

3.0 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA)

"The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Office of Naval Research via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address https://doncmra.nmci.navy.mil.

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be

reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://doncmra.nmci.navy.mil."

4.0 HOURS OF OPERATION AND HOLIDAY SCHEDULE

The Office of Naval Research conforms to public holidays for federal employees. Contractor support will not be required on public holidays, except to the extent that travel for operational requirements are scheduled. A list of federal holidays in effect during performance under this order can be found at http://www.opm.gov/Operating_Status_Schedules/fedhol/2014.asp . If the holiday falls on a Saturday, the holiday will be observed the preceding Friday. If the holiday falls on a Sunday, the observance will be on the following Monday.

In the event the Government is closed for any other purpose (e.g., inclement weather), contractor personnel may be allowed to work provided permission is granted by the Contractor and the COR. In the event Contractor personnel will be absent from the office for other reasons (e.g. sickness, training, vacation, etc.), these absences must be coordinated with the COR prior to their occurrence to the maximum extent practicable.

5.0 ACCOUNTING SYSTEM

In accordance with FAR 16.301-3(a), a cost-reimbursement contract may be used only when the contractor's accounting system is adequate for determining costs applicable to the contract. The Contractor's accounting system must be determined "adequate" for cost-reimbursement contracts prior to task order award. This accounting system requirement will not be reviewed as part of a determination as to whether a perspective contractor is responsible in accordance with FAR Part 9.104-1. But rather, an offeror's ability to demonstrate its accounting system is adequate for determining costs applicable to the contract is a specific task order requirement that will be part of the determination as to whether an offeror's proposal is responsive to the solicitation. If ONR is able to make an award without discussions for this task order solicitation, it does not intend to request DCAA accounting system audits to verify an offeror's compliance with this requirement due to the limited resources and length of time it takes DCAA to perform an accounting system audit.

6.0 INDIRECT COST CEILING (ONR 5252.242-9704)

For purposes of billing and provisional payment under the Task Order, a rate of [redacted] for Overhead on Direct Labor Costs for FTE's located at Government/Client Site(s) shall be used. Final payment shall be based on the application of the applicable audited rates. However, in no event shall a rate in excess of [redacted] for Overhead on Direct Labor Cost Expense be allowed for FTE's located at Government/Client Site(s).

SECTION I CONTRACT CLAUSES

CONTRACT CLAUSES SHALL BE IN ACCORDANCE WITH SECTION I OF THE BASIC IDIQ SEAPORT-E MULTIPLE-AWARD CONTRACT AND HEREBY INCORPORATED BY REFERENCE.

ADDITIONAL FAR AND DFARS CLAUSES

FAR 52.217-9	Option To Extend The Term of The Contract (MAR 2000) (In First Blank Of Paragraph (a) insert “any time during period of performance," In Second Blank Of Paragraph (a) Insert "1 day," and In Paragraph (c), Insert "60 months.")
FAR 52.223-5	Pollution Prevention and Right-to-Know Information (AUG 2003) (applicable if contract provides for performance, in whole or in part, on a federal facility)
DFARS 252.204-7005	Oral Attestation of Security Responsibilities (NOV 2001) (applicable if FAR 52.204-2, Security Requirements applies)
DFARS 252.215-7002	Cost Estimating System Requirements (DEC 2006) (Applicable only to contract actions awarded on the basis of certified cost or pricing data)

SECTION J LIST OF ATTACHMENTS

Attachment Number 1: Non-Disclosure Agreement

Attachment Number 2: Quality Assurance Surveillance Plan (QASP)

Attachment Number 3: DD254

Attachment Number 4: COR Designation Letter