

ORDER FOR SUPPLIES OR SERVICES (FINAL)

1. CONTRACT NO. N00178-04-D-4024		2. DELIVERY ORDER NO. 0040		3. EFFECTIVE DATE 2011 Oct 28		4. PURCH REQUEST NO. See Section G		5. PRIORITY Unrated	
6. ISSUED BY NSWC, DAHLGREN DIVISION 17632 Dahlgren Road Suite 157 Dahlgren VA 22448-5110			CODE N00178	7. ADMINISTERED BY DCMA Manassas 10500 BATTLEVIEW PARKWAY, SUITE 200 MANASSAS VA 20109-2342			CODE S2404A	8. DELIVERY FOB DESTINATION OTHER (See Schedule if other)	
9. CONTRACTOR Booz Allen Hamilton 8283 Greensboro Drive McLean VA 22102			CODE 17038	FAC LITY		10. DELIVER TO FOB PONT BY (Date) See Schedule		11. X IF BUS NESS IS SMALL SMALL DISADVANTAGED WOMEN-OWNED	
12. DISCOUNT TERMS Net 30 Days WIDE AREA WORK FLOW			13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Section G						
14. SHIP TO See Section D			CODE	15. PAYMENT WILL BE MADE BY DFAS Columbus Center, South Entitlement Operations P.O. Box 182264 Columbus OH 43218-2264			CODE HQ0338	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.	

16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of numbered contract.
	PURCHASE		Reference your _____ furnish the following on terms specified herein.
			ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MOD FIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

Booz Allen Hamilton

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)

If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPL ES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED *	21. UNIT	22. UNIT PRICE	23. AMOUNT
	See Schedule				

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.	24. UNITED STATES OF AMERICA BY: /s/ Amy T Richards	25. TOTAL \$	26. DIFFERENCES
	10/28/2011 CONTRACTING/ORDERING OFFICER		

27a. QUANTITY IN COLUMN 20 HAS BEEN

INSPECTED	RECEIVED	ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED:

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE		28. SH P NO.	29. D.O. VOUCHER NO.	30. INITIALS
f. TELEPHONE		31. PAYMENT COMPLETE		33. AMOUNT VERIFIED CORRECT FOR
g. E-MA L ADDRESS		32. PAID BY		34. CHECK NUMBER
36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.		31. PAYMENT PARTIAL		35. BILL OF LAD NG NO.
a. DATE		31. PAYMENT FULL		
b. SIGNATURE AND TITLE OF CERTIFY NG OFFICER				

37. RECEIVED AT	38. RECEIVED BY (Print)	39. DATE RECEIVED	40. TOTAL CON-TA NERS	41. S/R ACCOUNT NUMBER	42. S/R VOUCHER NO.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 1 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

SECTION B SUPPLIES OR SERVICES AND PRICES

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	Supplies/Services Qty	Unit	Est. Cost	Fixed Fee	CPFF
4000	Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD)	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████
400001	INCREMENTAL FUNDING TI#1 (RDT&E)				
400002	INCREMENTAL FUNDING TI#2 (RDT&E)				
400003	INCREMENTAL FUNDING TI#3 (RDT&E)				
400004	INCREMENTAL FUNDING TI#4 (RDT&E)				
400005	INCREMENTAL FUNDING TI#5 (RDT&E)				
4010	Option Base Period Surge, Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD) Option	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████
4100	Option Period 1, Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD) Option	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 2 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

4110	Option Period 1, Surge, Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD) Option	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████
4200	Option Period 2, Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD) Option	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████
4210	Option Period 2, Surge Engineering and Technical Support Services for High Power Microwave (HPM) and other Directed Energy Systems IAW Section C, PWS. (TBD) Option	██████ LH	\$ ██████████	\$ ██████████	\$ ██████████

For ODC Items:

Item	Supplies/Services	Qty	Unit	Est. Cost

6000	Base Period ODCs for CLIN 4000 (TBD)	1.0	LO	\$ ██████████
600001	INCREMENTAL FUNDING TI#1 (RDT&E)			
600002	INCREMENTAL FUNDING TI#2 (RDT&E)			
600003	INCREMENTAL FUNDING TI#3 (RDDA)			
600004	INCREMENTAL FUNDING TI#4 (RDT&E)			

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 3 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

600005 INCREMENTAL
FUNDING
TI#5 (RDT&E)

6010	Option Base Period, Surge ODCs for CLIN 4010 (TBD) Option	1.0 LO	-\$ [REDACTED]
6100	Option Period 1 ODCs for CLIN 4100 (TBD) Option	1.0 LO	-\$ [REDACTED]
6110	Option Period 1 Surge ODCs for CLIN 4110 (TBD) Option	1.0 LO	-\$ [REDACTED]
6200	Option Period 2 ODCs for CLIN 4200 (TBD) Option	1.0 LO	-\$ [REDACTED]
6210	Option Period 2 Surge ODCs for CLIN 4210 (TBD) Option	1.0 LO	-\$ [REDACTED]

NOTE 1: SURGE

If the Government determines that an increased level of effort for support is required, the government reserves the right to exercise a "Surge Option" CLIN for additional work in accordance with the Performance Work Statement. The Contracting Officer will provide written notice to the contractor at least 30 calendar days prior to exercise of a "Surge Option" CLIN.

B.1 ADDITIONAL CLINS

Additional CLINs/SLINs may be unilaterally created by the Contracting Officer during the performance of this Task Order to accommodate the multiple types of funds that may be used under this Order. These modifications will not change the overall level of effort, estimated cost or fee of the Task Order.

B.2 KEY PERSONNEL

The contractor agrees that during the first 90 days of the period of performance no key personnel substitutions will be permitted unless such substitutions are necessitated by an individual's sudden illness, death, or termination of employment. All proposed substitutions shall have qualifications equal to or higher than the qualifications of the person to be replaced. The contractor agrees to provide the hourly rates of the incumbent and the proposed substitute.

In the event a requirement to increase the specified level of effort for a designated labor category, but not the overall level of effort of the contract, occurs, the Contractor shall submit to the Contracting Officer a written request for approval to add personnel to the designated labor category.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 4 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

HQ B-2-0020 TRAVEL COSTS - ALTERNATE I (NAVSEA) (DEC 2005)

- (a) Except as otherwise provided herein, the Contractor shall be reimbursed for its reasonable actual travel costs in accordance with FAR 31.205-46. The costs to be reimbursed shall be those costs accepted by the cognizant DCAA.
- (b) Reimbursable travel costs include only that travel performed from the Contractor's facility to the worksite, in and around the worksite, and from the worksite to the Contractor's facility.
- (c) Relocation costs and travel costs incident to relocation are allowable to the extent provided in FAR 31.205 -35; however, Contracting Officer approval shall be required prior to incurring relocation expenses and travel costs incident to relocation.
- (d) The Contractor shall not be reimbursed for the following daily local travel costs:
- (i) travel at U.S. Military Installations where Government transportation is available,
 - (ii) travel performed for personal convenience/errands, including commuting to and from work, and
 - (iii) travel costs incurred in the replacement of personnel when such replacement is accomplished for the Contractor's or employee's convenience.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 5 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

SECTION C DESCRIPTIONS AND SPECIFICATIONS

SECTION C: DESCRIPTIONS AND SPECIFICATIONS

C.1 INTRODUCTION

The Directed Energy Division (Q20), of the Naval Surface Warfare Center, Dahlgren Division (NSWCDD) is responsible for performing research, development, technology assessment, modeling and simulation, systems engineering, analysis, prototyping and testing of High Powered Microwave (HPM), Pulsed Power, Prime Power, High Voltage (1KV), Radio Frequency (RF)/Antennas, Control Systems and Directed Energy technologies, systems and components. These technologies and systems are often required to be developed and deployed as rapidly as possible to support the warfighter and the Global War on Terror (GWOT). As an example, a HPM system was designed, prototyped, tested and deployed OCONUS.

C.2 SCOPE

The purpose of this Task Order is to acquire services to support Q20 in the areas of HPM, Pulsed Power, Prime Power, RF and Directed Energy research, development, technology assessment, modeling and simulation, definition and performance trade -off analysis, system architecture development, model based systems engineering, doctrine and tactical policy development, prototype development including design, fabrication, test and evaluation planning and execution and integrated logistics support including deployment preparation and sustainment. The contractor shall support the government in development, prototyping, testing and analyzing various HPM, Pulsed Power, Prime Power, High Voltage (>1KV), High Power RF, short -pulse and other Directed Energy systems and components. For the purposes of this Statement of Work, all of these systems will be referred to simply as Directed Energy systems. Tasking under this contract will include conducting technical research, supporting requirements development, concept exploration, preliminary to production design specification formulation, integrating and fabricating prototype systems and components; performing trade-off analysis, assessments (including environmental and electromagnetic effects and compatibility, system capabilities, limitations, target vulnerabilities); designing, building and running models and simulations; developing test strategies/plans, acquiring, analyzing and archiving test data; developing component, system and platform integration approaches, creating and reviewing technical documentation and providing technical advice. In support of this scope, the contractor will be required to perform the following tasks. Further detail will be provided in the individual Technical Instruction (TI).

C.2.1 RESEARCH AND DEVELOPMENT

C.2.1.1 The contractor shall conduct fundamental research, scientific study, and experimentation directed to advancing the state -of-the-art or increasing knowledge and understanding of Directed Energy systems and components. This includes requirements definition, analysis of technical concepts, technology trade -offs, and investigation of operational concepts with the goal of applying

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 6 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

results to developing new or improved Directed Energy systems. The contractor shall also address modernization of fielded military assets and platforms to accommodate Directed Energy capabilities. The contractor shall also conduct technology proof –of-concept experiments by testing basic principles and optimizing variable parameters. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.1.2 The contractor shall conduct studies to determine feasibility, practicality, and capability of state-of-the-art and emergent Directed Energy technologies and concepts. The contractor shall support efforts to develop, evaluate, and test the performance of these systems. This shall also include the assessment of new technologies to determine their potential applicability for advanced electromagnetic and Directed Energy Warfare. The contractor shall support Capability Based Assessments (CBAs) and Analysis of Alternatives (AoA) efforts for Directed Energy systems and exploration of practicality/suitability issues. Selected components and systems predicted reliability and total ownership costs aspects shall be included in the assessments. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.1.3 The contractor shall coordinate with various Government, civilian and military personnel in the development of Tactics, Techniques and Procedures (TTPs) and course curriculum for employment of selected technologies and field deployable Directed Energy systems. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.1.4 The contractor shall survey available technical data, intelligence, and publications to determine and document the existing and future Directed Energy threats to military and civilian systems. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.1.5 The contractor shall determine capability, limitations and vulnerability of state-of-the-art or emerging Directed Energy Weapons, including the effects on potential targets and potential countermeasures of these effects. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.1.6 The contractor shall conduct scientific investigations into the vulnerability of commercial and military infrastructure systems to Directed Energy systems, and the effectiveness of Directed Energy countermeasure systems. This includes theoretical predictions, bench and lab and field tests of components and subsystems. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A008.

C.2.2 SYSTEMS ENGINEERING

C.2.2.1 The contractor shall provide systems engineering for technology areas relating to the systems development of Directed Energy weapons, countermeasure systems and commercial infrastructure systems such as electric power and communication. This will include conceptual and prototype designs containing system requirements definition and functional decomposition. The contractor shall provide Model-Based System Engineering (MBSE) support including engineering data analysis

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 7 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

support in the review and evaluation of data from all available sources to develop Department of Defense Architecture Framework (DoDAF) products required to effectively develop systems and enable transition to appropriate Programs of Record. This includes development of: Use Case Scenarios, Derived Requirements, Operational Views, System Views, Capability Views, Project Views, and affiliated Architecture Views, through to the development of performance specifications, requirements traceability products, and other design documentation. MBSE ensures traceability from basic operational requirements, through the system architecture, to produce specifications automatically. The contractor will conduct system and subsystem demonstrations to show how well selected technologies and system requirements are met and to determine the need for new ideas and alternatives to fill gaps discovered or analyzed. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.2.2 The contractor shall provide systems comparisons, engineering support, and analysis for alternative designs or improvements, such as system reliability, system safety and system throughput/response time, to state -of-the-art Directed Energy systems. The contractor shall also conduct parametric and sensitivity performance studies to see how electrical, mechanical, command and control and environmental variables affect system output and effectiveness. Required deliverables shall be in accordance with the requirements of CDRLs A003 and A004.

C.2.2.3 The contractor shall support requirements definition and the program acquisition process in accordance with DoD Directive 5000.01 and DoD Instruction 5000.02 to properly transition and establish selected Directed Energy capabilities as Programs of Record Systems or in support of existing fielded military system modernization requirements. This may include tasks such as operational, technical and system hardware and software requirements, selection and integration of hardware components and software into formal system configurations, technical data package development, SHIPALT/SHIPMAIN activities, system compatibility and hardening definition, shipboard or other platform (air, subsurface, ground – including manned and unmanned) integration, interface/interoperability and command and control impacts to existing platforms and Electromagnetic Interference (EMI) and Electromagnetic Effects issues. In performing these tasks, the contractor shall apply engineering and scientific disciplines to perform technical analysis, technical development, selection of hardware and firmware, or modifications to existing hardware and firmware for systems, test facilities or training facilities. The contractor shall also support required DoD technical, legal and safety reviews of non -lethal capabilities. This includes reviews under the Weapon System Explosive Safety Review Board (WSESRB), and the DoD Human Effects Center of Excellence (HECOE). Required deliverables shall be in accordance with the requirements of CDRLs A003, A004, A007 and A008.

C.2.3 TECHNOLOGY ASSESSMENTS

C.2.3.1 The contractor shall conduct technology and vulnerability assessments and countermeasures studies to determine the potential capability of Directed Energy Weapons or Directed Energy Concepts for offensive or defensive military use. This will include assessment of requirements and investigation of operational concepts and issues. The contractor shall also conduct the analysis of state-of-the-art systems, prototypes and engineering models for specific Directed Energy

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 8 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

Technology Programs. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.3.2 The contractor shall assess the vulnerability of U.S. military and civilian operations to Directed Energy threats. The contractor shall investigate and identify potential Directed Energy threats on the Joint Forces' ability to conduct military and non-military missions including the potential vulnerability of critical equipment and facilities to Directed Energy attacks. The contractor shall identify potential viable methods to counter or reduce these threats to increase survivability. These efforts may include the use of special intelligence information and involve national needs and systems. Required deliverables shall be in accordance with the requirements of CDRLs A003 and A004.

C.2.3.3 The contractor shall provide technical assessments of domestic and foreign activities for defense against Directed Energy attack and assess the availability of existing and near-term technologies to counter these weapons. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.4 MODELING, SIMULATION, AND ANALYSIS SUPPORT

C.2.4.1 The contractor shall develop and exercise simulations to predict electromagnetic interactions with electronics and the environment (including the ground, trees, buildings, conducting or dielectric materials and coupling). The contractor shall develop computer simulations and theoretical models to support the establishment of models for design, optimization, and operation of Directed Energy systems. The contractor will use existing as well as developmental codes, such as finite difference time domain codes, particle in cell codes, and Numerical Electromagnetics Code (NEC), as well as circuit, effects, component and electromagnetic propagation, lethality and campaign models. The contractor shall perform validation studies to determine the accuracy of the developed models and simulations. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.4.2 The contractor shall conduct modeling and simulation efforts of Directed Energy technologies and systems to facilitate electromagnetic design, prediction of RF effects against military and civilian targets, determining shielding effectiveness, system effectiveness predictions, design of experiment and evaluation of short-pulse, HPM systems and antennas, electromagnetic propagation and electronics countermeasure systems. Areas of application include assessment of threats, analysis of the operational environment, determination of system performance requirements, specification of system configuration, definition of interface parameters, definition of integration and support requirements, definition of multi-system coordination, and analyses of environmental interactions. The contractor shall perform validation studies to determine the accuracy of the developed models and simulations. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.4.3 The contractor shall perform the mathematical and statistical analysis of test planning, test results, data analysis and potential electromagnetic effects impact such as the ability to deny, disrupt

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 9 of 66	FINAL
----------------------------------	----------------------------	-----------------	-------

or damage target electronics. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.4.4 The contractor shall design, develop, update and maintain technical databases associated with target effects, test results, equipment, experimental tests and facilities on PC -based software and hardware systems. Required deliverables shall be in accordance with requirements of CDRL A005.

C.2.5 PROTOTYPE DEVELOPMENT/EVALUATION SUPPORT

C.2.5.1 The contractor shall support design, develop and analysis associated with prototypes, scale models, mock -ups, and test models of Directed Energy systems or system elements. Additionally, the contractor shall be required to operate, troubleshoot and resolve problems for prototypes, mock -ups and models under test or being prepared for test. Types of prototypes include high -voltage short-pulse RF sources, high power microwave long -pulse systems, high rep -rate wideband systems, Pulsed Power and Prime Power, High Voltage, RF antennas and sensor systems and control systems. These efforts may include the use of advanced materials such as composites, ceramics and metals for use in components such as capacitors, switches and structures. Areas of application include analysis of the operational environment, determination of system performance, specification of system configuration, definition of interface parameters, definition of integration and support requirements, and analyses of environmental impact. The contractor shall develop and maintain an inventory database for prototype parts, support equipment and associated components. Inventory management shall include asset visibility, project stock, warehousing, storage and distribution modules to support audits, control, access and reporting of on -hand and disposed of prototype parts, components and containers. The contractor shall support integration of existing equipment or software into different applications or platforms and support the development of alterations to on -hand Directed Energy systems. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.5.2 The contractor shall support government efforts to design, acquire, develop, analyze, fabricate and operate prototypes, scale models, mock -ups, and test models of representative target systems such as computer networks, industrial systems, commercial electronics, security systems and infrastructure controls. This includes determining most common equipment, architectures, and applications in use. The contractor shall assemble mechanical enclosures and prototype hardware, wire prototype components, produce cables, layout and populate electronic circuit board and circuit board soldering. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.5.3 The contractor shall be required to fabricate some of the prototypes for Directed Energy systems or targets. This task could include the acquisition and fabrication of specialized material and equipment such as interface hardware, targets, special test bed circuits, surrogate test objects, source components, diagnostic hardware, control systems, mounts, gimbal systems, generator components, mechanical enclosures and structures, source components and replacement parts. The

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 10 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

contractor will identify, evaluate and test applicable Commercial Off -the-Shelf (COTS) hardware, firmware and software for suitability in satisfying prototype requirements. Purchases over \$10K will need to be approved prior to purchase by the Contracting Officer if the Offeror doesn't have a an approved Purchasing System. Required deliverables shall be in accordance with the requirements of CDRLs A004, A005 and A008.

C.2.5.4 The contractor shall evaluate the operational and technical performance of components and subsystems used in Directed Energy prototypes. These evaluations often will require the use of specialized measurement devices, calibration facilities, instrumentation, data acquisition and processing systems. The contractor shall use and maintain these specialized systems and when necessary acquire or design, develop and fabricate these specialized systems. Required deliverables shall be in accordance with the requirements of CDRLs A004, A005 and A008.

C.2.5.5 The contractor shall provide technical drawings and specifications for prototype designs and interfaces. A technical data package shall include applicable technical data such as drawings and associated lists, specifications, standards, performance requirements, quality assurance provisions and packaging details. The contractor shall also provide any unique testing, processing requirements and maintenance guides. Updates to existing prototype design documentation may also be necessary to include in the technical package. Documentation may be in the form of paper, electronic packages, or software and may include Computer -aided design (CAD) drawings, interface drawings, assembly or operation and maintenance documentation and parts specifications. Required deliverables shall be in accordance with the requirements of CDRLs A003, A004, A005 and A007.

C.2.5.6 The contractor shall develop advanced multi -channel high -speed data acquisition systems and high-speed diagnostic systems for measuring parameters and effects of Directed Energy weapon systems and subsystems, as necessary. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.6 SYSTEMS TEST AND EVALUATION/TEST FACILITY OPERATIONS SUPPORT/DEPLOYMENT PREPARATION

C.2.6.1 The contractor shall develop and conduct operational tests to measure effectiveness of full and reduced scale models, mock -ups, prototypes and component technologies for a variety of Directed Energy systems/components – high average or peak power RF sources, high power microwave systems, high rep -rate wideband systems, pulsed power and prime power systems, High Voltage systems, control systems and antennas. The contractor shall also develop test definitions, designs and specifications for static and dynamic tests of Directed Energy systems and components in controlled laboratory environments, under simulated dynamic field conditions and under actual field conditions. The types of testing include target vulnerability effects, source characterization, field mapping, shielding effects, direct injection, functional, environmental effects, performance and waveforms. The contractor shall develop the necessary test plans, test simulation and emulation, test documentation, safety plans, risk hazard assessments and Standard Operating Procedures (SOP). The contractor shall set up and check out all test and prototype equipment prior to test, prepare test site and transport all necessary equipment to the test site, teardown and clean up test site after test, if

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 11 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

appropriate. The contractor shall produce written test plans, data recording (planning/storage), event reconstruction, data analysis and final report documentation of the test results. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.6.2 The contractor shall develop, assemble, monitor, test, and maintain operation during testing of common infrastructure and mission support systems such as communications systems, sensor systems, power systems, data acquisition and processing systems, distributed control systems, programmable logic systems, alarm systems, industrial systems, and computer information systems to be used at test targets to determine effects of a Directed Energy attack and countermeasures against such attacks. This may include computer systems (networks and servers); supervisory control and data acquisition systems; commercial infrastructure systems such as power, telephone, radio, traffic, security systems; and electrical/mechanical systems such as pumps, motors, valves, and controls. This is typically commercially available hardware and software with potential modifications required for testing or monitoring requirements. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A005.

C.2.6.3 The contractor shall conduct calibration and operation of specialized hardware and diagnostic equipment during testing. The contractor shall also develop, calibrate and operate RF diagnostics required to measure quantities such as electric and magnetic fields, short -pulse high -voltage waveforms, radiated field patterns antenna designs, intensity, attenuation ratios, and efficiencies. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A007.

C.2.6.4 The Contractor shall provide and/or coordinate use of unique targeted equipments and associated interface hardware, software and the operators/technicians needed to operate these equipments in support of system tests. This includes calibration instrumentation and electrical or mechanical fixtures to interface system or test equipment to land, air, shipboard or subsurface platforms. Additional provisioning of all jigs, mounts, configurations, and mock -ups to operate these equipments and obtain characterization measurements shall be provided by the contractor. The contractor shall acquire, fabricate and machine parts or equipment for bench and field tests or test platforms. Purchases over \$10K will need to be approved by the Contracting Officer prior to purchase. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A008.

C.2.6.5 The contractor shall disassemble, configure and pack Directed Energy system prototypes and/or components for shipment to CONUS locations. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.2.6.6 The contractor shall provide offsite test support to include CONUS locations. It is estimated that travel to offsite destinations will be required during each year of performance during the life of the contract. Required deliverables shall be in accordance with the requirements of CDRLs A004 and A008.

C.2.6.7 The contractor shall provide for the development of specifications and implementation of security procedures for laboratory and test facilities that are suitable for classified operations at the Secret and Top Secret levels. Required deliverables shall be in accordance with the requirements of CDRL A004.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 12 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

C.2.7 PROGRAM MANAGEMENT/ADMINISTRATIVE SUPPORT

C.2.7.1 The contractor shall provide programmatic support related to specific assigned technical efforts, including the development of Program Plans, Plans of Action and Milestones (POA&M), work breakdown structures, staffing plans, financial documentation, Quality Assurance Plans and Procedures, Configuration Management Plans, point papers, status reports, Situation Reports, Operations/User Manuals, technical drawings/diagrams, training materials and other written or electronic documentation that describe planned, current or future operations or tasks related to Directed Energy programs required to support the Q20 mission requirements and objectives. Required deliverables shall be in accordance with the requirements of CDRLs A004, A006 and A007.

C.2.7.2 The contractor shall support the planning and execution of technical meetings, workshops, and/or conferences in which one or more of the Directed Energy programs or capabilities are presented. This includes technical support to arrange the program, technical and administrative staffing during the meetings, collection and preparation of briefing materials and papers for post meeting distribution, recording minutes and action items and implementation of security procedures for classified meetings. This also includes hosting project team, planning and status meetings at the contractor's facility. Required deliverables shall be in accordance with the requirements of CDRLs A002, A004 and A006.

C.2.7.3 The contractor shall provide technical editing and document and graphics support in the preparation of technical publications. Required deliverables shall be in accordance with the requirements of CDRLs A002 and A006.

C.2.7.4 The contractor shall log, label, track, and dispose of classified materials generated as a direct product of this contract. Required deliverables shall be in accordance with the requirements of CDRL A004.

C.3 GOVERNMENT FURNISHED PROPERTY/FACILITIES

C.3.1 The government will provide access to NMCI/other government computer resources as required.

C.3.2 Much of the contract performance will occur in government spaces. Q20 has laboratory and outdoor experimental facilities and equipment to develop and evaluate Directed Energy systems. These resources include: equipment and test vans, fiber optic data links, laboratories, computer and simulation systems, fabrication/shop facilities and outdoor ranges for testing Directed Energy components and systems. Contractors will be provided access to these resources, when appropriate. The buildings, room numbers and facilities are reflected below:

Bldg	Room	Facility Name
194		Hangar (temporary)
213	2018 / 2018A	Modeling Lab
213	1006	Electronic & Systems Development Lab
213	1007	RF Lab

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 13 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

213	1008	High Bay
213	1014	GTEM Lab
994		
1118		HIVAR
1120		PUPFAC
	101A	
	102	
	103	
1332		MOATS (Citadelle)
1334		MOATS (Bastille)
1470	1406	SIPRNET Room ("Bowling Alley")
1470	1410	Conference Room ("NIRF Conference Room")
1470	1502	GTEM Lab
1470	1511	OPAL Lab
1470	1512	Instrumentation and Diagnostics Lab
1470	1513	Prototype and Fabrication Lab
1470	1612	NLUAV
1495		FAST
1502		WAF

C.4 TASK ORDER MANAGEMENT

C.4.1 Schedule

C.4.1.1 The contractor shall deliver and maintain an integrated project schedule using Microsoft Project that shows all resource-loaded tasks through level 2, durations, dependencies and deliverables.

C.4.2 Monthly Progress Report (A001)

C.4.2.1 The contractor shall submit a Monthly Progress Report (MPR) by the 15th of the month following the month being reported on. The cutoff date of the report shall be the same as that used for invoicing purposes by the prime contractor. Any and all subcontractor, consultant, vendor data shall be current through the "as of" date of the report. The report shall be unclassified and reflect no proprietary markings; narrative information shall be in Microsoft Word. Any trips conducted during the reporting period will require a trip report specifying the purpose, duration, attendee's, cost. E-mail submission is required. The specific format shall be pre-approved by the COR and the Contract Specialist.

C.4.2.2 This Task Order will be funded from a variety of sponsors. It will be necessary, therefore, for the Monthly Progress Report to separately report on work accomplished for each project area both in terms of technical accomplishments and expenditure data. The level of detail identified in the sections below will be required for each project area.

C.4.2.3 Each line of funding obligated against this Task Order will have a unique subCLIN, or SLIN. These SLINs are automatically established by SeaPort-e. This can result in a situation

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 14 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

where the same line of accounting, or ACRN, could be obligated under multiple SLINs. Invoicing is accomplished at the SLIN level within Wide Area Workflow.

C.4.2.4 The Monthly Progress Report shall be distributed to the COR, Area Director and the Contract Specialist in its entirety. Individual project/task leads shall be provided that section of the report that applies to their respective projects. The following information shall be provided as a minimum in the Monthly Progress Report. The Government will provide a template to be used for displaying the following information. The Government reserves the right to change the template as necessary to respond to Sponsor reporting requirements.

C.4.2.4.1 Summary Information: The contractor shall include a summary of all funded tasks/projects/Technical Instructions (TIs) under the Task Order.

C.4.2.4.2 This summary shall be organized by Task Order period (Base, Option 1, etc.) and shall include the following data: Project name, TI number (if applicable), funded amount, expenditures to date, funding balance and expenditure of hours. It is expected that as data for completed CLINs are revised due to indirect rate adjustments or other reasons, deobligations of excess amounts, etc., information in this summary section shall be revised accordingly.

C.4.2.4.3 For both current and completed CLINs, provide tables that show ceiling hours, funded hours, and both current and cumulative hours (separately identify regular hours from Uncompensated Time/Total Time Accounting (UT/TTA) hours) charged to the Task Order by Task Order labor category. Provide subtotals for key and non-key categories and overall totals.

C.4.2.4.4 Following this summary expenditure information, the report shall identify the CLIN currently being performed and its period of performance. List current CLIN Task Order modifications by number, to include date issued and description. List TIs issued by number, date issued and description.

C.4.2.4.5 Detailed information to be provided by task/project/TI and functional area: The data described below shall be provided for each project/work area/technical instruction. The document shall provide a separate section or module for each task/project/TI. Sections and modules are required only for work being performed during the current period or CLIN.

C.4.2.4.6 Discuss efforts performed during the reporting period.

C.4.2.4.7 Identify any problems encountered (technical/schedule/cost) and resolutions. Specifically note if there are any unresolved problems/issues at the end of the reporting period.

C.4.2.4.8 Specifically state whether the task is on schedule, ahead of schedule, or behind schedule. If behind schedule, discuss what steps are being or will be taken to complete all requirements on time if possible, or provide a proposed revised schedule based on best current estimates. Note that any revisions to the delivery schedule could require advance Government approval by modification to the TI.

C.4.2.4.9 Provide the status of all assigned deliverables. Include title, CDRL number, due date, date delivered, applicable task or TI, Government point of contact, Contractor point of contact and description of deliverable(s). The final report for each contract period shall include a cumulative list of all deliverable items provided. Detail shall be the same as that provided in individual monthly reports.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 15 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

C.4.2.4.10 Identify any open correspondence that requires either Government or Contractor action.

C.4.2.4.11 Financial and other information: It is a material requirement of this Task Order that expenditure information be current thru the "as of" date of the report for all performers (prime contractor, subcontractor, consultant, vendor). It is understood that this data may reflect higher expenditures than what has been invoiced. For example, a report for the period ending 31 Oct 2010 is expected to reflect all subcontractor expenditures in terms of hours and dollars thru 31 Oct 2010 whether or not these amounts have been invoiced to, or paid by, the prime contractor.

C.4.2.4.12 Individual project/task/TI sections or modules are required only for work being performed during the current period or CLIN.

C.4.2.4.13 Provide current and cumulative expenditures of both hours and dollars. The level of detail shall be at the Labor Category, Year or TI level for this and subsequent paragraphs. Separately show expenditures by CLIN (labor and ODC). Show the amount funded and compute a funding balance.

C.4.2.4.14 Provide line graphs showing cumulative expenditures of both hours and dollars. These graphs shall show planned cumulative expenditures as well as cumulative funded level(s). Planned values may not be linear and will require revision as/if plans change. Provide numerical values for all points graphed. Dollar expenditures may be rounded to the nearest dollar; quantities of labor hours may be rounded to the nearest hour.

C.4.2.4.15 Provide the names of all personnel charging. Organize this data by Task Order labor category and show both current and cumulative hours charged for each individual. Separately show UT/TTA hours worked (if applicable). Task Order labor categories shall be identified as to whether they are key or non-key categories. Subtotals shall be provided for key and non-key categories as well as total current and cumulative hours. These data shall include subcontractor/consultant hours in appropriate labor categories.

C.4.2.4.16 Identification of all items charged against the ODC CLIN. Include description of item, quantity, purpose, vendor, unit price, extended price and disposition.

C.4.2.4.17 Total expenditures shall be compared to those invoiced for the same period and differences explained. It is understood that subcontractor/consultant expenditures reported in the Monthly Progress Report will frequently be greater than the amounts invoiced.

C.4.2.4.18 The contractor shall be responsive to requests for changes to the above requirements if, during performance, the Government identifies a need for additional/revised information to be included. All changes to the Monthly Progress Report shall be approved in advance by the COR and the Contracting Specialist.

C.4.2.4.19 Invoice Information

Direct Labor - Provide current and cumulative expenditures (both labor hours and dollars) invoiced by Cost Center where charges originated. Identify the Cost Center. Show totals for both current and cumulative invoiced amounts.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 16 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Indirects - List each indirect rate being invoiced, showing applicable Cost Center as well as current and cumulative dollar amounts by Cost Center. Also show total indirect costs, both current and cumulative. Compare rates being invoiced to the rates proposed for the task order period.

Subcontracts/Consultants - Provide copies of invoices received from subcontractors and consultants as well as evidence of your review to ensure that all invoiced costs represent services that have been performed and deliverable items.

Fixed Fee - Show each fee rate applied, together with current and cumulative dollar amounts. Show the base to which each fee rate was applied.

Other Direct Costs - List category of expense (airfare, per diem, supplies, etc.) and show both current and cumulative expenditures for each category. Be prepared to provide copy of receipt documentaion to the COR or Contract Specialist if requested.

SF1034/SF1035. If the contractor has prepared an SF1034/1035, attach a complete copy.

Total expenditures per the Monthly Progress Report shall be compared to those invoiced for the same period and differences explained. It is understood that subcontractor/consultant expenditures reported in the Monthly Progress Report will frequently be greater than the amounts invoiced.

C.4.2.4.20 Following this summary expenditure information, the report shall identify the CLIN currently being performed and its period of performance. List current CLIN Task Order modifications by number, to include date issued and description. List TIs issued or funded projects/work areas by number (where applicable), date issued and description. Show amount funded, total expenditures, funding balance, and total invoiced to dated.

C.4.2.5 Information to be provided by task/project/TI: The data described below shall be provided for each project/work area/technical instruction. It is desired that there be a separate section or module for each.

C.4.2.5.1 Discuss efforts performed during the reporting period. Where work is performed by a subcontractor, specifically also address the value-added tasks performed by the prime contractor.

C.4.2.5.2 Identify any problems encountered (technical/schedule/cost) and resolutions. Specifically note if there are any unresolved problems/issues at the end of the reporting period.

C.4.2.5.3 Specifically state whether the task is on schedule, ahead of schedule, or behind schedule. If behind schedule, discuss what steps are being or will be taken to complete all requirements on time if possible, or provide a proposed revised schedule based on best current estimates. Note that any revisions to the delivery schedule could require advance Government approval by modification to the TI/tasking document.

C.4.2.5.4 Provide the status of all assigned deliverables. Include title, CDRL number, due date, date delivered, Contractor point of contact and description or title of deliverable(s). The final report for each contract period shall include a cumulative list of all deliverable items provided. Detail shall

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 17 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

be the same as that provided in individual monthly reports.

C.4.2.5.6 Identify any open correspondence/e-mail that requires either Government or Contractor action.

C.4.3 Financial and other information

It is a material requirement of this Task Order that expenditure information be current thru the "as of" date of the report for all performers (prime contractor, subcontractor, consultant, vendor). It is understood that this data may reflect higher expenditures than what has been invoiced. For example, a report for the period ending 31 Oct 2007 is expected to reflect all subcontractor expenditures in terms of hours and dollars thru 31 Oct 2007 whether or not these amounts have been invoiced to the prime contractor.

C.4.3.1 Individual project/task/TI sections or modules are required only for work being performed during the current period or CLIN.

C.4.3.2 Provide current and cumulative expenditures of both hours and dollars. Separately show expenditures by CLIN (labor and ODC). Show the amount funded and compute a funding balance.

C.4.3.3 Provide line graphs showing cumulative expenditures of both hours and dollars. These graphs shall show planned cumulative expenditures as well as cumulative funded level(s). It is understood that planned values may not be linear and will require revision as projections change. Provide numerical values for all points graphed. Dollar expenditures may be rounded to the nearest dollar; quantities of labor hours may be rounded to the nearest hour.

C.4.3.4 Provide the names of all personnel charging. Organize these data by Task Order labor category and show both current and cumulative hours charged for each individual. Separately show uncompensated hours/TTA hours worked (if applicable). Task Order labor categories shall be identified as to whether they are key or non-key categories. Subtotals shall be provided for key and non-key categories as well as total current and cumulative hours. These data shall include subcontractor/ consultant hours in appropriate labor categories.

C.4.3.5 Identification of all items charged against the task/project/TI. Include description of item, quantity, purpose, vendor, unit price, extended price and disposition.

C.4.3.6 Travel Performed. Identify all travel direct-charged during the period, showing the following for each: Destination, purpose of trip, number of travelers, length of trip, and estimated cost of the trip. It is understood that these costs are estimates only and that actuals would be available only after all travel claims have been paid.

C.4.4 Table of Approved Personnel

C.4.3.1 The contractor shall submit a monthly report showing all personnel who have been approved to charge to this Task Order. This report is due concurrent with submission of the

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 18 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

first Monthly Progress Report, 15 days after the end of the month being reported on.

C.4.3.2 This report shall be submitted in table format that shall show the following: Task Order labor category, individual's name, employer, location (if Government working space), date resume submitted, date resume approved, and date removed. If a resume is submitted as a replacement for a Key Person approved at time of award, the name of the individual being replaced shall also be provided. The specific format will be addressed at the Task Order Kick -Off meeting.

C.4.4 Plan of Actions and Milestone (POA&M) Requirements

The contractor shall develop a POA&M for each work element. The signed POA&M shall be provided electronically to the Contract Specialist, the COR, and the appropriate Government Technical Assistant (TA) or Lead (TA) within forty -five (45) calendar days after issuance of the order. Thereafter, plans shall be updated bi-annually or as needed. While contractor format is acceptable, with Government's approval, the following information, as a minimum, shall appear in each POA&M. (CDRL A006).

- a. Date POA&M prepared/revised
- b. Work Element (number and title)
- c. Revision number if applicable
- d. Contract and Order Number
- e. POA&M Period Of Performance
- f. Contractor Interfaces/Points Of Contact (technical area)
- g. Government Interfaces/POC
- h. Estimated labor hours and total cost (including fee)
- i. Work summary - to include tasking for the year
- j. Subcontractors identified by name
- k. Travel
- i. Data items to be delivered

C.4.5 In Progress Review (IPR)

The contractor shall participate in both formal and informal IPRs of work being performed. IPRs may be conducted at the overall Task Order level or for specific projects/work areas/TIs. Reviews will be scheduled by the Government and held in Government spaces. At the time the review is scheduled, the Government will communicate the specific purpose of the review and advise the

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 19 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

contractor as to the desired content of the presentation. The contractor shall provide copies of slides presented to all attendees. An initial formal IPR is planned within 60 days of the Task Order award date and will follow an agenda agreed to by the COR. Subsequent formal IPRs shall be held approximately every 90 days thereafter unless waived by the Government.

C.4.6 Task Prioritization Meeting

The contractor shall participate in periodic Task Prioritization Meetings with the COR and TI leads. The purpose of these meetings is to convey the Government's technical program schedules and priorities and to identify corresponding project priorities. It is anticipated that these meetings will occur on a biweekly basis. At the Government's discretion, these meeting may be conducted by conference call. Results of these meetings shall be documented in the Biweekly Progress Report.

C.4.7 Technical Instruction/Project/Work Area Plan

The Government may require the contractor to submit execution plans for large and/or high visibility projects. These plans would typically include schedules, priorities, management approach, and staffing plans. Schedule data shall be delivered and maintained in Microsoft Project and will include resource loading, durations, dependencies and deliverables. Other items may be identified by TI.

C.5 SECURITY

Many projects under this Task Order will be conducted at security levels up to and including TOP SECRET. The Department of Defense Contract Security Classification Specification (DD Form 254) provides the security classification requirements for this order. The contractor shall obtain facility and personnel security clearances as required by the Department Industrial Security Program prior to starting to work on tasks in this contract. Access to classified spaces and material and generation of classified material shall be in accordance with the attached DD Form 254. All technical and other data provided to and/or developed by the contractor shall be protected from public disclosure in accordance with the markings contained thereon. All information relating to the items to be delivered or services to be performed under this task order may not be disclosed by any means without prior approval of the Contracting Officer and the task order manager.

C.6 TRAVEL

Travel to offsite destinations will be required during each period of performance during the life of the order. Field exercises will be conducted at one or more of the Major Range and Test Facility Base (MRTFB) locations as follows:

- White Sands, NM
- Yuma, AZ
- China Lake, CA
- Utah Test Range, UT
- Air Force Research Laboratory, NM
- San Nicholas Island CA

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 20 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Possibility of travel at other Contractor sites and onboard ships may be required. For each one year period, an estimated minimum of:

- one two-week trip to test locations in CONUS
- one one-week trip to test locations in CONUS
- one four-week trip to test locations in CONUS
- twenty five (25) two-day trips to East Coast locations
- one one-week trip to support international meetings to OCONUS (European locations)
- twenty five (25) one-day trips to the Washington Metropolitan area.

All travel will be conducted in accordance with the Joint Travel Regulations (JTR) and the Federal Travel Regulations (FTR) and shall be preapproved by the COR.

C.7 DELIVERABLE REQUIREMENTS

Specific deliverables requirements are identified below. Copies of all deliverable, both formal and informal, shall be provided to the following distribution: COR, ACOR, Q20, Area Director, TI leads. Other distribution may be mutually agreed to.

CDRL No.: A001

Title: CONTRACTOR'S PROGRESS, STATUS AND MANAGEMENT REPORT

DID No.: DI-MGMT-80227

Frequency: Biweekly

Date of First Submission: Due 10 days after the end of the Biweekly period being reported on.

Date of Subsequent Submissions: Biweekly thereafter.

Remarks: Content to be as specified in C.4.2 above.

CDRL No.: A002

Title: PRESENTATION MATERIAL

Subtitle: In Process Review Briefings, Technical Presentations

DID No.: DI-ADMN-81373

Frequency: As required

Remarks: Delivery schedule to be established at time of government request.

CDRL No.: A003

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 21 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Title: REVISIONS TO EXISTING GOVERNMENT DOCUMENTS

DID No.: DI-ADMN-80925

Frequency: As required

Remarks: Revised document to carry the same title as previous. Delivery schedule to be established at Task Prioritization Meetings.

CDRL No.: A004

Title: TECHNICAL REPORT – STUDY/ SERVICES CONTRACT

Subtitle: See Remarks section.

DID No.: DI-MISC-80508

Remarks: Titles include, but are not limited to: technical reports, feasibility studies, technical specifications, test reports and technical databases. Delivery schedule to be established at Task Prioritization Meetings.

CDRL No.: A005

Title: COMPUTER SOFTWARE PRODUCT END ITEMS

DID No.: DI-MCCR-80700

Remarks: Titles include, but are not limited to: computer simulations, models, technical databases. Delivery schedule to be established at Task Prioritization Meetings.

CDRL No.: A006

Title: TECHNICAL REPORT – STUDY/SERVICES CONTRACT

Subtitle: Plan of Action and Milestones

DID No.: DI-MISC-80508

Frequency: As required

Remarks: Delivery schedule in accordance with C.4.1.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 22 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

CDRL No.: A007

Title: ENGINEERING DRAWINGS

DID No.: DI-DRPR-80651

Frequency: As required

Remarks: Delivery schedule to be established at Task Prioritization Meetings.

CDRL No.: A008

Title: PRODUCTION INSPECTION EQUIPMENT TEST SYSTEMS
ENGINEERING DESIGN DATA

Subtitle: Engineering Specifications

DID No.: DI-RELI-80261

Frequency: As required

Remarks: Delivery schedule to be established at Task Prioritization Meetings.

C.8 NON-DISCLOSURE AGREEMENTS (NDAs)

NDAs may be utilized to allow for access to company sensitive/proprietary data. For tasks requiring NDAs the contractor shall obtain appropriate agreements for all of their employees that are associated with the task requiring such an agreement.

Contractor personnel may be required, from time to time, to sign non -disclosure statements as applicable to specific tasking. The COR will notify the contractor of the number and type of personnel that will need to sign the Non -Disclosure agreements. The signed Non -Disclosure Agreements shall be executed prior to accessing data or providing support for information that is considered business or program sensitive and returned to the COR for endorsement and retention. Copies of all executed NDAs shall be provided to the COR.

C.9 NON-PERSONAL SERVICES/ INHERENTLY GOVERNMENTAL FUNCTIONS

(a) The Government will neither supervise contractor employees nor control the method by which the contractor performs the required tasks. Under no circumstances shall the Government assign tasks to, or prepare work schedules for, individual contractor employees. It shall be the responsibility of the contractor to manage its employees and to guard against any actions that are of the nature of personal services or give the perception that personal services are being provided. If the contractor feels that any actions constitute, or are perceived to constitute personal services, it shall be the contractor's responsibility to notify the Contracting Officer immediately.

(b) Inherently-Governmental functions are not within the scope of this Task Order. Decisions

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 23 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

relative to programs supported by the contractor shall be the sole responsibility of the Government. The contractor may be required to attend technical meetings for the Government; however, they are not, under any circumstances, authorized to represent the Government or give the appearance that they are doing so.

C.10 CONTROL OF CONTRACTOR PERSONNEL

The contractor shall comply with the requirements of NAVSEA and NSWCDD instructions regarding performance in Government facilities. All persons engaged in work while on Government property shall be subject to search of their persons (no bodily search) and vehicles at any time by the Government, and shall report any known or suspected security violations to the appropriate Security Department. Assignment, transfer, and reassignment of contractor personnel shall be at the discretion of the contractor. However, when the Government directs, the contractor shall remove from contract performance any person who endangers life, property, or national security through improper conduct. All contractor personnel engaged in work while on Government property shall be subject to the Standards of Conduct contained in SECNAVINST 5370.2J.

C.11 DIGITAL DELIVERY OF DATA

(a) Delivery by the Contractor to the Government of certain technical data and other information is now frequently required to be made in digital form rather than in hardcopy form. The method of delivery of such data and/or other information (i.e., in electronic, digital, paper hardcopy, or other form) shall not be deemed to affect in any way either the identity of the information (i.e., as “technical data” or “computer software”) or the Government’s and the Contractor’s respective rights therein.

(b) Whenever technical data and/or computer software deliverables required by this contract are to be delivered in digital form, any authorized, required, or permitted markings relating to the Government’s rights in and to such technical data and/or computer software must also be digitally included as part of the deliverable and on or in the same medium used to deliver the technical data and/or software. Such markings must be clearly associated with the corresponding technical data and/or computer software to which the markings relate and must be included in such a way that the marking(s) appear in human-readable form when the technical data and/or software is accessed and/or used. Such markings must also be applied in conspicuous human-readable form on a visible portion of any physical medium used to effect delivery of the technical data and/or computer software. Nothing in this paragraph shall replace or relieve the Contractor’s obligations with respect to requirements for marking technical data and/or computer software that are imposed by other applicable clauses such as, where applicable and without limitation, DFARS 252.227-7013 and/or DFARS 252.227-7014.

C.12 IDENTIFICATION BADGES

The contractor shall be required to obtain identification badges from the Government for all contractor personnel to be located on Government property. The identification badge shall be visible at all times while employees are on Government property. The contractor shall furnish all requested information required to facilitate issuance of identification badges and shall conform to applicable regulations concerning the use and possession of the badges. The contractor shall be responsible for ensuring that all identification badges issued to contractor employees are returned to the appropriate Security Office within 48 hours following completion of the Task Order, relocation

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 24 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

or termination of an employee, and upon request by the Contracting Officer.

C.13 USE OF INFORMATION SYSTEM (IS) RESOURCES

Contractor Provision of IS Resources

Except in special circumstances explicitly detailed elsewhere in this document, the Contractor shall provide all IS resources needed in the performance of this contract. This includes, but is not limited to computers, software, networks, certificates, and network addresses.

Contractor Use of NSWCDD IS Resources

In the event that the contractor is required to have access to NSWCDD IS resources, the login name used for access shall conform to the NMCI login naming convention. If the contractor requires access to applications/systems that utilize client certificates for authentication, the contractor is responsible for obtaining requisite certificates from a DOD or External Certificate Authority.

If this contract requires that the contractor be granted access and use of NSWCDD IS resources (at any site), the IS shall be accredited for contractor use in accordance with procedures specified by the Information Assurance Office.

Connections Between NSWCDD and Contractor Facilities

If there is a requirement (specifically delineated elsewhere in this contract) for interconnection (e.g., link level or Virtual Private Network (VPN)) between any facilities and/or ISs owned or operated by the contractor and ISs owned or operated by NSWCDD, such interconnection shall take place only after approval from the NSWCDD Information Assurance Office. All such connections as well as the ISs connected thereto will be accredited in accordance with DOD policy (DODI 5200.40) by the cognizant Designated Approving authority (DAA) and comply with the requirements of CJCSI 6211.02B regarding Memorandums of Agreement. All such connections will be made outside the appropriate NSWCDD firewall.

C.14 SKILLS AND TRAINING

The Contractor shall provide capable personnel with qualifications, experience levels, security clearances, and necessary licenses, certifications, and training required by Federal, State, and Local laws and regulations. Training necessary to ensure that personnel performing under this contract maintain the knowledge and skills to successfully perform the required functions is the responsibility of the Contractor. Training necessary to maintain professional certification is the responsibility of the Contractor.

C.15 SUBCONTRACTORS/CONSULTANTS

In addition to the information required by FAR 52.244-2 Alternate 1 of the contractor's SeaPort-e contract, the contractor shall include the following information in requests to add subcontractors or consultants during performance, regardless of subcontract type or pricing arrangement.

(1) The results of negotiations to incorporate rate caps no higher than the lower of (i) SeaPort -e rate

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 25 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

caps for the prime contractor, or in the case where the proposed subcontractor is also a SeaPort -e prime, (ii) rate caps that are no higher than the subcontractor's prime SeaPort -e contract.

(2) Impact on subcontracting goals, and

(3) Impact on providing support at the contracted value

C.16 SHIPBOARD PROTOCOL

16.1 This task order will involve working onboard U.S. and/or foreign naval ships or vessels . As such, the Contractor is reminded of its responsibility to assure that shipboard protocol is stringently followed. Specifically, visit requests must be arranged through the Government sponsor and must be forwarded to the individual command being visited as well as to all supporting commands, such as the base, squadron, tender, etc. that the visitor must pass through to get to the ship or vessel; the Contractor is responsible for obtaining and maintaining specialized training (i.e., nuclear awareness, safety, quality control, etc.) and certification (i.e., SUBSAFE certification, etc.); personnel performing onboard U.S. Navy ships must have at least a SECRET security clearance; if not led by a Government representative, the Contractor is responsible for briefing the ship/command upon arrival; and, the Contractor is responsible for debriefing the ship/command upon departure to include the operational status of the equipment.

16.2 The Contractor shall ensure that its personnel adhere to these requirements when performing shipboard operations or tasks. Compliance shall be reported in the trip report, CDRL Requirement A001.

16.2.1 All personnel working shipboard shall possess at least a SECRET security clearance.

16.2.2 All personnel, while shipboard, shall conform to the rules and regulations of the ship. It is the responsibility of the Contractor to determine the proper rules, regulations, actions, policy, and procedures.

16.2.2.1 Alarms – actual or drill

16.2.2.2 Safety – hardhats, tag-outs, safety shoes, goggles, etc. as applicable

16.2.2.3 HAZMAT – bringing hazardous materials aboard, using hazardous materials, etc.

16.2.3 The designated team lead shall, upon arrival, brief the Commanding Officer or his/her designated representative as to the purpose of the visit and expected duration.

16.2.4 The designated team lead shall, upon departure, debrief the Commanding Officer or his/her designated representative as to the success of the work performed.

Ddl-C30 HAZARDOUS MATERIALS USED ON GOVERNMENT SITE

(a) This clause applies if hazardous materials are utilized at any time during the performance of work

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 26 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

on a Government site under this Task Order. Hazardous materials are defined in Federal Standard No. 313 and include items such as chemicals, paint, thinners, cleaning fluids, alcohol, epoxy, flammable solvents, or asbestos.

(b) The contractor shall have an active Hazard Communication Program in place for all contractor employees per 29 C.F.R. 1910.1200. Before delivery of any hazardous materials onto Government property, the Contractor shall provide both the Contracting Officer and the Contracting Officer's Representative (COR) with an inventory and Material Safety Data Sheet (MSDS) for these materials.

Ddi-C41 TERMINATION OF EMPLOYEES WITH NSWCDD BASE ACCESS

The contractor shall insure that all employees who have a NSWCDD badge and/or bumper sticker turn-in the badge and remove the bumper sticker immediately upon termination of their employment under this contract. The above requirement shall be made a part of the standard employee facility clearance procedures for all separated personnel. The contractor shall advise NSWCDD Physical Security of all changes in their contract personnel requiring NSWCDD base access.

For involuntarily separated personnel and those separated under adverse circumstances, the contractor shall notify NSWCDD Physical Security in advance of the date, time and location where the NSWCDD representative may physically remove the employee's automobile bumper sticker and retrieve the NSWCDD badge prior to the employee departing the contractor's facility. In the event the employee is separated in his or her absence, the contractor shall immediately notify NSWCDD Physical Security of the separation and make arrangements between the former employee and NSWCDD Physical Security for the return of the badge and removal of the sticker.

HQ C-2-0002 ACCESS TO PROPRIETARY DATA OR COMPUTER SOFTWARE (NAVSEA) (JUN 1994)

(a) Performance under this contract may require that the Contractor have access to technical data, computer software, or other sensitive data of another party who asserts that such data or software is proprietary. If access to such data or software is required or to be provided, the Contractor shall enter into a written agreement with such party prior to gaining access to such data or software. The agreement shall address, at a minimum, (1) access to, and use of, the proprietary data or software exclusively for the purposes of performance of the work required by this contract, and (2) safeguards to protect such data or software from unauthorized use or disclosure for so long as the data or software remains proprietary. In addition, the agreement shall not impose any limitation upon the Government or its employees with respect to such data or software. A copy of the executed agreement shall be provided to the Contracting Officer. The Government may unilaterally modify the contract to list those third parties with which the Contractor has agreement(s).

(b) The Contractor agrees to: (1) indoctrinate its personnel who will have access to the data or software as to the restrictions under which access is granted; (2) not disclose the data or software to another party or other Contractor personnel except as authorized by the Contracting Officer; (3) not engage in any other action, venture, or employment wherein this information will be used, other than under this contract, in any manner inconsistent with the spirit and intent of this requirement; (4) not

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 27 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

disclose the data or software to any other party, including, but not limited to, joint venturer, affiliate, successor, or assign of the Contractor; and (5) reproduce the restrictive stamp, marking, or legend on each use of the data or software whether in whole or in part.

(c) The restrictions on use and disclosure of the data and software described above also apply to such information received from the Government through any means to which the Contractor has access in the performance of this contract that contains proprietary or other restrictive markings.

(d) The Contractor agrees that it will promptly notify the Contracting Officer of any attempt by an individual, company, or Government representative not directly involved in the effort to be performed under this contract to gain access to such proprietary information. Such notification shall include the name and organization of the individual, company, or Government representative seeking access to such information.

(e) The Contractor shall include this requirement in subcontracts of any tier which involve access to information covered by paragraph (a), substituting "subcontractor" for "Contractor" where appropriate.

(f) Compliance with this requirement is a material requirement of this contract.

**HQ C-2-0011 COMPUTER SOFTWARE AND/OR COMPUTER DATABASE(S)
DELIVERED TO AND/OR RECEIVED FROM THE GOVERNMENT (NAVSEA)
(APR 2004)**

(a) The Contractor agrees to test for viruses all computer software and/or computer databases, as defined in the clause entitled "RIGHTS IN NONCOMMERCIAL COMPUTER SOFTWARE AND NONCOMMERCIAL COMPUTER SOFTWARE DOCUMENTATION" (DFARS 252.227-7014), before delivery of that computer software or computer database in whatever media and on whatever system the software is delivered. The Contractor warrants that any such computer software and/or computer database will be free of viruses when delivered.

(b) The Contractor agrees to test any computer software and/or computer database(s) received from the Government for viruses prior to use under this contract.

(c) Unless otherwise agreed in writing, any license agreement governing the use of any computer software to be delivered as a result of this contract must be paid -up and perpetual, or so nearly perpetual as to allow the use of the computer software or computer data base with the equipment for which it is obtained, or any replacement equipment, for so long as such equipment is used. Otherwise the computer software or computer database does not meet the minimum functional requirements of this contract. In the event that there is any routine to disable the computer software or computer database after the software is developed for or delivered to the Government, that routine shall not disable the computer software or computer database until at least twenty -five calendar years after the delivery date of the affected computer software or computer database to the

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 28 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Government.

(d) No copy protection devices or systems shall be used in any computer software or computer database delivered under this contract to restrict or limit the Government from making copies. This does not prohibit license agreements from specifying the maximum amount of copies that can be made.

HQ C-2-0037 ORGANIZATIONAL CONFLICT OF INTEREST (NAVSEA) (JUL 2000)

(a) "Organizational Conflict of Interest" means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the order work is or might be otherwise impaired, or a person has an unfair competitive advantage. "Person" as used herein includes Corporations, Partnerships, Joint Ventures, and other business enterprises.

(b) The Contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in the order, the Contractor does not have any organizational conflict of interest(s) as defined in paragraph (a).

(c) It is recognized that the effort to be performed by the Contractor under this order may create a potential organizational conflict of interest on the instant order or on a future acquisition. In order to avoid this potential conflict of interest, and at the same time to avoid prejudicing the best interest of the Government, the right of the Contractor to participate in future procurement of equipment and/or services that are the subject of any work under this order shall be limited as described below in accordance with the requirements of FAR 9.5.

(d) (1) The Contractor agrees that it shall not release, disclose, or use in any way that would permit or result in disclosure to any party outside the Government any information provided to the Contractor by the Government during or as a result of performance of this order. Such information includes, but is not limited to, information submitted to the Government on a confidential basis by other persons. Further, the prohibition against release of Government provided information extends to cover such information whether or not in its original form, e.g., where the information has been included in Contractor generated work or where it is discernible from materials incorporating or based upon such information. This prohibition shall not expire after a given period of time.

(2) The Contractor agrees that it shall not release, disclose, or use in any way that would permit or result in disclosure to any party outside the Government any information generated or derived during or as a result of performance of this order. This prohibition shall expire after a period of three years after completion of performance of this order.

(3) The prohibitions contained in subparagraphs (d)(1) and (d)(2) shall apply with equal force to any affiliate of the Contractor, any subcontractor, consultant, or employee of the Contractor, any joint venture involving the Contractor, any entity into or with which it may merge or affiliate, or any successor or assign of the Contractor. The terms of paragraph (f) of this Special Contract Requirement relating to notification shall apply to any release of information in contravention of this paragraph (d).

(e) The Contractor further agrees that, during the performance of this order and for a period of

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 29 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

three years after completion of performance of this order, the Contractor, any affiliate of the Contractor, any subcontractor, consultant, or employee of the Contractor, any joint venture involving the Contractor, any entity into or with which it may subsequently merge or affiliate, or any other successor or assign of the Contractor, shall not furnish to the United States Government, either as a prime contractor or as a subcontractor, or as a consultant to a prime contractor or subcontractor, any system, component or services which is the subject of the work to be performed under this order. This exclusion does not apply to any recompetition for those systems, components, or services furnished pursuant to this order.

As provided in FAR 9.505-2, if the Government procures the system, component, or services on the basis of work statements growing out of the effort performed under this order, from a source other than the contractor, subcontractor, affiliate, or assign of either, during the course of performance of this order or before the three year period following completion of this order has lapsed, the Contractor may, with the authorization of the cognizant Contracting Officer, participate in a subsequent procurement for the same system, component, or service. In other words, the Contractor may be authorized to compete for procurement(s) for systems, components, or services subsequent to an intervening procurement.

(f) The Contractor agrees that, if after award, it discovers an actual or potential organizational conflict of interest, it shall make immediate and full disclosure in writing to the Contracting Officer. The notification shall include a description of the actual or potential organizational conflict of interest, a description of the action, which the Contractor has taken or proposes to take to avoid, mitigate, or neutralize the conflict, and any other relevant information that would assist the Contracting Officer in making a determination on this matter. Notwithstanding this notification, the Government may terminate the order for the convenience of the Government if determined to be in the best interest of the Government.

(g) Notwithstanding paragraph (f) above, if the Contractor was aware, or should have been aware, of an organizational conflict of interest prior to the award of this order or becomes, or should become, aware of an organizational conflict of interest after award of this order and does not make an immediate and full disclosure in writing to the Contracting Officer, the Government may terminate this order for default.

(h) If the Contractor takes any action prohibited by this requirement or fails to take action required by this requirement, the Government may terminate this order for default.

(i) The Contracting Officer's decision as to the existence or nonexistence of an actual or potential organizational conflict of interest shall be final.

(j) Nothing in this requirement is intended to prohibit or preclude the Contractor from marketing or selling to the United States Government its product lines in existence on the effective date of this order; nor, shall this requirement preclude the Contractor from participating in any research and development or delivering any design development model or prototype of any such equipment. Additionally, sale of catalog or standard commercial items are exempt from this requirement.

(k) The Contractor shall promptly notify the Contracting Officer, in writing, if it has been tasked to evaluate or advise the Government concerning its own products or activities or those of a competitor in order to ensure proper safeguards exist to guarantee objectivity and to protect the Government's

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 30 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

interest.

(l) The Contractor shall include this requirement in subcontracts of any tier which involve access to information or situations/conditions covered by the preceding paragraphs, substituting "subcontractor" for "contractor" where appropriate.

(m) The rights and remedies described herein shall not be exclusive and are in addition to other rights and remedies provided by law or elsewhere included in this order.

(n) Compliance with this requirement is a material requirement of this order.

Ddl-G12 POST AWARD MEETING

(a) A Post Award Meeting with the successful offeror will be conducted within 15 working days after award of the contract. The meeting will be held at (TBD after award).

(b) The contractor will be given at least five working days notice prior to the date of the meeting by the Contracting Officer.

(c) The requirement for a Post Award meeting shall, in no event, constitute grounds for excusable delay by the Contractor in performance of any provisions of the Task Order.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 31 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION D PACKAGING AND MARKING

Delivery shall be in accordance with the provisions of the basic contract. Some deliveries may contain classified information.

HQ D-1-0001 DATA PACKAGING LANGUAGE

Data to be delivered by Integrated Digital Environment (IDE) or other electronic media shall be as specified in the contract.

All unclassified data to be shipped shall be prepared for shipment in accordance with best commercial practice.

Classified reports, data, and documentation shall be prepared for shipment in accordance with National Industrial Security Program Operating Manual (NISPOM), DOD 5220.22-M dated 28 February 2006.

HQ D-2-0008 MARKING OF REPORTS (NAVSEA) (SEP 1990)

All reports delivered by the Contractor to the Government under this contract shall prominently show on the cover of the report:

- (1) name and business address of the Contractor
- (2) contract number
- (3) contract dollar amount
- (4) whether the contract was competitively or non-competitively awarded
- (5) sponsor: See DD 1423s

(Name of Individual Sponsor)

(Name of Requiring Activity)

(City and State)

All Deliverables shall be packaged and marked IAW Best Commercial Practice.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 32 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION E INSPECTION AND ACCEPTANCE

Inspection and Acceptance shall be performed at NSWCDD, Dahlgren, VA by the Contracting Officer Representative (COR) designated herein.

PERFORMANCE BASED CRITERIA:

QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)

.

1. PURPOSE

(a) This Quality Assurance Surveillance Plan (QASP) is a Government developed and applied document used to ensure that systematic quality assurance methods are used in the administration of this performance based order. The intent is to ensure that the Contractor performs in accordance with the performance objectives and the Government receives the quality of services called for in the order.

(b) This Task Order provides technical and programmatic support for NSWCDD Directed Energy RDT&E. The resulting performance based order will have cost plus fixed fee Labor CLINS, and cost only Other Direct Cost (ODC) CLINS. The order will be for a base year with two one-year options. An additional surge option, labor and ODC, for each period is available. A properly executed QASP will assist the Government in achieving the overall objectives of this procurement.

.

2. AUTHORITY

Authority for issuance of this QASP is provided under Contract Section E – Inspection and Acceptance, which provides for inspections and acceptance of the services and documentation called for in service contracts, to be executed by the Contracting Officer or a duly authorized representative.

.

3. SCOPE

(a) The QASP is put in place to provide Government surveillance oversight of the contractor 's efforts to assure that they are timely, effective and are delivering the results specified in the order.

(b) The Contractor's performance on the Task Order will be evaluated by the Government as described below. The first evaluation will cover the first six months of performance with successive evaluations being performed for each twelve -month period thereafter until the contractor completes performance under this task order. For the first six month period and each subsequent twelve-month period, the Government will evaluate the contractor 's performance. The evaluation will encompass all work performed by the contractor at any time during the six/twelve -month period but will not include cumulative information from prior reports. For each period, the Contractor will complete a self -assessment of the performance provided, to be delivered to the COR and Contract Specialist NLT 60 days following the period being evaluated. The self -assessment shall cover all areas of the Government QASP. Based on the evaluation results, the Contracting Officer will assign an overall performance rating. If the Contracting Officer assigns an "Unsatisfactory" overall performance rating for the period evaluated, the next option period will not be exercised. As options are exercised, improved performance is required as demonstrated in Table 2.

4. GOVERNMENT RESOURCES AND RESPONSIBILITIES

.

(a) Contracting Officer

.

(1) A person duly appointed with the authority to enter into (Procuring Contracting Office(PCO)) or administer (Administrative Contracting Officer (ACO)) contracts and make related determination and findings on behalf of the Government. The PCO for

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 33 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

this Task Order is identified in section G, Ddl -G10 Government Contract Administration Points-of-Contact and Responsibilities. The ACO will be designated in the resulting order. Contracting Officers are designated via a written warrant, which sets forth limitations of their respective authority.

(2) The Contracting Officer ensures performance of all necessary actions for effective contract administration, ensures compliance with the terms of the contract and safeguards the interests of the United States in the contractual relationship. It is the Contracting Officer that assures the Contractor receives impartial, fair and equitable treatment under the Order. The Contracting Officer is ultimately responsible for the final determination of the acceptability of the Contractor's performance.

(b) Contract Specialist

(1) Assigned by the PCO to provide daily administration of the Task Order.

(2) Provides input to the PCO and the COR as to the quality of performance for areas addressed in this QASP.

(c) Contracting Officers Representative (COR)

(1) An individual appointed in writing by the PCO to act as their authorized representative to assist in technical administration of the Order. The COR is appointed in the Task Order award. The limitations of authority are contained in a written letter of appointment which is a formal attachment to the Order.

(2) The COR is responsible for technical administration of the Task Order and assures proper Government surveillance of the contractor's technical performance. The COR provides QASP reports to the PCO.

(3) The COR is not empowered to make any contractual commitments or to authorize any

changes on the Government's behalf. Any changes that the contractor deems may affect contract price, terms, or conditions shall be referred to the Contracting Officer for action.

(d) Technical Point of Contact (TPOC) /Technical Assistant (TA) / Functional Area Lead

(1) Subject Matter Experts who may be assigned by the COR to perform limited technical oversight of specific projects, work areas, or Technical Instructions issued under the contract with approval of the Contracting Officer.

(2) The TPOC/TA/Functional Area Lead provides input to the COR as to the quality of technical performance for their respective area(s) of expertise.

(3) A Government TPOC/TA/Functional Area Lead cannot, in any manner, alter the scope of the contract, make commitments or authorize any changes on the Government's behalf.

5. METHOD OF QA SURVEILLANCE

(a) The methods of surveillance used in the administration of this QASP are identified in Tables 1 thru 3. The Government will conduct surveillance of contractor performance utilizing the evaluation and measurement criteria in the QASP, supplemented with additional information listed below, to determine whether the contractor is effectively complying with all the terms and conditions of the Task Order. The assessed performance level using this QASP will be a determining factor in the PCO's decision to exercise an option or not.

(b) Contractor Performance Assessment Report System (CPARS) – The market place for information technology, engineering, and management support services is very competitive. As such, the successful offeror has a vested interest in the Government generated CPARS under this Task Order. Additionally, an evaluation using the CPARS format will be performed at the end of

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 34 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

each year of performance. The Government for this procurement will address the quality of product or service, schedule, cost control, business relations, management, and other important areas. As this information may affect future source selections throughout DOD, the annual Government assessment will be used appropriately as an additional performance oversight and communication tool with the QASP.

6. DOCUMENTATION

In addition to providing annual reports to the Contracting Officer, the COR will maintain a complete Quality Assurance file. The file will contain copies of all reports, evaluations, recommendations, and any actions related to the Government's performance of the quality assurance function. All such records will be maintained for the life of the order. The COR shall forward these records to the Contracting Officer at termination or upon completion of the order.

7. SURVEILLANCE

The tables below set forth the performance ratings, standards, outcomes and surveillance methods to document the results of the surveillance on an annual basis as well as interim and informal reviews (i.e. In Progress Reviews (IPRs)) on a more frequent basis.

(a) Performance Ratings: The Government will evaluate the contractor's performance of the Performance Work Statement (PWS) and the Contracting Officer will assign one of the following ratings:

- (1) Excellent
- (2) Satisfactory
- (3) Unsatisfactory

The standards associated with these ratings are given in the following Table 1.

TABLE 1: OVERALL PERFORMANCE RATINGS

Overall Performance Rating	Standard
Excellent	"Excellent" ratings for all performance evaluation criteria in Tables 3, 5, and 6.
Satisfactory	A minimum of "Satisfactory" ratings for all performance criteria in Tables 3, 5, and 6.
Unsatisfactory	A rating of "Unsatisfactory" for one or more performance evaluation criteria in Tables 3, 5, and 6.

(b) Objectives/Determination:

1. Interim/Informal

Interim/informal performance evaluations will be provided to assess performance at each IPR.

2. Annual

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 35 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

The Contracting Officer will make a performance determination at the end of each evaluation period. The determination will be based upon the COR's recommendations, the contractor's comments including any Self-Evaluation Report, and any other information deemed relevant by the Contracting Officer. The Contracting Officer will resolve disagreements between the COR's recommendations and the Contractor's comments/report regarding the evaluation. The Contracting Officer's performance determination is unilateral and final. The Contracting Officer will document the determination and provide a copy to the Contractor within 30 days of receipt of the contractor's self assessment.

TABLE 2: OBJECTIVES

Assessment Period	Acceptable Performance Definition	How Measured	Outcome
Base :	All measurement areas rated at least "Satisfactory" based on roll up of Tables 3, 5, and 6.	After the first six months using the QASP evaluation ratings; annually using the CPARS system covering the previous 12 months.	(+) Meet the acceptable performance definition as a condition for exercise of Option 1.* (-) Does not meet the acceptable performance definition as a condition for exercise of Option 1.*
Year I:	All measurement areas rated at least "Satisfactory" based on roll up of Tables 3, 5, and 6.	Annually using the QASP evaluation factors covering the previous 12 months; annually using the CPARS system covering the option POP.	(+) Meet the acceptable performance definition as a condition for exercise of Option 2.* (-) Does not meet the acceptable performance definition as a condition for exercise of Option 2.*
Year II:	All measurement areas rated at least "Satisfactory". Two or more measurements rated as "Excellent" based on roll up of Tables 3, 5, and 6.	Annually using the QASP evaluation factors covering the previous 12 months; annually using the CPARS system covering the option POP.	Final CPARS ratings.

* The Government will not exercise the next option year unless the contractor meets the acceptable performance definition.

(c) Performance Evaluation Criteria. The Contractor's performance will be evaluated using the criteria and standards provided for each objective, and identified in Tables 3, 5, and 6 of this contract clause. Based on this evaluation, each assessment period will be given an overall rating resulting from the rolled up objective. Each of the criteria in Tables 3, 5, and 6 must score a minimum of "Satisfactory" to receive an overall performance rating of "Satisfactory" in each assessment period. Additional ratings of "Excellent" are required in the last option year as shown in the table above.

(d) Organization: This performance evaluation organization consists of the Contracting Officer, who will serve as the Determining Official, and the COR. In some instances, a TA will be assigned to the contract or Task Order in addition to a COR.

(e) This performance evaluation does not replace any other requirement for evaluating contractor performance that may be required by the Task Order such as a Contractor Performance Assessment Reporting System (CPARS) report, or a Task

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 36 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Order Performance Evaluation (TOPE) report.

TABLE 3: TASK PERFORMANCE EVALUATION CRITERIA AND STANDARDS

CRITERIA	UNSATISFACTORY	SATISFACTORY	EXCELLENT
Task Performance	Work product fails to meet Acceptable Quality Levels (AQLs) defined in Performance Requirements Summary Table 4.	Work product routinely meets Acceptable Quality Levels (AQLs) defined in Performance Requirements Summary Table 4.	Work product frequently exceeds Acceptable Quality Levels (AQLs) defined in Performance Requirements Summary Table 4.
Staffing	Contractor provides marginally qualified or unqualified personnel. Lapses in coverage occur regularly.	Contractor provides qualified personnel. Lapses in coverage may occasionally occur and are managed per Task Order policy.	Contractor provides highly qualified personnel. Contractor reassigns personnel to ensure proper coverage. Actual lapses in coverage occur very rarely, if ever, and are managed per Task Order policy. Contractor ensures staff training remains current.
Timeliness	Contractor frequently misses deadlines, schedules, or is slow to respond to Government requests or is non-responsive to Government requests.	Contractor routinely meets deadlines, schedules, and responds quickly to Government requests.	Contractor consistently meets deadlines, schedules, and responds immediately to Government requests.
Customer Satisfaction	Fails to meet customer expectations	Meets customer expectations	Exceeds customer expectations.

TECHNICAL PERFORMANCE

TABLE 4: PERFORMANCE REQUIREMENTS SUMMARY TABLE

Work Area/SOW Reference	Performance Objective	Performance Standard	Acceptable Quality Level (AQL)	QASP Surveillance Plan Typical Monitoring Method
Work Area 1: Directed Energy Research and Development				
C.2.1.1	Conduct fundamental research and experimentation for Directed Energy systems.	Research and experimentation products are technically relevant and accurate. Products and revisions are delivered per schedule.	Requirements assessment, technical analysis and proof of concept experimentation products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.

C.2.1.2	Conduct feasibility and assessment studies for emergent Directed Energy technologies.	Studies, evaluation and performance products are technically relevant and accurate. Products and revisions are delivered per	Studies, evaluation and performance products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of
---------	---	--	---	---

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 37 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	Evaluate performance of Directed Energy systems.	schedule.		final products.
C.2.1.3	Coordinate development of TTPs including course curriculum for selected technologies and deployable DE systems.	TTPs and course curriculum are technically relevant and accurate. Products and revisions are delivered per schedule.	TTPs and course curriculum are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.1.4	Survey available technical data and determine future Directed Energy threats.	Survey and threat products are technically relevant and accurate. Products and revisions are delivered per schedule.	Survey and threat products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.1.5	Determine capability and vulnerability of existing Directed Energy weapons.	Capability/vulnerability products are technically relevant and accurate. Products and revisions are delivered per schedule.	Capability/vulnerability products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.1.6	Investigate vulnerability of commercial and military systems to Directed Energy. Determine effectiveness of countermeasure systems.	Vulnerability and effectiveness products are technically relevant and accurate. Products and revisions are delivered per schedule.	Investigation and effectiveness products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
Work Area 2: Directed Energy Systems Engineering				

C.2.2.1	Conduct systems engineering of Directed Energy technology areas. Demonstrate functionality of technology areas including conceptual and prototype designs.	System engineering products are technically relevant and accurate. Any prototype designs are properly documented. Products and revisions are delivered per schedule.	System engineering products and prototype designs are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.2.2	Provide systems analysis for alternate designs or improvements for existing Directed Energy systems. Conduct parametric and sensitivity performance studies.	Alternate design analyses are properly documented with drawings and specifications, as required. Parametric and sensitivity products	Alternate design analyses, parametric and sensitivity products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 38 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

		are technically relevant and accurate. Products and revisions are delivered per schedule.		
C.2.2.3	Propose operational requirements, system design issues, system hardening requirements and interface requirements for transitioning prototype Directed Energy systems to the engineering development phase.	Operational, interface, system hardening and design products are properly documented with drawings and specifications, as required and are technically relevant and accurate. Products and revisions are delivered per schedule.	Operational, interface and system hardening requirements and shipboard design issues products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
Work Area 3: Technology Assessments				

C.2.3.1	Conduct technology, vulnerability and countermeasures assessments for potential or existing Directed Energy technologies or weapons. Conduct analysis of prototypes and EDM for specific Directed Energy technology programs.	Technology, vulnerability and countermeasure assessments products are technically relevant and accurate. Prototype and EDMs are properly documented with drawings and specifications, as required. Products and revisions are delivered per schedule.	Technology, vulnerability and countermeasure assessments products, and prototypes/EDMs documents are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.3.2	Assess vulnerability of military and civilian operations, equipment and facilities against Directed Energy threats. Investigate methods to counter these threats.	Vulnerability assessments and possible counter measures products are technically relevant and accurate. Products and revisions are delivered per schedule.	Vulnerability and counter measure assessments products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.3.3	Provide assessments of foreign and	Technical assessments,	Technical assessments, reports of available	Government oversight of

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 39 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	domestic activities against Directed Energy attack. Investigate what technologies can counter these weapons.	technologies available to counter Directed Energy attack reports and products are technically relevant and accurate. Products and revisions are delivered per schedule.	technologies to counter Directed Energy attack are approved by the Government. 95% are completed by the due date.	review process, and providing approval of final products.
Work Area 4: Modeling, Simulation and Analysis				

C.2.4.1	Develop simulations and models for design, optimization and operation of Directed Energy systems. Validate the accuracy of simulations and models developed.	Maintain accurate and up to date simulation and model program code and specifications and operations manuals. Simulations and models, both original and upgrades, delivered per schedule	Simulations, models and operating manuals are approved by the Government. 95% completed by the due date.	Government oversight of review process, random sampling and providing approval of final products.
C.2.4.2	Utilize simulations and models to evaluate Directed Energy systems and countermeasures.	Threat assessment, operational environment analysis, system performance requirements, system specifications, and interface and integration requirements products are technically relevant and accurate. Products and revisions are delivered per schedule.	Threat assessment, operational environment analysis, system performance requirements, system specifications, and interface and integration requirements products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.4.3	Perform mathematical and statistical analysis of test data and electromagnetic effects on target electronics	Analysis products are technically relevant and accurate. Products and revisions are delivered per schedule.	Analysis products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.4.4	Design, develop, update and maintain databases associated	Master databases are backed up weekly. Databases	Databases are approved by the Government. 95%	Government oversight of review

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 40 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	with target effects, test results, equipment, experimental tests and facilities.	are 99% accurate and are delivered per schedule.	are completed by the due date.	process, random sampling and providing approval of final products.
Work Area 5: Prototype Development/Evaluation				
C.2.5.1	Design, develop, analyze and operate prototypes, scale models, mock-ups and test model of Directed Energy systems/components.	Designs, analyses, prototype system specifications and drawings, interface parameters, integration requirements and environmental impact products are technically relevant and accurate. Products and revisions are delivered per schedule.	Designs, analyses, prototype system specifications and drawings, interface parameters, integration/interface requirements and environmental impact products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.5.2	Support Government design, development, analysis, fabrication and operation of prototypes, scale models, mock-ups and test models for representative target systems.	Design, development, analysis, fabrication and operations products are technically relevant and accurate. Products and revisions are delivered per schedule.	Design, development, analysis, fabrication and operations products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.5.3	Fabricate certain Directed Energy and target prototypes.	Drawings, specifications and material lists are accurate. Any Acquisitions will be documented to include item description, quantity, purpose, vendor, unit price, extended price and disposition.	Drawings, specifications and material lists are approved by the Government. 95% are completed by the due date.	Government oversight of review process, random sampling and providing approval of final products.
C.2.5.4	Evaluate prototype performance, and system/subsystem components. Design, develop and fabricate any specialized devices, instruments or systems needed for the evaluation.	Evaluation products will be technically relevant and accurate. Specialized systems/devices will be documented with drawings, specifications and user manuals, as required.	Evaluation products and specialized systems/devices are approved by the Government. 95% are completed by the due date.	Government oversight of review process, random sampling and providing approval of final products.
C.2.5.5	Provide technical	Prototype drawings	Prototype design	Government

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 41 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	drawings and specifications for prototype designs. Update existing prototype documentation.	and specifications are relevant and accurate. Updated prototype design documentation is accurate and all documentation is under configuration control.	products are approved by the Government. 95% are completed by the due date.	oversight of review process, random sampling and providing approval of final products.
C.2.5.6	Develop advanced multi-channel high speed data acquisition systems and high speed data diagnostic systems.	High speed data acquisition and diagnostic systems are documented with specifications, drawings, user manuals and are under configuration control.	High speed data acquisition and diagnostic systems are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
Work Area 6: Systems Test and Evaluation/Test Facility Operations/Deployment Preparations				
C.2.6.1	Conduct testing on scale models, mock-ups, prototypes and components for Directed Energy systems. Develop test design and specifications for static and dynamic tests under various conditions.	Test designs and specifications are documented and accurate. Test data is collected, analyzed and documented and delivered per schedule.	Test designs and specifications and test analysis reports are approved by the Government. 95% are completed by the due date.	Government oversight of review process, random sampling and providing approval of final products.
C.2.6.2	Develop, assemble, monitor, test and maintain operation of common infrastructure systems used for testing	Infrastructure systems will be accurately documented with drawings and specifications. Operational manuals will be developed and maintained	Infrastructure systems are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.6.3	Calibrate and operate specialized systems during testing. This includes RF diagnostic systems.	Calibration logs will be kept and maintained. Specialized and diagnostic systems will be documented with drawings and specifications, as required. Operational manuals will be developed and maintained.	Specialized and diagnostic systems and associated documentation will be approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.6.4	Design, acquire and fabricate hardware/systems needed for system tests. Acquire, fabricate and machine parts or equipment for	Fabricated systems are documented with drawings, specifications, parts lists. Fabricated systems will be maintained and put	Fabricated systems and associated documentation are approved by the Government. 95% are completed by the due date.	Government oversight of review process, random sampling and providing

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 42 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	bench and field tests.	under configuration control.		approval of final products.
C.2.6.5	Disassemble and pack Directed Energy system prototypes/components for shipment to CONUS locations.	Equipment is disassembled and packed with no damage. Bill of lading will be filled out and maintained.	Equipment disassembly and packing is approved by the Government. 100% is completed by the due date.	Government oversight of process and condition of system at destination.
C.2.6.6	Provide off-site test support (CONUS)	Test support is documented.	Presence at test site per schedule.	Government direct observation.
C.2.6.7	Develop specifications and implementation of security procedures for test facilities. Security level could be TS.	Specifications and implemented security procedures are accurate and completed per schedule.	Specifications and security procures are approved by the Government. 95% are completed by the due date.	Government oversight of review process and direct observation.
Work Area 7: Program Management/Administration				
C.2.7.1	Provide program plans and schedules, implementation plans, point papers, status reports, operator/user manuals, drawings/diagrams and specifications.	Program plans, implementation plans, papers, reports, manuals and other data are technically relevant and accurate. Products delivered per schedule.	Program products are approved by the Government. 95% are completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.7.2	Provide technical support in planning and execution of Directed Energy meetings/workshops and conferences. Prepare briefing materials, papers, record minutes/action items. Implement security procedures.	Meeting/workshop and conference actions and documentation are technically relevant and accurate. Products delivered per schedule.	Meeting, workshop and conference actions and documentation are approved by Government. 100% completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.7.3	Provide technical editing and documentation support for technical publication preparation.	Technical editing and documentation is accurate. Technical publications are prepared utilizing Navy instructions for format. Products are delivered per schedule.	Edited documents and prepared technical publications are approved by the Government. 100% completed by the due date.	Government oversight of review process, and providing approval of final products.
C.2.7.4	Log, label, track and dispose of classified materials resulting from this Task Order.	Classified data labeling, tracking and disposition utilizes Navy security regulations and instructions	Classified material handling is approved by Government. 100% completed by the due date.	Government oversight of review process, and providing final products approval.
C.4	The contractor shall submit a bi-weekly progress and status report, in accordance	Report accurate, easy to read, and is IAW Government requirements	Report delivered complete and on time 95% of the time.	Government oversight of review process, and

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 43 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

with the attached DD Form 1423, CDRL A001. The report shall reflect both prime and subcontractor data.			providing final products approval.
--	--	--	------------------------------------

MANAGEMENT PERFORMANCE

TABLE 5: MANAGEMENT PERFORMANCE EVALUATION CRITERIA AND STANDARDS

CRITERION	UNSATISFACTORY	SATISFACTORY	EXCELLENT
Problem Resolution	Problems are unresolved, repetitive, or take excessive Government effort to resolve.	Problems are resolved quickly with minimal Government involvement.	Problems are non-existent or the contractor takes corrective action without Government involvement.
Responsiveness	Contractor's management is unresponsive to Government requests and concerns	Contractor's management is responsive to Government requests and concerns	Contractor's management takes proactive approach in dealing with Government representatives and anticipates Government concerns
Communications	Contractor often fails to communicate with Government in an effective and timely manner.	Contractor routinely communicates with Government in an effective and timely manner.	Contractor takes a proactive approach such that communications are almost always clear, effective and timely.

COST PERFORMANCE

TABLE 6: COST EFFICIENCY PERFORMANCE EVALUATION CRITERIA AND STANDARDS

CRITERION	UNSATISFACTORY	SATISFACTORY	EXCELLENT
Cost Management	Contractor routinely fails to complete the effort within the originally agreed to estimated cost, i.e. cost overruns frequently occur.	Contractor routinely completes the effort within the originally agreed to estimated cost. Contractor provides measures for controlling all costs at estimated cost levels. Funds and resources are generally used in a cost-effective manner. No major resource management problems are apparent.	Reductions in direct costs to the Government below contract estimated cost levels are noteworthy. Contractor provides detailed cost analysis and recommendations to Government for resolution of problems identified. Funds and resources are optimally used to provide the maximum benefit for the funds and resources available. Documented savings are apparent.
Cost Reporting	Reports are generally late, inaccurate, incomplete or unclear.	Reports are timely, accurate, complete and clearly written. Problems and/or trends are addressed, and an analysis is also submitted	Reports are clear, accurate, and pro-active. Problems and/or trends are addressed thoroughly, and the contractors recommendations and/or corrective plans are implemented and effective.
Invoicing	Invoices are generally late	Invoices are timely (no more	Invoices are timely (no more

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 44 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

	<p>and/or contain errors. Differences between invoiced amounts and progress report expenditures are unexplained. Contractor does not respond to Government questions in a timely manner. Invoices did not segregate cost at the lowest level of performance. Supporting documentation was not submitted as referenced in Section (e) of Clause HQG-2-0007.</p>	<p>than three weeks after the end date of the period being invoiced); are accurate with respect to both ACRNs/SLINs invoiced; and differences between progress report expenditures and invoiced costs are explained. Contractor responds to Government questions in a timely manner. Invoices reflect the segregated cost at the lowest level of performance. Supporting documentation was submitted as referenced in Section (e) of Clause HQG-2-0007.</p>	<p>than two weeks after end date of period being invoiced) with respect to both prime and subcontractor costs; are accurate with respect to ACRNs/SLINs invoiced; and all differences between progress report expenditures and invoiced amounts are fully explained. Contractor is very pro-active in responding to Government questions and takes prompt action to resolve any issues. Invoices reflect the segregate cost at the lowest level of performance. Supporting documentation was submitted as referenced in Section (e) of Clause HQG-2-0007.</p>
--	--	---	---

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 45 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION F DELIVERABLES OR PERFORMANCE

CLIN - DELIVERIES OR PERFORMANCE

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

4000	10/28/2011 - 10/27/2012
6000	10/28/2011 - 10/27/2012

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

4010	10/28/2011 - 10/27/2012
4100	10/28/2012 - 10/27/2013
4110	10/28/2012 - 10/27/2013
4200	10/28/2013 - 10/27/2014
4210	10/28/2012 - 10/27/2013
6010	10/28/2011 - 10/27/2012
6100	10/28/2012 - 10/27/2013
6110	10/28/2012 - 10/27/2013
6200	10/28/2013 - 10/27/2014
6210	10/28/2013 - 10/27/2014

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 46 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION G CONTRACT ADMINISTRATION DATA

ACCOUNTING DATA

The award document will include Accounting Data at the end of Section G. All lines of accounting are listed sequentially under a heading that identifies the particular action (award or modification number) under which the funding was obligated. Under SeaPort -e, all funding is identified/obligated at the SubCLIN (SLIN) level. SLINs are established sequentially by the SeaPort -e software. Each obligation of funds receives a unique SLIN identifier, even if the funds are an increase to an existing line of accounting (ACRN). Thus, an individual project/work area or Technical Instruction that is funded incrementally, could have one ACRN but multiple SLINs. Accounting for expenditures and invoicing at the SLIN level is required.

Ddl-G1 PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS

(a) This requirement includes support for multiple programs with independent budgets and funding lines. These funding lines are NOT interchangeable and it is critical that the Paying Office pay in accordance with the ACRNs and SLINs noted on the contractor's invoices. To do otherwise could result in a misappropriation of funds.

(b) The Payment Office shall ensure that each payment under this contract is made in accordance with the specific accounting classification reference numbers (ACRNs) and SubLine (SLIN) numbers shown on each individual invoice, including attached data.

Ddl-G10 GOVERNMENT CONTRACT ADMINISTRATION POINTS-OF-CONTACT AND RESPONSIBILITIES

Procuring Contracting Officer (PCO):

- (a) Name: Amy T. Richards
Code: CXS13-15
Address: Naval Surface Warfare Center, Dahlgren Division
17632 Dahlgren Road, Suite 157
Dahlgren, Virginia 22448-5100
Phone: (540) 653-7825
Fax: (540) 653-6810
E-mail: amy.t.richards@navy.mil

(b) PCO responsibilities are outlined in FAR 1.602-2. The PCO is the only person authorized to approve changes in any of the requirements of this Task Order, notwithstanding provisions contained elsewhere in this contract, the said authority remains solely the PCO's. The contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer or is pursuant to specific authority otherwise included as part of this contract. In the event the contractor effects any change at the direction of any person other

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 47 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

than the PCO, the change will be considered to be unauthorized.

Contract Specialist:

(a) Name: Katie Samulevich
Code: CXS13-1
Address: Naval Surface Warfare Center, Dahlgren Division
7632 Dahlgren Road, Suite 157
Dahlgren, Virginia 22448-5100
Phone: (540) 653-4402
Fax: (540) 653-6810
E-mail: katie.samulevich@navy.mil

(b) The Contract Specialist is the representative of the Contracting Officer for all contractual matters.

Administrative Contracting Officer (ACO)

(a) Name: Beverly H. Bolden
Code: S2404A
Address: DCMA MANASSAS
10500 Battleview Parkway, Suite 200
Manassas, VA 20109-2342
Phone: (703) 530-3266
FAX: (703) 530-3607
E-mail: Beverly.Bolden@dcma.mil

(b) The Administrative Contracting Officer (ACO) of the cognizant Defense Contract Management Agency (DCMA) is designated as the authorized representative of the Contracting Officer for purposes of administering this Task Order in accordance with FAR 42.3. However, in view of the technical nature of the supplies and services to be furnished, technical cognizance is retained by the Naval Surface Warfare Center, Dahlgren Division.

Contracting Officers Representative (COR):

(a) Name: Mila Marchosky
Code: Q23
Address: Naval Surface Warfare Center, Dahlgren Division
Electromagnetic & Sensor Systems Department
18444 Frontage Road, Suite 324
Dahlgren, VA 22448-5116
Phone: 540-653-2284
Fax: 540-653-4322
E-mail: mila.marchosky@navy.mil

(b) The COR is the PCO's appointed representative for technical matters. The COR is not a contracting officer and does not have the authority to direct the accomplishment of effort which is

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 48 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

beyond the scope of the Task Order or to otherwise change any Task Order requirements. A copy of the COR appointment letter which provides a delineation of COR authority and responsibilities is provided as an attachment to this Task Order.

HQ G-2-0007 INVOICE INSTRUCTIONS (NAVSEA) (APR 2011)

(a) In accordance with the clause of this contract entitled “ELECTRONIC SUBMISSION OF PAYMENT REQUESTS” (DFARS 252.232-7003), the Naval Sea Systems Command (NAVSEA) will utilize the DoD Wide Area Workflow Receipt and Acceptance (WAWF) system to accept supplies/services delivered under this contract. This web-based system located at <https://wawf.eb.mil> provides the technology for government contractors and authorized Department of Defense (DoD) personnel to generate, capture and process receipt and payment-related documentation in a paperless environment. Invoices for supplies/services rendered under this contract shall be submitted electronically through WAWF. Submission of hard copy DD250/invoices may no longer be accepted for payment.

(b) It is recommended that the person in your company designated as the Central Contractor Registration (CCR) Electronic Business (EB) Point of Contact and anyone responsible for the submission of invoices, use the online training system for WAWF at <http://wawftraining.com>. The Vendor, Group Administrator (GAM), and sections marked with an asterisk in the training system should be reviewed. Vendor documentation is available under Resources at <http://wawftraining.com>.

(c) The designated CCR EB point of contact is responsible for activating the company’s CAGE code on WAWF by calling 1-866-618-5988. Once the company is activated, the CCR EB point of contact will self-register under the company’s CAGE code on WAWF and follow the instructions for a group administrator. After the company is set -up on WAWF, any additional persons responsible for submitting invoices must self-register under the company’s CAGE code at <https://wawf.eb.mil>.

(d) The contractor shall use the following document types, DODAAC codes and inspection and acceptance locations when submitting invoices in WAWF:

<input type="checkbox"/>	Invoice (FFP Supply & Service)
<input type="checkbox"/>	Invoice and Receiving Report Combo (FFP Supply)
<input type="checkbox"/>	Invoice as 2-in-1 (FFP Service Only)
<input checked="" type="checkbox"/>	Cost Voucher (Cost Reimbursable, T&M , LH, or FPI)
<input type="checkbox"/>	Receiving Report (FFP, DD250 Only)

DODAAC Codes and Inspection and Acceptance Locations (*contracting officer complete appropriate information as applicable*)

Issue DODAAC	N00178
--------------	--------

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 49 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Admin DODAAC	S2404A
Pay Office DODAAC	HQ0338
Inspector DODAAC	N000178
Service Acceptor DODAAC	N00178
Service Approver DODAAC	N00178
Ship To DODAAC	N00178
DCAA Auditor DODAAC	HAA47F
LPO DODAAC	N/A
Inspection Location	Destination
Acceptance Location	Destination

Attachments created in any Microsoft Office product may be attached to the WAWF invoice, e.g., backup documentation, timesheets, etc. Maximum limit for size of each file is 2 megabytes. Maximum limit for size of files per invoice is 5 megabytes.

(e) The Contractor agrees to segregate costs incurred under this task order at the lowest level of performance, either task or subtask, rather than on a total task order basis, and to submit invoices reflecting costs incurred at that level. Supporting documentation in WAWF for invoices shall include summaries of work charged during the period covered as well as overall cumulative summaries by individual labor categories, rates, and hours (both straight time and overtime) invoiced; as well as a cost breakdown of ODCs (materials and travel), by line item task or subtask. Subcontractors are also required to provide labor categories, rates, and hours (both straight time and overtime) invoiced; as well as, a cost breakdown of ODCs, materials, and travel invoiced. Supporting documentation may be encrypted before submission to the prime contractor for WAWF invoice submittal. Subcontractors may email encryption code information directly to the Contracting Officer and Contracting Officer Representative. Should the subcontractor lack encryption capability, the subcontractor may also email detailed supporting cost information directly to the Contracting Officer and Contracting Officer Representative; or other method as agreed to by the Contracting Officer.

(f) Before closing out of an invoice session in WAWF, but after submitting the document(s), you will be prompted to send additional email notifications. Click on "Send More Email Notification" and add the acceptor/receiver email addresses noted below in the first email address block, and add any other additional email addresses desired in the following blocks. This additional notification to the government is important to ensure that the acceptor/receiver is aware that the invoice documents have been submitted into WAWF.

Send Additional Email Notification To:

(g) The contractor shall submit invoices/cost vouchers for payment per contract terms and the government shall process invoices/cost vouchers for payment per contract terms. Contractors approved by DCAA for direct billing will submit cost vouchers directly to DFAS via WAWF. Final voucher submission will be approved by the ACO.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 50 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

(h) If you have any questions regarding WAWF, please contact the WAWF helpdesk at the above 1-866 number or the NAVSEA WAWF point of contact Margaret Morgan at (202) 781-4815 or margaret.morgan@navy.mil.

CONSENT TO SUBCONTRACT

For subcontracts and consulting agreements for services, where the prime contractor anticipates that hours delivered will be counted against the hours in the Level of Effort clause in this section, Consent to Subcontract authority is retained by the Procuring Contracting Officer.

The following subcontractors are approved on this Task Order:

- 1) EOIR Technologies, Inc.**
- 2) URS Federal Technical Services, Inc. (URS)**
- 3) Envisioneering Inc.**
- 4) The Pennsylvania State University Electro-Optics Center**
- 5) Applied Physical Electronics, LLC (APELC)**
- 6) The Durbin Group, LLC**
- 7) MBO Partners**
- 8) SAQ Consulting Ltd.**
- 9) Directed Energy Technologies, Inc. (DEtech)**
- 10) ENS Designs, Inc.**
- 11) Galecki Design Services LLC**
- 12) Gilbert Franklin DuVal Jr., Consultant**
- 13) Thomas J. Zwolinski, Consultant**

Ddl-G40 PAYMENT, SELECTED ITEMS OF COST REIMBURSEMENT CONTRACTS

(a) Travel costs

The contractor shall, to the maximum extent practicable, minimize overall travel costs by taking advantage of discounted airfare rates available thru advance purchase. Charges associated with itinerary changes and cancelations under nonrefundable airline tickets are reimbursable as long as the changes are driven by the work requirement.

(b) Training

The Government will not allow costs, nor reimburse costs associated with the contractor for training employees in an effort to attain and/or maintain minimum personnel qualification requirements of this contract. Other training may be approved on a case-by-case basis by the Contracting Officer. Advance approval is required. Attendance at workshops or symposiums is considered training for purposes of this clause. The contractor is encouraged to suggest a cost-sharing arrangement that addresses registration/tuition, travel and labor costs.

(c) General Purpose Office Equipment (GPOE) and Information Technology (IT)

The cost of acquisition of GPOE and IT shall not be allowable as direct charges to this contract. The

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 51 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

contractor is expected to have the necessary CONUS facilities to perform the requirements of this contract, including any necessary GPOE and IT. GPOE means equipment normally found in a business office such as desks, chairs, typewriters, calculators, file cabinets, etc. IT means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, movement, control, display, switching, interchange, transmission, or reception of data or information. IT includes computers, ancillary equipment, software, firmware and similar products, services (including support services), and related resources for both unclassified and classified applications.

(d) The requirements of the above clause apply equally to subcontractors and consultants.

Ddl-G41 PAYMENT OF FIXED FEE (COST PLUS FIXED FEE)

(a) Subject to the withholding provisions of this clause, and any other adjustments required by other contract clauses, the fixed fee shall be paid in installments.

(b) The amount of each fee installment shall be billed at [REDACTED] % of allowable costs. This percentage reflects the ratio of total contract fixed fee to total contract estimated cost.

(c) In accordance with FAR 52.216-8 FIXED FEE in Section I of this contract, the Contracting Officer has established a withholding of 15% of funded fixed fee, not to exceed \$100,000. The contractor's provisional payment vouchers may invoice fee at the percentage cited in paragraph (b) above, up to 85% of the funded fixed fee.

EARLY DISMISSAL AND CLOSURE OF GOVERNMENT FACILITIES

When a Government facility is closed and/or early dismissal of Federal employees is directed due to severe weather, security threat, or a facility related problem that prevents personnel from working, onsite contractor personnel regularly assigned to work at that facility should follow the same reporting and/or departure directions given to Government personnel. The contractor shall not direct charge to the contract for time off, but shall follow parent company policies regarding taking leave (administrative or other). Non-essential contractor personnel, who are not required to remain at or report to the facility, shall follow their parent company policy regarding whether they should go/stay home or report to another company facility. Subsequent to an early dismissal and during periods of inclement weather, onsite contractors should monitor radio and television announcements before departing for work to determine if the facility is closed or operating on a delayed arrival basis.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 53 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

[REDACTED]

[REDACTED]

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 54 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION H SPECIAL CONTRACT REQUIREMENTS

TASK ORDER LABOR CATEGORY QUALIFICATIONS

To perform the requirements of the Performance Work Statement, the Government desires personnel with the appropriate experience and professional development qualifications. Labor categories are identified as Key and Non-Key. The experience level for each Key Personnel labor category is identified in the clause entitled PERSONNEL QUALIFICATIONS below.

Resumed Key Personnel are the Key Personnel whose resumes were submitted with the offeror's proposal for evaluation purposes or their replacement in accordance with the CHANGES IN RESUMED KEY PERSONNEL clause below. (Section L provision 5.2 RESUMES identifies the number of Full -Time Equivalents for which resumes are required in the offeror's proposal.) Key Personnel qualification levels are considered to be "Desired" for those individuals whose resumes are submitted for evaluation with the proposal. Resumes for any replacement of these proposed resumed key personnel following award shall be equal to or better than the individuals initially proposed, as required by the clause CHANGES IN RESUMED KEY PERSONNEL below.

The desired experience for each position is listed below; this experience must be directly related to the tasks and programs listed in the statement of work. In addition to the experience listed below, general experience in engineering (electrical, mechanical, civil, industrial), computer science, mathematics, physical science, modeling and simulation, or another field appropriate to the labor category employing skills that apply to the accomplishment of the technical objectives of the statement of work is a plus and will be favorably considered (such experience may not necessarily meet the desired qualifications listed below), as will experience utilizing automated systems, including personal computers/workstations and basic software applications such as word processors, spreadsheets, graphics/presentation packages, databases, and e-mail.

KEY LABOR CATEGORY DESIRED QUALIFICATIONS

Program Manager - Ten (10) years professional technical experience managing similar scientific/engineering projects. Ten (10) years experience in planning, directing, coordinating, controlling administrative and engineering activities for the entire contract effort including supervision of task managers in the execution of their assigned duties; reviewing and maintaining quality of technical work done on the program; assuring and monitoring the timeliness and quality of all work products including work planning, control of budget, schedule, and task execution, contract and subcontract management, personnel management and supervision. Five (5) years experience related to one or more of the specific technology areas of this contract: RF sensors, HPM systems, precision tracking systems, shipboard countermeasure systems, image and sensor fusion; image/signal processing; and modeling and simulation is highly desirable.

Principal Engineer – Fifteen (15) years professional technical experience developing, designing, integrating and testing Directed Energy systems for U.S. Navy/Joint warfare applications. Ten (10) years engineering expertise in solving technical problems that arise from the development and design of various Directed Energy systems. Ten (10) years experience related to specific technology areas of this contract, including HPM systems, Pulsed Power, High Voltage and Prime Power systems, HPM sources, RF systems, electromagnetic pulse, EMI and Electromagnetic Effects, prototyping and modeling and simulation. Recent experience on U.S. Navy/Joint HPM research and development programs.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 55 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

Senior Systems Engineer - Ten (10) years professional technical experience in Navy experimental research and/or systems engineering programs. Ten (10) years experience in utilizing systems engineering techniques and procedures in design, development and implementation of U.S. Navy/Joint Directed Energy systems, targets and test assets. Ten (10) years experience with sensors and systems. Experience with U.S. Navy/Joint Directed Energy research and development programs is desired. Five (5) years experience with DOD operational, research, development and intelligence organizations as well as experience with the operational Navy.

Senior Electrical Engineer – Ten (10) years professional technical experience in pulsed power research, development and test and evaluation of a wide variety of pulsed power systems or in research, design and development for U.S. Navy/Joint warfare applications. Ten (10) years experience with high voltage, high peak power spark-gaps, high voltage power supplies, fast transient diagnostics and EMI/EMC mitigation techniques or design, development, and fabrication of a wide array of electronic printed circuit boards. Five (5) years experience in all aspects of laboratory and field testing, including setting test goals, developing test methodologies, organizing and conducting tests, reducing test data, and analyzing results. Must be familiar with modeling and simulation programs related to pulsed power or electronic systems.

Senior RF Engineer - Ten (10) years professional technical experience in design, development and implementation of digital hardware and software related to RF systems or in design, development, test and evaluation of HPM systems. Ten (10) years experience in RF/Microwave signal generation and test equipment; vacuum devices, tubes, radars and high power RF systems, and digital signal processing or with HPM source testing and evaluation. Five (5) years experience in all aspects of laboratory and field testing, including setting test goals, developing test methodologies, organizing and conducting tests, reducing test data and analyzing results.

Senior Mechanical Engineer – Ten (10) years professional technical experience in the mechanical design of Directed Energy systems. Five (5) years experience in the design and development of high -voltage or RF systems. Five (5) years experience in integration of Directed Energy systems into land, air or shipboard applications. Current experience using 3D CAD software.

Senior Electronics Technician - Ten (10) years experience in supporting the design, development, test, and evaluation of a wide variety of electronic and electromagnetic sensors and systems. Ten (10) years experience in setting up and conducting laboratory and field tests; in the fabrication of electronic and electro -mechanical components and subsystems; and in the integration of electronic and electromagnetic components and systems in U.S. Navy/Joint systems and platforms. Five (5) years experience in providing technical supervision/direction to other technicians for day to day tasking.

Senior RF Technician - Ten (10) years experience in supporting the design, development, test, and evaluation of a wide variety of RF sensors, antennas and systems. Ten (10) years experience in setting up and conducting laboratory and field tests; in the fabrication of RF components and subsystems; and in the integration of RF systems and components in U.S. Navy/Joint systems and platforms.

Senior Pulsed Power/High Voltage Technician - Ten (10) years experience in supporting the design, development, test, and evaluation of a wide variety of Pulsed Power and High Voltage systems. Ten (10) years experience in setting up and conducting laboratory and field tests; in the fabrication of Pulsed Power and High Voltage components and subsystems; and in the integration of Pulsed Power and High Voltage in U.S. Navy/Joint systems and platforms.

Non-Key Personnel are the personnel proposed to provide hours in labor categories that are not identified as Key.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 56 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

NON-KEY LABOR CATEGORY DESIRED QUALIFICATIONS

Systems Engineer - Five (5) years experience in Directed Energy applications. Three (3) years experience with U.S. Navy/Joint Directed Energy systems and system/platform integration. Experience with HPM sources is highly desirable.

Electrical Engineer – Five (5) years experience in electromagnetic system design, analysis and test. Three (3) years experience with U.S. Navy/Joint Directed Energy systems. Three (3) years experience in design, development and test of HPM, Pulsed Power and High Voltage systems. Experience with Pulsed Power or High Powered system and platform integration is highly desirable.

RF Engineer – Five (5) years experience in design, development and implementation of analog and digital hardware and software related to RF systems, or HPM systems. Three (3) years experience in the areas of signal generation, vacuum devices, high powered RF systems, digital signal processing, bench and system level testing of electronics components for Directed Energy systems, or HPM source testing and evaluation. Three (3) years experience in laboratory and field testing, including conducting tests, reducing test data and analyzing results. Experience with RF system and platform integration is highly desirable.

Mechanical Engineer – Five (5) years experience in mechanical design and test. Three (3) years experience in mechanical engineering design and development. Three (3) years experience in use of 3D CAD programs. Experience with high voltage, RF, electromagnetics and military designs highly desirable.

Software Engineer – Five (5) years experience in software engineering applied to program development, modeling and/or simulation. Three (3) years experience with Navy/Joint programs and/or systems. Experience with Directed Energy systems and platform integration highly desirable.

Electronics Technician – Five (5) years experience in the operation, troubleshooting, and repair of a wide variety of electronic, electromagnetic sensors and supporting instrumentation and electrical and electronic test equipment. Experience in setting up and conducting laboratory and field tests is highly desirable.

Mechanical Technician – Five (5) years experience in mechanical enclosures and structures, plumbing, HVAC maintenance, generator maintenance hardware assembly and machining parts. Must be certified as a fork lift operator. Experience in setting up and conducting laboratory and field tests is highly desirable.

Technician – Three (3) years experience in a wide variety of electrical, mechanic systems and in set up of test beds and use of measurement instrumentation.

Security Specialist - Three (3) years experience in DOD security policies and procedures. Must have a working knowledge of Top Secret security policies and procedures. Three (3) years experience with U.S. Navy/Joint programs. Must have specialized security training.

Technical Writer – Three (3) years experience in the preparation, review and formalization of technical reports. Three (3) years experience in the formalization of technical reports and conference proceedings. Must be experienced in security procedures and classified document tracking and maintenance. Experience with U.S. Navy/Joint programs and the science and technology R&D environment is highly desirable.

Additional Information

Accumulation of Qualifying Experience – Experience may be accumulated concurrently. All experience must be

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 57 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

clearly supported by the resume or it will be discounted during the evaluation.

Professional Certifications and Development - Professional development includes honors, degrees, publications, professional licenses, accreditations, and certifications that directly impact the offerors ability to perform the contract. Retention of these credentials, as required to maintain accreditation, throughout the duration of the contract is the responsibility of the contractor. The years of experience listed above are in addition to appropriate professional development. It is incumbent upon the offeror to demonstrate that the proposed personnel have the necessary credentials and accreditations to perform the work.

5252.237-9106 Substitution of Personnel (Sep 1990)

(a) The Contractor agrees that a partial basis for award of this contract is the list of key personnel proposed. Accordingly, the Contractor agrees to assign to this contract those key persons whose resumes were submitted with the proposal necessary to fulfill the requirements of the contract. No substitution shall be made without prior notification to and concurrence of the Contracting Officer in accordance with this requirement. (b) All proposed substitutes shall have qualifications equal to or higher than the qualifications of the person to be replaced. The Contracting Officer shall be notified in writing of any proposed substitution at least forty -five (45) days*, or ninety (90) days* if a security clearance is to be obtained, in advance of the proposed substitution. Such notification shall include: (1) an explanation of the circumstances necessitating the substitution; (2) a complete resume of the proposed substitute; and (3) any other information requested by the Contracting Officer to enable him/her to judge whether or not the Contractor is maintaining the same high quality of personnel that provided the partial basis for award.

Ddl-H13 POST AWARD CONTRACTOR PERSONNEL APPROVAL

(a) Requests for post award approval of additional and/or replacement Resumed Key personnel shall be submitted via e-mail. E-mail submissions shall be made simultaneously to the Contract Specialist and the COR. Electronic notification via e-mail from the Contract Specialist will serve as written approval/disapproval on behalf of the Contracting Officer. This approval is required before an individual may begin charging to the Task Order.

(b) It is desired that resumes be submitted in the format required below. However, in order to expedite contract administration, contractor format may be used providing sufficient information is submitted for an independent comparison of the individual's qualifications with labor category requirements.

(c) If the employee is not a current employee of the contractor (or a subcontractor), a copy of the accepted offer letter (which identifies a projected start date and the agreed to annual salary) shall be provided.

RESUME FORMAT AND CONTENT REQUIREMENTS

RESUME FORMAT AND CONTENT: In order to facilitate evaluation, all resumes shall be provided in the following format:

Complete Name

Task Order Labor Category / Contractor Labor Category

Percentage of time to be allocated to this effort

Current security clearance level per JPAS (identify if interim or final)

Current work location and planned work location upon award of this Task Order

Note if the individual is key on another contract with a period of performance that will overlap this requirement. Note plans to satisfy both contracts if the Offeror is selected for award.

Chronological Work History / Experience – Show experience and date(s) as follows:

(a) Employer: Dates (month/year); Title(s) held

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 58 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

(b) Work experience shall be presented separately for each employer, clearly marked with proper category of experience (i.e, Relevant Experience; Non-Relevant Experience.). If relevant and non-relevant experience were obtained while at the same employer, separate time periods shall be noted for each assignment. (This is necessary to prevent an offeror from describing relevant experience obtained in a six month assignment for Company A as applicable to the entire 10-year employment with that firm and to ensure offerors' proposals are evaluated on an equal basis). Responsibilities shall be discussed in sufficient detail for each assignment so as to permit comparison with desired experience levels in Section H. Specific examples of work assignments, accomplishments, and products shall be provided.

(c) Phrases such as "assisted with", "participated in", or "supported" are UNACCEPTABLE except as introductory to a detailed description of the actual work performed. If no such description is provided, the sentence or bulleted information will NOT be considered in the resume evaluation process. This is because evaluators would not be able to identify the specific technical work contributions made by the individual.

(d) Resume information is encouraged to be presented in bullet format. This will allow evaluators to focus on relevant information.

(e) Offerors shall note that the lack of specific definition in job responsibilities, services performed or products produced may be viewed as a lack of understanding of the Government 's overall technical requirements.

(f) All relevant military experience claimed shall be described such that each relevant tour is treated as a separate employer. Time frames/titles/responsibilities shall be provided in accordance with the level of detail prescribed above. Military experience not documented in this manner will not be considered.

(g) Gaps in experience shall be avoided.

(h) The cut-off date for any experience claimed shall be the closing date of the solicitation.

(i) PROFESSIONAL DEVELOPMENT – Show any honors, degrees, publications, professional licenses, specialized certifications and other evidence of professional accomplishments that are directly relevant and impact the offeror's ability to perform under the Task Order. For education and training, the following format is preferred:

Academic: Degree(s); Date(s); Institution; Major/Minor

Non-Academic: Course title, date(s), approximate length

Professional licenses and specialized certifications. Note the date obtained for each, as well as the date when each license/certification requires renewal.

(j) Certification of correctness of information signed and dated by both the person named and the Offeror. The employee certification shall include the following statement: CERTIFICATION: "I certify that the experience and professional development described herein are complete and accurate in all respects. I consent to the disclosure of my resume for NSWCDD Solicitation N00024 - 11-R-3223 by _____ (insert Offeror's company name) and intend to make myself available to work under any resultant contract to the extent proposed."

Employee Signature and Date

Offeror Signature and Date

Resumes without this certification will be unacceptable and will not be considered. The employee certification shall not be dated earlier than the issue date of this solicitation.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 59 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

(k) If the employee is not a current employee of the offeror (or a proposed subcontractor), a copy of the accepted offer letter shall be provided. The letter shall identify the projected start date. The Cost Proposal shall include documentation that identifies the agreed-to salary amount.

NAVSEA 5252.242-9115 TECHNICAL INSTRUCTIONS (APR 1999)

(a) Performance of the work hereunder shall be subject to written technical instructions issued electronically by the Contract Specialist on behalf of the Contracting Officer. As used herein, technical instructions are defined to include the following:

(1) Directions to the Contractor which suggest pursuit of certain lines of inquiry, shift work emphasis, fill in details or otherwise serve to accomplish the contractual SOW.

(2) Guidelines to the Contractor which assist in the interpretation of drawings, specifications or technical portions of work description.

(b) Technical instructions must be within the general scope of work stated in the order. Technical instructions may not be used to: (1) assign additional work under the order; (2) direct a change as defined in the "CHANGES" clause of the basic contract; (3) increase or decrease the estimated order amount (including fee), as applicable, the level of effort, or the time required for task order performance; or (4) change any of the terms, conditions or specifications of the order.

(c) If, in the opinion of the Contractor, any technical instruction calls for effort outside the scope of the order or is inconsistent with this requirement, the Contractor shall notify the Contracting Officer in writing within ten (10) working days after the receipt of any such instruction. The Contractor shall not proceed with the work affected by the technical instruction unless and until the Contractor is notified by the Contracting Officer that the technical instruction is within the scope of this order.

(d) Nothing in the foregoing paragraph shall be construed to excuse the Contractor from performing that portion of the contractual work statement which is not affected by the disputed technical instruction.

FUNDING PROFILE

It is estimated that these incremental funds will provide for the number of hours of labor stated below. The following details funding to date:

CLIN	Total CFFF	Funding this Action	Previous Funding	Total Funded	Balance Unfunded	Funded Labor Hrs
Base Period						
4000						
6000						
Total Base Period						

NAVSEA 5252.232-9104 ALLOTMENT OF FUNDS (JAN 2008)

(a) This contract is incrementally funded with respect to both cost and fee. The amount(s) presently available and allotted to this contract for payment of fee for incrementally funded contract line item number/contract subline item number (CLIN/SLIN), subject to the clause entitled "FIXED FEE" (FAR 52.216 -8) or "INCENTIVE FEE" (FAR 52.216-10), as appropriate, is specified below. The amount(s) presently available and allotted to this contract for payment of cost for incrementally funded CLINs/SLINs is set forth below. As provided in the clause of this contract entitled "LIMITATION OF FUNDS" (FAR 52.232 -22), the

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 60 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

CLINs/SLINs covered thereby, and the period of performance for which it is estimated the allotted amount(s) will cover are as follows:

CLIN	Period of Performance	Allotted to Cost	Allotted to Fee	Estimated CPFF	Est. Funded Through
Base Period					
4000	10/28/11 - 10/27/12				12/25/2011
6000	10/28/11 - 10/27/12				3/3/2012
Total Base Period					

(b) The parties contemplate that the Government will allot additional amounts to this contract from time to time for the incrementally funded CLINs/SLINs by unilateral contract modification, and any such modification shall state separately the amount(s) allotted for cost, the amount(s) allotted for fee, the CLINs/SLINs covered thereby, and the period of performance which the amount(s) are expected to cover.

(c) CLINs/SLINs _____ are fully funded and performance under these CLINs/SLINs is subject to the clause of this contract entitled "LIMITATION OF COST" (FAR 52.232-20).

(d) The Contractor shall segregate costs for the performance of incrementally funded CLINs/SLINs from the costs of performance of fully funded CLINs/SLINs.

5252.216-9122 LEVEL OF EFFORT – ALTERNATE 1 (MAY 2010)

(a) The Contractor agrees to provide the total level of effort specified below in performance of the work described in Sections B and C of this task order. The total 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. **The table below and information for blanks in paragraph (b) and (d) are to be completed by the Offeror.**

	Total Labor Hours	Compensated	Uncompensated
Base Period (CLIN 4000)			
Base Period Surge (CLIN 4010)			
Option 1 (CLIN 4100)			
Option 1 Surge (CLIN 4110)			
Option 2 (CLIN 4200)			
Option 2 Surge (CLIN 4210)			
GRAND TOTAL HOURS			

(b) Of the total man-hours of direct labor set forth above, it is estimated that **2,917** man-hours are uncompensated effort. Uncompensated effort is defined as hours provided by personnel in excess of 40 hours per week without additional compensation for such excess work. Total Times Accounting (TTA) efforts are included in this definition. All other effort is defined as compensated effort. If no effort is indicated in the first sentence of this paragraph, uncompensated 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 (i) below), or other time and effort which does not have a specific and direct contribution to the tasks described in Sections B and C.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 61 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

(d) The level of effort for this contract shall be expended at an average rate of approximately [REDACTED] hours per week. 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) 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.

(h) 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. All submissions shall include subcontractor information.

(i) 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 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.

(j) Notwithstanding any of the provisions in the above paragraphs and subject to the LIMITATION OF

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 62 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

FUNDS or LIMITATION OF COST clauses, as applicable, the period of performance may be extended and the estimated cost may be increased in order to permit the Contractor to provide all of the man -hours listed in paragraph (a) above. The contractor shall continue to be paid fee for each man -hour performed in accordance with the terms of the contract.

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 63 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION I CONTRACT CLAUSES

CLAUSES INCORPORATED BY REFERENCE

52.222-41	Service Contract Act of 1965 (Nov 2007)
52.223-18	Contractor Contractor Policy to Ban Text Messaging While Driving (SEP 2010)
52.227-1	Authorization and Consent (DEC 2007) (ALT 1)
52.227-2	Notice and Assistance regarding Patent and Copyright Infringement (DEC 2007)
52.227-11	Patent Rights-Ownership by the Contractor (DEC 2007)
52.251-1	Government Supply Sources (APR 1984)
252.204-7000	Disclosure of Information (DEC 1991)
252.204-7008	Export Controlled Items (APR 2010)
252.222-7006	Restrictions on the use of Mandatory Arbitration Agreements (DEC 2010)
252.227-7013	Rights in Technical Data-Noncommercial Items (NOV 1995)
252.227-7014	Rights in NonCommerical Computer Software and NonCommerical Computer Software Documentation (Jun 1995)
252.227-7016	Rights in Bid or Proposal Information (JUN 1995)
252.227-7019	Validation of Asserted Restrictions-Computer Software (JUN 1995)
252.227-7025	Limitations on the Use or Disclosure of Government - Furnished Information Marked with Restrictive Legends (JUN 1995)
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government (JUN 1995)
252.227-7030	Technical Data-Withholding or Payment (MAR 2000)
252.227-7037	Validation of Restrictive Markings on Technical Data (SEP 1999)
252.227-7038	Patent Rights-Ownership by the Contractor (Large Business) (DEC 2007)
252.227-7039	Patents-Reporting of Subject Inventions (APR 1990)
252.239-7001	Information Assurance Contractor Training and Certification (JAN 2008)
252.251-7000	Ordering From Government Supply Sources (NOV 2004)

CLAUSES INCORPORATED BY FULL TEXT:

52.217-9 OPTION TO EXTEND THE TERM OF THE TASK ORDER (MAR 2000) (NAVSEA VARIATION) (SEP 2009)

(a) The Government may extend the term of this contract by written notice(s) to the Contractor within the periods specified below. If more than one option exists the Government has the right to unilaterally exercise any such option whether or not it has exercised other options.

CLINs/PURPOSE	LATEST OPTION EXERCISE DATE
4010 Base Labor Surge	10/27/2012
4100 Option 1 Labor	10/27/2012

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 64 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

4110 Option 1 Labor Surge	10/27/2013
4200 Option 2 Labor	10/27/2013
4210 Option 2 Labor Surge	10/27/2014
6010 Base ODC Surge	10/27/2012
6100 Option 1 ODC	10/27/2012
6110 Option 1 ODC Surge	10/27/2013
6200 Option 2 ODC	10/27/2013
6210 Option 2 ODC Surge	10/27/2014

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any option(s) under this clause, shall not exceed three (3) years, however, in accordance with paragraph (g) of the requirement of this contract entitled "LEVEL OF EFFORT" (NAVSEA 5252.216-9122), if the total manhours delineated in paragraph (a) of the LEVEL OF EFFORT requirement, have not been expended within the period specified above, the Government may require the Contractor to continue to perform the work until the total number of manhours specified in paragraph (a) of the aforementioned requirement have been expended.

SERVICE CONTRACT ACT WAGE DETERMINATION(S)

(A) Due to the nature of some of the support required by the Performance Work Statement a Wage Determination has been determined to be necessary to ensure appropriate minimum wages and fringe benefits are paid to those non-exempt personnel performing under this Task Order. Work under this Task Order involves performance in King George and Attachment J.4 provides Rev. 11 to Wage Determination No.2005-2103 for the state of Virginia.

The following table provides a correlation between Task Order labor categories in Section H and the Wage Determination Occupations shown in Attachment J.4.

Task Order Category	Occupation Code
Senior Electronics Technician	30084
Senior RF Technician	30084
Senior Pulsed Power/High Voltage Technician	30084
Electronics Technician	30083
Mechanical Technician	30083
Technician	30082

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 65 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each as if they were employed by the contracting agency subject to the provisions of 5 U.S.C.5341 or 5332.

This Statement for Information Only: *It is not a Wage Determination*

<u>Employee Class</u>	<u>GS Equivalent</u>
Senior Electronics Technician	GS12
Senior RF Technician	GS12
Senior Pulsed Power/High Voltage Technician	GS12
Electronics Technician	GS11
Mechanical Technician	GS11
Computer/Networking Technician	GS11
Technician	GS9

CONTRACT NO. N00178-04-D-4024	DELIVERY ORDER NO. 0040	PAGE 66 of 66	FINAL
----------------------------------	----------------------------	------------------	-------

SECTION J LIST OF ATTACHMENTS

EXHIBIT A - CDRLS

Attachment J.1 - DD254

Attachment J.2 Contracting Officer Representative (COR) Appointment Letter

Attachment J.3 Technical Instructions 1 - 5

Attachment J.4 Wage Determination Rev. 11

DISTRIBUTION:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

AID # 123765