			1. CONTRACT ID CODE		PAGE OF PAGES
AMENDMENT OF SOLICITATION/N	IODIFICATION OF C	ONTRACT	V		1 3
2. AMENDMENT/MODIFICATION NO. 01	3. EFFECTIVE DATE 05-Jul-2016	4. REQUISITION	PURCHASE REQ. NO. Numerous	5. PR	OJECT NO. (If applicable) N/A
6. ISSUED BY CODE	N64498	7. ADMINISTER	ED BY (If other than Item 6)	COI	DE S2101A
NAVAL SURFACE WARFARE CENTE	R PHILA	DCM	A Baltimore		SCD: C
NSWCPD		217 E	AST REDWOOD STREE	T, SUITE 180	00
Philadelphia PA 19112-1403		BALT	IMORE MD 21202-3375		
8. NAME AND ADDRESS OF CONTRACTOR (No.	, street, county, State, and Z	Tip Code)	9A. AMENDMENT OF SO	LICITATION NO.	
Spectrum Technology Group, Inc.	-				
16 S. Summit Ave., Suite 210					
Gaithersburg MD 20877-2077			9B. DATED (SEE ITEM 1	1)	
-					
			10A. MODIFICATION OF	CONTRACT/ORD	ER NO.
		[X]			
			N00178-14-D-79	32-FD01	
			10B. DATED (SEE ITEM	13)	
CAGE 1KAE4 FACILIT	TY CODE		10-May-2016		
	HIS ITEM ONLY APPL	JES TO AMEND	MENTS OF SOLICITATION	DNS	
The above numbered solicitation is amended Offers must acknowledge receipt of this amendme (a) By completing Items 8 and 15, and returning on separate letter or telegram which includes a refere PLACE DESIGNATED FOR THE RECEIPT OF OF amendment you desire to change an offer already and this amendment, and is received prior to the of 12. ACCOUNTING AND APPROPRIATION DATA	nt prior to the hour and date e (1) copy of the amendment nce to the solicitation and an FERS PRIOR TO THE HOUF submitted, such change may pening hour and date specifi (If required)	specified in the solici t; (b) By acknowledgir nendment numbers. R AND DATE SPECIF be made by telegram	tation or as amended, by one of ng receipt of this amendment on o FAILURE OF YOUR ACKNOWLE TIED MAY RESULT IN REJECTION	the following me each copy of the EDGEMENT TO I DN OF YOUR OF	offer submitted; or (c) By BE RECEIVED AT THE FER. If by virtue of this
13 THIS I	TEM APPLIES ONLY	TO MODIFICATI	ONS OF CONTRACTS/C	DRDERS	
			AS DESCRIBED IN ITE	•	
(*) A. THIS CHANGE ORDER IS ISSUED ITEM 10A.	PURSUANT TO: (Specify a	authority) THE CHAN	GES SET FORTH IN ITEM 14 AI	RE MADE IN THE	E CONTRACT ORDER NO. IN
B. THE ABOVE NUMBERED CONTRA date, etc.)SET FORTH IN ITEM 14, PU				h as changes in _l	paying office, appropriation
[] C. THIS SUPPLEMENTAL AGREEME	NT IS ENTERED INTO PUR	SUANT TO AUTHOR	ITY OF:		
[X] D. OTHER (Specify type of modification Unilateral Modification IAW FAR 52.23	• /				
E. IMPORTANT: Contractor [X] is not, []		ment and return	copies to the issuing office.		
14. DESCRIPTION OF AMENDMENT/MODIFICATI SEE PAGE 2	ON (Organized by UCF sect	tion headings, includi	ng solicitation/contract subject n	natter where feas	sible.)
15A. NAME AND TITLE OF SIGNER (Type or print	t)	16A. NAME AND T	TITLE OF CONTRACTING OFFIC	ER (Type or print	t)
() () () () () () () () () ()					
			Contracting Officer		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STA	TES OF AMERICA		16C. DATE SIGNED
		BY _			05-Jul-2016
(Signature of person authorized to sign)		00.405	(Signature of Contracting Officer	,	
NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE		30-105		NDARD FORM cribed by GSA	30 (Rev. 10-83)

FAR (48 CFR) 53.243

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GENERAL INFORMATION

1) Incremental funding for this task order is provided for CLIN 7000 in the amount of is estimated that funding under this order will cover the cost of performance through 08 May 2017. In accordance with the contract clause 52.232-22, the Government is not obligated to reimburse the contractor for any costs in excess of unless additional funds are made available and obligated under this order in a subsequent modification.

- 2) Technical Instruction (TI) The contractor is not authorized to start performance associated with the funding cited in TIs until the Contracting Officer and Contracting Officer's Representative receive a signed copy of each Technical Instruction from the contractor.
- 3) The Accounting and Appropriation Data added to Section G is as follows:

MOD 01

7004 130055937000001

LLA:

AD 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003349788 In Accordance With Technical Instruction Number 16-005-00.

7005 130056112500001

LLA:

AE 97X4930 NH1C 254 77777 0 050120 2F 000000 A00003362150 In Accordance With Technical Instruction Number 16-006-00.

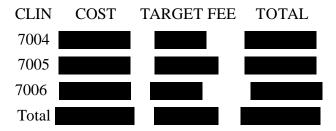
7006 130056292800001

LLA:

AF 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003375352 In Accordance With Technical Instruction Number 16-007-00.

MOD 01 Funding Cumulative Funding

4) Section G clause entitled "SEA 5252.232-9104 (JAN 2008) has been revised to read as follows:



5) The period of performance for CLINs 7000 and 9000 is to end 08 May 2017.

The Line of Accounting information is hereby changed as follows:

The total amount of funds obligated to the task is hereby increased from

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CLIN/SLIN	Type Of Fund	From (\$)	By (\$)	To (\$)
7004	RDT&E			
7005	Fund Type - OTHER			
7006	RDT&E			

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

CLIN/SLIN	From	То
7004		6/30/2016 - 12/1/2016
7005		6/30/2016 - 5/8/2017
7006		6/30/2016 - 5/8/2017

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SECTION B SUPPLIES OR SERVICES AND PRICES

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	PSC	Supplies/Services	Qty	Unit	Target	Cost	Target Fe	e CPIF
7000	R425	Engineering and Technical Support Services IAW Section C. From Date of Award through 12 Months after Date of Award. (Fund Type - TBD)	1.0	LO	\$		g.	Ş
	Max Fee		\$					
	Min Fee		\$					
	Government Overrun Share Line		50.0					
	Government Underrun Share Line		50.0					
7001	R425	Engineering and Technical Support Services IAW Technical Instruction Number 16-002-00. (RDT&E)	1.0	LO	Ş		\$	\$ EEEE
	Max Fee		\$					
	Min Fee		\$					
	Government Overrun Share Line		50.0					
	Government Underrun Share Line		50.0					
7002	R425	Engineering and Technical Support Services IAW Technical Instruction Number 16-003-00. (Fund Type - OTHER)	1.0	LO	Ş		\$	\$
	Max Fee		\$					
	Min Fee		\$					
	Government Overrun Share Line		50.0					

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Item	PSC	Supplies/Services	Qty	Unit	Target Cost	Target Fee	CPIF
	Government Underrun Share Line		50.0				
7003	R425	Engineering and Technical Support Services IAW Technical Instruction Number 16-004-00. (WCF)	1.0	LO	\$	G.	Ş
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7004	R425	Engineering and Technical Support Services IAW Technical Instruction Number 16-005-00. (RDT&E)	1.0	LO	\$	O.	Ç
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7005	R425	Engineering and Technical Support Services IAW Technical Instruction Number 16-006-00. (Fund Type - OTHER)	1.0	LO	\$	G.	Ş
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7006	R425	In Accordance With Technical Instruction	1.0	LO	Ş	\$	\$

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Item	PSC	Supplies/Services	Qty	Unit	Target Cost	Target Fee	CPIF
		Number 16-007-00. (RDT&E)					
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7100	R425	Contract Year 2, Option Year 1: Engineering and Technical Support Services IAW Section C. From 13 Months after Date of Award through 24 Months after Date of Award. (Fund Type - TBD) Option	1.0	LO	\$	V	Ş
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7200	R425	Contract Year 3, Option Year 2: Engineering and Technical Support Services IAW Section C. From 25 Months after Date of Award through 36 Months after Date of Award. (Fund Type - TBD)	1.0	LO	\$	\$	\$
		Option					
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				

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Item	PSC	Supplies/Services	Qty	Unit	Target Cost	Target Fee	CPIF
7300	R425	Contract Year 4, Award Term 1: Engineering and Technical Support Services IAW Section C. From 37 Months after Date of Award through 48 Months after Date of Award. (Fund Type - TBD) Option	1.0	LO	\$	\$	ψ.
	Max Fee	or	Ś				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				
7400	R425	Contract Year 5, Award Term 2: Engineering and Technical Support Services IAW Section C. From 49 Months after Date of Award through 60 Months after Date of Award. (Fund Type - TBD)	1.0	LO	\$	\$	\$
		Option					
	Max Fee		\$				
	Min Fee		\$				
	Government Overrun Share Line		50.0				
	Government Underrun Share Line		50.0				

For ODC Items:

Item PSC Supplies/Services Qty Unit Est. Cost

9000 F	R425		rect Costs (ODCs) in Support of CLIN 7000. Not To (Fund Type - TBD)	1.0 LO	\$
9001 F	R425	Other Direct Costs Instruction Number	(and the second	1.0 LO	\$
9002 F	R425		(ODCs) in Support of CLIN 7000 IAW Technical 16-003-00. (Fund Type - OTHER)	1.0 LO	\$

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Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost
9100	R425	Contract Year 2, Option Year 1: Other Direct Costs (ODCs) in Support of CLIN 7100. Not To Exceed \$ (Fund Type - TBD)	1.0	LO	\$	
		Option				
9200	R425	Contract Year 3, Option Year 2: Other Direct Costs (ODCs) in Support of CLIN 7200. Not To Exceed (NTE) \$ (Fund Type - TBD)	1.0	LO	\$	
		Option				
9300	R425	Contract Year 4, Award Term 1: Other Direct Costs (ODCs) in Support of CLIN 7300. Not To Exceed (NTE) \$ (Fund Type - TBD)	1.0	LO	\$	
		Option				
9400	R425	Contract Year 5, Award Term 2: Other Direct Costs (ODCs) in Support of CLIN 7400. Not To Exceed (NTE) \$ (Fund Type - TBD)	1.0	LO	\$	
		Option				

Level of Effort:

The level of effort for the performance of this contract is based upon an anticipated total estimated level of effort of man-hours of direct labor. The estimated composition of the man-hours of direct labor can be found in the chart below. Contractor Site Labor refers to labor performed at the Contractor's Facility and Government Site Labor refers to labor performed at Naval Surface Warfare Center Carderock Division, NSWCCD.

An asterisk (*) denotes a KEY PERSONNEL labor category.

Sur	nmary of the Level	of Effort Over the	Potential	Five (5) Year	Task Order				
LABOR CATEGORY	PRIMARY PLACE OF PERFORMANCE	CONRACTORS AT EACH LOCATION	HOURS PER LABOR CLIN	OVERTIME HOURS PER LABOR CLIN	TOTAL POTENTIAL HOURS				
KEY PERSONNEL									
Program Manager*	Contractor Site	1	1,000	0	5,000				
Information Technology Specialist*	Government Site	2	3,840	80	19,600				
Senior Scientist – Electrochemistry*	Government Site	1	1,920	0	9,600				
Senior Scientist – Magnetics*	Government Site	1	1,000	0	5,000				
Chemist/Chemical Engineer*	Government Site	1	1,920	0	9,600				
NON-KEY PERSONNEL									
Scientist/Engineer	Government Site	2	3,840	80	19,600				
Senior Engineer	Government Site	2	3,840	0	19,200				

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Junior Engineer	Government Site	4	7,680	320	40,000
Project Manager	Government Site	1	1,920	0	9,600
Fluids Laboratory Technician	Government Site	1	1,920	40	9,800
Technician	Government Site	3	5,760	320	30,400
Program Analyst	Government Site	2	3,840	0	19,200
Welder	Government Site	2	3,840	80	19,600
NDE Technician	Government Site	1	1,920	0	9,600
Clerk	Government Site	2	3,840	0	19,200
TOTAL LABOR HOURS					245,000

Award of Options in Award Term Periods:

NOTE: Exercise of option CLINs in award term periods are contingent upon the award term option period of the basic contract being exercised.

CLIN/SLIN Structure:

CLINS 7000 (Services) and 9000 (Other Direct Costs) represent the Parent CLINs. For administrative purposes, ceiling amounts under the parent CLINs will be subsequently re-allocated to new CLINs associated with various technical instructions issued and/or Appropriation types.

Incentive Fee:

The minimum fee shall be 2%, the maximum fee shall be 8%.

(1) The *final* target cost, target fee amounts shall be based upon the actual level of effort the contractor provides as explained in the following paragraphs:

CPIF LABOR ITEMS	LABOR HOURS	TARGET COST	TARGET FEE*	TOTAL TARGET COST/FEE AMOUNT
7000		\$	\$	\$
7000 Rate/Hr				
7100				

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7100 Rate/Hr			
7200			
7200 Rate/Hr			
	:		
7300			
7300 Rate/Hr			
	:		
7400			
7400 Rate/Hr			

- (i) The *final* CPIF target cost for CLIN 7000 and (if and to the extent Options are exercised) Option CLIN(s) 7100 and 7200 and (if Award Terms are awarded) CLIN(s) 7300 and 7400 shall be determined by multiplying the allowable hours worked, including subcontractor hours, under the CLIN by the rate/hour in the target cost column including cost of money, in the preceding table.
- (ii) The *final* CPIF target fee for CLIN 7000 and (if and to the extent Options are exercised) Option CLIN(s) 7100 and 7200 and (if Award Terms are awarded) CLIN(s) 7300 and 7400 shall be determined by multiplying the allowable hours worked, including subcontractor hours, under the CLIN by the rate/hour in the target fee column of the preceding table.

HQ B-2-0015 Payments of Fee(s) (Level of Effort – Alternate 1) (NAVSEA)(May 2010):

- (a) For purposes of this task order, "fee" means "target fee" in cost-plus-incentive-fee type task orders, "base fee" in cost-plus-award-fee type task orders, or "fixed fee" in cost-plus-fixed fee type task orders for level of effort type task orders.
- (b) The Government shall make payments to the Contractor, subject to and in accordance with the clause in this contract entitled "FIXED FEE" (FAR 52.216-8)or "INCENTIVE FEE", (FAR 52.216-10), as applicable. Such payments shall be submitted by and payable to the Contractor pursuant to the clause of this contract entitled "ALLOWABLE COST AND PAYMENT" (FAR 52.216-7), subject to the withholding terms and conditions of the "FIXED FEE" or "INCENTIVE FEE" clause, as applicable, and shall be paid at the hourly rate(s) specified above per man-hour performed and invoiced. Total fee(s) paid to the Contractor shall not exceed the fee amount(s) set forth in this task order. In no event shall the Government be required to pay the

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Contractor any amount in excess of the funds obligated under this task order.

Information Assurance Workforce (February 2011):

In accordance with DFARS 252.239-7001 "Information Assurance Contractor Training and Certification", contractors are required to provide proper and current certifications for the purposes of performing the information assurance functions identified in the task order. Copies of the certificate shall be submitted to the Contract and to the Information Assurance Workforce Program Manager, Kate Hogarth with 5 days after task order award. Failure to comply will result in denied access to DoD information systems.

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SECTION C DESCRIPTIONS AND SPECIFICATIONS

STATEMENT OF WORK

Full-Spectrum Scientific and Technical Investigation of Marine Materials for Navy Ships in the Area of Hull, Machinery, and Electrical Systems from Basic Research through In-Service Engineering

1.0 INTRODUCTION

The contractor shall provide scientific, technical, programmatic, and engineering services in the development, test, and evaluation of marine materials as well as oil and water analyses for submarines, unmanned underwater vehicles, surface ships, and weapons systems, including electrochemical power sources and magneto restrictive alloys and composites. The contractor's emphasis is on meeting Navy requirements for advanced applications, more cost effective solutions, and improved material selection.

Efforts will be implemented through the issuance of written work assignments described in Technical Instructions (TIs), issued under this Task Order (TO). The Naval Surface Warfare Center Carderock Division (NSWCCD), through the Contracting Officer's Representative (COR), will provide the information and technical data necessary for task performance. A list of Government Furnished Material (GFM), Government Furnished Information (GFI), and Government Furnished Equipment (GFE will be provided with each individual TI when applicable. Task deliverables will consist of documentation, data, and deliverables in accordance with the task statement and the Contract Data Requirements List (CDRL) of the base task order.

2.0 SCOPE OF WORK

- 2.1 Provide technical and practical expertise to support the Marine Corps Energy Program and its systems by characterization of power systems and validation of physical and electrical performance specifications. Provide engineering support for renewable energy system testing including test plans and reports and provide program management support for multiple Energy Programs with monthly updates and status reports. The contactor will also evaluate hybrid power systems and peripherals and provide field support when necessary for Marine Corps power demonstration.
- 2.2 Provide material expertise for material characterization, construction, test, and evaluation of electrochemical power sources. Types of power sources include various configurations (e.g., proton exchange and solid oxide fuel cells, batteries and capacitors) and chemistries appropriate for a wide range of Navy applications.
- 2.3 Conduct thermal analysis and molecular spectroscopy studies of advanced electrochemical materials used in batteries and supercapacitors for Navy and Marine Corps applications. The contractor shall investigate and determine the physical and chemical properties of electrochemical materials.

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- 2.4 Plan and conduct testing for Navy power source performance and safety evaluations with special emphasis on the Navy's Lithium Battery Safety Program. The contractor shall provide technical and practical expertise for the testing and evaluation of electrochemical power sources with emphasis on the engineering-level aspects of tests and characterization.
- 2.5 Work will include fabrication of test fixtures and samples; evaluation of various configurations and chemistries for power sources such as batteries, capacitors and supercapacitors, and fuel cells; calibration, maintenance and operation of existing test and evaluation equipment; refurbishment of equipment; and nondestructive evaluation of materials.
- 2.7 The contractor shall provide support to scientists and engineers in order to keep their Research Development Test and Evaluation (RDT&E) computers in compliance with information assurance and cybersecurity requirements. The contractor will maintain data acquisition and other electronic systems that address present needs of the technical codes and provides a path for future enhancements. This will include the capability to design, revise, update, build, software and hardware, and assist with inventory of computers and related electronic systems; access to restricted systems will be granted as needed and appropriate. Special emphasis is placed on:
- 2.7.1 Ensuring that data acquisition, especially computers, are available for optimal use by the scientists and engineers, and
- 2.7.2 Ensuring all RDT&E computers are in compliance for certification and accreditation by working with information assurance and cybersecurity workforce to the degree necessary and appropriate.
- 2.8 The contractor shall provide contract management and administrative support to improve business operations during the financial development phase for a number of incoming projects; develop project-tracking procedures for various funded accounts; monitor direct labor spending against project codes; verify financial expenditures using cost database systems; and produce reports on work progress in regard to financial analysis and monitoring to enhance financial performance. The contractor shall also provide support for clerical work when required.
- 2.9 The contractor shall provide technical expertise to test and characterize non-metallic materials, including polymers, ceramics, adhesives, syntactic materials, rubber, seals fibers, gaskets, insulations, foams, composites, signature tiles and signature coatings to determine basic properties and to assess suitability for use in Naval environments. The contractor shall also perform quality assurance testing of non-metallic materials and shall evaluate the compatibility of non-metallic materials with coatings including paint.
- 2.10 The contractor shall fabricate test samples and parts from non-metallic materials by cutting, blasting, grinding, sanding, painting, mixing, milling, compounding, molding, spraying, bonding and using high-temperature processing techniques, as appropriate. Following fabrication, the contractor shall conduct quality assurance tests and assess, treat, coat, mark and package final parts and samples.

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- 2.11 The contractor shall provide technical expertise to prepare, revise and issue technical documentation for the specification, repair, maintenance, installation of non-metallic materials. Technical documentation shall include specifications, standards, technical manuals, and repair, installation, removal and disposal procedures. The contractor shall provide a response to technical inquires on non-metallic materials and components.
- 2.12 The contractor shall conduct analyses on failed non-metallic material components, including polymers, rubber components, ceramic components and seals, to determine the cause of failure and to prepare recommendations to improve component design and mitigate failure modes.
- 2.13 The contractor shall conduct physical, vibratory, and metrological testing of bearings, and shall prepare standardized test reports of the results. The contractor shall also inspect, clean and lubricate shelf-life expired bearings to assess their conformance to specification requirements. The contractor shall pack, ship and store bearings in accordance with Navy requirements.
- 2.14 The contractor shall provide technical expertise to support and oversee the installation, repair and maintenance of non-metallic materials, including ceramics, coatings, seals, insulation, sealants, tiles or vibration and noise control features on board ships and at shore facilities. The contractor shall perform tests and measurements to ensure that environmental and installation requirements are met prior to installation, and subsequent to installation, shall perform quality assurance tests to ensure the installation was performed correctly. The contractor shall provide support to conduct ship and shore surveys, assessments and inspections of non-metallic material components, and shall prepare material condition reports, including recommendations for repair and maintenance.
- 2.15 The contractor shall provide welding engineering services applicable to Naval shipbuilding (e.g., marine structures, piping, propulsion shafting, and machinery). Engineering services may include, for example, generation, review, and recommendation of welding procedures and qualifications, review and modification of military specifications and other welding related documents and commercial standards (e.g., American Bureau of Shipbuilding, American Welding Society, American Society of Testing and Materials, and American Society of Mechanical Engineers), oversight of fabrication operations at on-site locations (e.g., Warfare Centers, Naval and private shipyards, material vendors, fabricators, etc.), consultation based on technical expertise. The contractor shall provide technical reports as requested. All efforts performed shall be described in the monthly progress report.
- 2.16 The contractor shall provide welding operation support services to fabricate test samples to include, for example, plates, pipes, parts and system components from ferrous and non-ferrous materials by cutting, blasting, grinding, sanding, milling, machining, fabricating fixtures, fixturing, instrumenting, running ancillary equipment associated with welding, data acquisition, developing welding procedures, perform preliminary analysis of procedures, and welding, as appropriate. After fabrication, the contractor shall conduct quality assurance procedures and assess, mark and package final products as appropriate. The contractor shall provide welding reports for all welds fabricated and provided reporting as requested. All efforts performed shall be described in the monthly progress report.

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- 2.17 The contractor shall provide Nondestructive Testing (NDT) Testing Support. Non-destructive testing can include, for example, Eddy Current (ET), Magnetic Particle (MT), Penetrant Testing (PT), Ultrasonic Testing (UT), Phased Array Ultrasonic Testing (PAUT), Visual Testing (VT), Radiographic Testing (RT), or leak testing. The contractor shall provide review of specifications and provide engineering services, Technique Development and Inspection Services on at NSWCCD labs, including model shop, in-service inspections at shipyards and on-board ships. The contractor shall provide inspection reports for all inspections and provided reporting as requested. All efforts performed shall be described in the monthly progress report.
- 2.18 The contractor shall provide machining and mechanical testing services of ferrous and nonferrous metallic materials. Machining services may include sectioning blanks and test specimens utilizing techniques such as water jet cutting, saw cutting, and/or milling. Mechanical testing support may include work to evaluate tensile, bend, stress corrosion cracking, fracture toughness, and/or fatigue properties. Machining and testing services shall be performed in accordance with applicable specifications.
- 2.19 The contractor shall provide computational materials engineering services to include modeling and simulation of stress, deformation, heat transfer, microstructure, and mechanical properties from a combination, or singular, source of composition, fabrication method (e.g., welding, forming, extruding, casting, cutting, additive manufacturing technologies) and loading. Work may also include the development of alloy specific thermo-physical, thermo-mechanical, and thermo-metallurgical property databases for finite element analysis, as required. After analysis has been complete, the contractor shall conduct quality assurance procedures and, mark and package final products as appropriate. The contractor shall provide modeling and simulation and test reports for all work, and mark and package final products as appropriate.
- 2.20 The contractor shall assess, measure, and characterize the effect of the dependence of the concentration of Ga, Al, and Ge and ternary / quaternary elements on magnetization, magnetic anisotropy, and magnetostriction over a temperature range from cryogenic temperatures to above room temperature.
- 2.21 The contractor shall assess and measure the effect of the dependence of the concentration of Ga and other ternary/quaternary elements in Fe-Ga alloys on magnetization, magnetic anisotropy, and magnetostriction.
- 2.22 The contractor shall assess of alloys under compression, tension and magnetic fields to optimize transducer operation, including under various tensile load and saturation magnetostriction conditions.
- 2.23 The contractor shall conduct elastic property measurements as a function of magnetic field and temperature on alloys.
- 2.24 The contractor shall determine fundamental physical behavior leading to the large magnetostriction of alloys, including analysis of elastic properties and saturation-magnetostrictions.

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- 2.25 The contractor shall evaluate the feasibility of converting unwanted mechanical energy (or noise) into useful electrical power using magneto-mechanical alloys.
- 2.26 The contractor shall develop transducer materials to sustain and enhance performance by using new and optimized alloys in sensors. They will measure magnetic material characteristics which are correlated with sensor performance to guide material alloy and annealing process investigations.
- 2.27 The contractor shall provide technical and programmatic expertise to support hull material evaluation programs by writing, reviewing, and editing reports, inspection plans, and safety procedures. Provide laboratory, waterfront, and shipyard test and evaluation support. Develop, design, and fabricate underwater and terrestrial equipment, instrumentation tools, and sensors for evaluating hull materials. Have knowledge and provide support in piloting, maintaining, and modifying unmanned underwater vehicles. Provide support in maintaining laboratories, equipment, and facilities. Provide support in data acquisition and analysis.
- 2.28 The contractor shall provide technical expertise to perform laboratory analytical evaluations of in-service propulsion systems including diesel engines, gas turbines, and steam propulsion plant automation systems, hydraulics, steering systems, shipboard crane and anchor mooring towing systems, and chillwater systems to provide data that will assess the performance of Hull, Mechanical and Electrical (HM&E) machinery systems and components from aircraft carriers, surface ships and submarines.
- 2.29 The contractor shall track, repair and trend shipboard analytical instrumentation repair and replacements.
- 2.30 The contractor shall provide technical support for maintenance and installation of shipboard equipment. The contractor will provide technical expertise to ensure that the equipment is installed and operating correctly in support of diesel, fuel, or steam and auxiliary systems.
- 2.31 The contractor shall review and develop updates to technical documentation including laboratory equipment standard operating procedures, reports of analysis and evaluation, military specifications, Naval Technical Manuals and other Integrated Logistics Support (ILS) as it relates to the Naval Fluids program.
- 2.32 The contractor shall perform analyses of water and petrochemical samples in order to determine the degree of contamination, chemical make-up, and other common chemical properties in order to determine maintenance requirements and strategies. The contractor shall troubleshoot Navy propulsion and auxiliary systems based on analysis of the chemical properties of water and petrofluids.
- 2.33 The contractor shall provide support services to analyze routine oil-water separator effluent samples per City of Philadelphia Wastewater Requirements using approved EPA methods.

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- 2.34 The contractor shall provide Diesel Propulsion analysis, quality assurance, and laboratory equipment maintenance purchase, repair and calibration. The contractor shall perform testing, analysis and data review of new and used samples performed by the Government in order to determine diesel maintenance strategy through on-site personnel and external laboratory services. The contractor shall provide maintenance and calibration services in order to maintain Naval Fluids laboratory equipment.
- 2.35 The contractor shall provide shipping and purchasing support of water and petrofluid projects to include water or petrofluid samples, sample bottle kits, labels, shipping containers and express mailers, fluid sampling pump kits, and shipboard testing equipment.
- 2.36 The contractor shall provide support for non-nuclear steam generating plants to include evaluation of shipboard water chemistry test equipment and chemicals.
- 2.37 The contractor shall provide engineering and analytical services to evaluate Commercial Off The Shelf (COTS) shipboard analytical technology insertion, prototype demonstrations, and evaluate integration with existing systems and perform system qualification. The contractor shall develop necessary supporting documentation to support technology insertion of NDI/COTS.
- 2.38 The contractor shall support the Naval Fluids Laboratory and the facilities and inventory required for routine shipboard testing and evaluation in support of propulsion and auxiliary equipment maintenance and troubleshooting.

3.0 PROGRAM MANAGEMENT

The contractor shall maintain a management structure and management reporting system that ensures proper and timely performance, delivery, and completion of all contract requirements and individual task requirements. The contractor shall appoint a Program Manager to act as the focal point for all communications between the Contractor and Government. The Program Manager shall have overall responsibility for accomplishing the efforts under each Technical Instruction. The contractor shall provide personnel and technical data to support program review meetings scheduled by the Government of any work related to this contract, and maintain records of the proceedings as specified in the Technical Instructions.

4.0 GOVERNMENT FURNISHED RESOURCES

The Government will provide the contractor with office space, computer, printer, facsimile service, Internet access and administrative support for the project as required and telephone service for official and local use. Government Furnished Equipment (GFE) provided to the contractor will be returned to the Government in good working order. The Government Furnished Information (GFI) will consist of documentation, data and materials.

The Government will provide the contractor with all pertinent information, including deadlines and Government proprietary data within fourteen (14) working days after award. This Government Furnished Information (GFI) shall be returned to the Government within thirty (30) days after completion of the task performed.

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The Government shall provide the Contractor with the following GFI/GFE:

- a. Access to laboratory hardware and software system documentation upon task issuance.
- b. Access to Division 61 laboratory material evaluation hardware.
- c. Division 61 will provide equipment and office space for work under this order and access to an on-base working computer with Navy Marine Corps Intranet (NMCI) access after support contractors have obtained a Common Access Card (CAC). The Contractor will be responsible for supplying working computers until the proper Security Clearances have been obtained.
- d. Scope and strategy of program and technical issues: as information becomes known.

5.0 DELIVERABLES AND REPORTING

All products, documentation, data files and masters for products, reports, etc. developed in support of this task order are the property of the Government and shall be turned over to the Government upon request or completion of this task order.

- 5.1 Technical/Test Reports: Technical reports shall be provided to the Contracting Officers Representative per request and include efforts such as shipboard installations, surveys, and technical evaluations In Accordance With DD Form 1423, Contract Data Requirements List (CDRL), A001.
- 5.2 The Contractor shall prepare a monthly HM&E Platform Design and Integration progress report. The Monthly status report shall include: amount funded (ODC and Labor), amount expended (ODC and Labor), number of labor hours used during the reporting period, cumulative amount expended to date (ODC and Labor), number of labor hours used to date, summary of tasking performed during the reporting period and a summary of ODC Usage for the reporting period. In addition, the progress report shall include a description of any problems encountered during the reporting period. (The first progress report is due 30 days after task order award and the remaining reports shall be due the same day of every month thereafter.) In Accordance With DD Form 1423, CDRL, A002.
- 5.3 The Burn Rate Analysis Report is a summary report that captures the rate at which the money is expended.

This report shall be attached in Wide Area Workflow Receipts and Acceptance (WAWF-RA), beginning 30 days after award and every 30 days thereafter.

- 5.4 The Incurred Costs Report is a report that captures a summary of all costs incurred to date. This report shall be attached in Wide Area Workflow Receipts and Acceptance (WAWF-RA), beginning 30 days after award and every 30 days thereafter.
- 5.5 Other Reports: Technical studies, analysis, evaluations, calculations, briefs, white papers, detailed designs, draft specifications, 75% Notification Letters, Cost Summary Report, and plans and data logs as required.

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6.0 PLACE OF PERFORMANCE

The primary Government place of performance (approximately ninety percent (90%) of the work) will be at the Naval Surface Warfare Center Carderock Division (NSWCCD), West Bethesda, MD. The contractor shall have a means that will enable timely and efficient routine visits with appropriate officials between contractor personnel and Government personnel. Other places of performance include Naval Surface Warfare Center Carderock Division Ship Systems Engineering Station (NSWCCD-SSES), Philadelphia, PA (approximately five percent (5% of the work), and the contractor's facility (approximately five percent (5%) of the work).

7.0 TRAVEL

Performance of the task will require travel to various Government facilities within and beyond the Washington D.C. metropolitan area and the Philadelphia metropolitan area for the purpose of obtaining data and documentation, presenting and discussing technical issues, and participating in technical reviews associated with task performance.

8.0 SECURITY REQUIREMENTS

8.1 The highest level of security required under this task order will be up to and including SECRET, as designated on the attached DD Form 254. The Contractor must have or be eligible to obtain and maintain the required security clearances at the level required under this task order at time of task order award. The Director of Industrial Security, Defense Investigative Service, NSWCCD is the point of contact regarding security matters. Additional information related to the facility clearance process can be obtained by visiting www.dss.mil or http://www.dss.mil /isec/pcl_index.htm.

8.2 Contractor must have the ability to attain the clearance necessary to handle and store classified documents Documents include, but are not limited to technical manuals, drawings, letters, and reports. Classified documents must be handled in accordance with standard classified security operating procedures.

9.0 CONTRACTOR PERSONNEL IDENTIFICATION

In the performance of this contract, contractor employees shall identify themselves as contractor personnel by introducing themselves or being introduced as contractor personnel and by displaying distinguishing badges or other visible identification for meetings with Government personnel. Contractor personnel shall appropriately identify themselves as contractor employees in telephone conversations and formal and informal written correspondence.

10.0 PERSONNEL QUALIFICATIONS

The level of effort for the performance of this task order is based upon 245,000 person-hours of direct labor distributed over a potential five (5) year period of performance. Regardless of the offeror's labor categories (including those of any subcontractor), each offeror must base its labor costs on personnel fitting the following labor categories. Contractor personnel for all labor categories shall be cleared or able to be cleared at the SECRET level within 30 days of task order

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award.

10.1 Key Personnel - The contractor shall be responsible for employing technically qualified personnel to perform the requirements. The following labor categories are designated Key Personnel for this task order. The work history of each employee must contain experience directly related to the functions he/she intends to perform under this task order. Resumes shall be submitted for each category in the quantities indicated by the key category description. Personnel shall be assigned to efforts in a manner that will provide greatest efficiency. Any substitution/addition of personnel under those identified as Key Personnel shall be subject to the Substitution of Key Personnel Clause identified under the Basic Seaport Order.

Requirements for Key Personnel are target requirements unless the labor category is identified with "Minimum Requirements", in which case the qualifications stated represent the minimum. Please also see Paragraph 12.0 "NAVY INFORMATION ASSURANCE (IA) WORKFORCE REQUIREMENTS" and ensure that the proposed personnel have or can obtain the required listed computer certifications by the time of task order award.

If the contracting officer questions the qualifications or competence of any person performing under the task order, the burden of proof to sustain that the person is qualified as prescribed herein shall be upon the contractor.

The key-personnel categories and requirements include:

(1) Program Manager (1 Resume):

Target Education: This individual should have a Bachelor's degree in engineering or physics.

Target Experience: He or she should also have ten (10) years of experience in Navy Ship Programs to include research, development, new ship construction, repair, maintenance test, evaluation, or performance assessments. The person should also have target 5 years of supervisory experience related to Navy programs including project management; technology management; research, development, test and evaluation, repair, maintenance, new ship construction, or evaluation of characteristics and capabilities for U.S. ships and submarines and foreign ships.

(2) Information Technology Specialist (2 Resumes):

Target Education: These individuals should have a Bachelor's degree in Information Technology or a related field.

Target Experience: These individuals should have two (2) years of experience in information technology or related field and should have knowledge of Navy Information Awareness and operating system certification. The individuals shall obtain and maintain a Security+ certification. These individuals should also have familiarity compliance with cybersecurity workforce, networks, data acquisition, and other electronic systems that addresses present Navy needs. Experience should include the capability to design, revise, update and build software and hardware, and assist with inventory of computers and related electronic systems.

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(3) <u>Senior Scientist – Electrochemistry (1 Resume):</u>

Target Education: This individual should have an advanced degree in Chemistry or Chemical Engineering.

Target Experience: Target ten (10) years of professional experience in electroanalytical chemistry, battery science, and capacitor materials. Such materials include, but are not limited to, battery electrodes, battery electrolytes, ceramics, polymers, amorphous metal alloys, pyrophoric mixtures, nanocrystalline alloys, semiconductors and supercapacitor activated carbon electrodes.

(4) <u>Senior Scientist – Magnetics (2 Resumes):</u>

Target Education: These individuals should have a Master's degree or higher in a science or engineering related field.

Target Experience: Target ten (10) years of professional experience in magnetic and magnetoelastic properties of advanced materials for Navy applications. Such properties include, but are not limited to, magnetostriction, permeability, piezomagnetic constant, elastic moduli, and magnetic anisotropy of magnetostrictive materials. The scientist should have expertise in the in the development of magnetostrictive materials and high magnetoelastic coupling coefficient sensor materials, and should have demonstrated the ability to formulate theoretical models for magnetostrictive materials. Theoretical investigation into the physical origin of magnetoelastic fundamental properties, energy harvesting, and/or magnetic materials development for sensor applications should also be demonstrated. Expertise could be demonstrated by publications in peer-reviewed journals, Government technical reports, patents, and presentations at professional society meetings.

(5) <u>Chemist/Chemical Engineer (1 Resume):</u>

Target Education: This individual should have a Bachelor's degree in either chemical engineering or chemistry.

Target Experience: Target (3) years of experience in either water or petrofluids chemistry/engineering and an established track record of successful project management. Experience in independent task management, with minimal oversight must have been demonstrated.

10.2 Non-Key Personnel - The following labor categories are designated non-key personnel for this task order. The offeror must certify that all proposed personnel meet the prescribed requirements. All non-key personnel performing under this task order shall meet the Government's minimum education and experience requirements. Please also see Paragraph 12.0 "NAVY INFORMATION ASSURANCE (IA) WORK FORCE REQUIREMENTS" and ensure that the proposed personnel have or can obtain the required listed computer certifications by the time of task order award.

The minimum personnel qualifications for the respective non-key labor categories are as follows:

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(1) <u>Scientist/Engineer:</u>

Minimum Education: Individuals under this labor category shall have a Bachelor's degree in engineering, physics, chemistry or other related field.

Minimum Experience: The individuals shall have five (5) years of experience in relevant fields such as material characterization, construction and test and evaluation for Navy electrochemical power source applications.

(2) Senior Engineer:

Minimum Education: Individuals under this labor category shall have a Bachelor's degree in engineering, physics, chemistry or other related field.

Minimum Experience: The individuals shall have ten (10) years of experience in relevant fields such as material characterization and test and evaluation for Navy applications such as submarine and surface ships technical insertions and modernization efforts.

(3) <u>Junior Engineer:</u>

Minimum Education: Individuals under this labor category shall have a Bachelor's degree in engineering, physics, chemistry, computer science, information technology or other related field.

Minimum Experience: The individuals shall have two (2) years of experience in material characterization, testing and evaluation.

(4) **Project Manager:**

Minimum Education: Individuals under this labor category shall have a Bachelor's degree from an accredited university.

Minimum Experience: Two (2) years of experience in managing projects, developing reports, and providing project management support for multiple energy programs with monthly updates and status reports.

(5) Fluids Laboratory Technician:

Minimum Education: Individuals under this labor category shall have a High School Diploma or GED.

Minimum Experience: Five (5) years of related experience in laboratory operations, maintenance, data collection, records maintenance, report preparation, test and evaluation of water and/or petrofluids, and logistical support. The individuals shall have the necessary training or education to work with water or petrofluids. Substitution of experience for education requirements may be made, with 3 years military experience equivalent to an Oil King.

(6) Technician:

Minimum Education: Individuals under this labor category shall have a High School Diploma or

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GED.

Minimum Experience: Individuals under this labor category shall have two (2) years of experience in machining, and operation and maintenance of equipment. The technician should have experience in a laboratory setting with materials manufacturing and testing.

(7) **Program Analyst:**

Minimum Education: Individuals under this labor category shall have a Bachelor's degree from an accredited university.

Minimum Experience: These individuals shall have four (4) years of experience providing program management support for planning, organizing, reviewing, and documenting projects for U.S. Navy or other DoD Organizations. The individuals should have experience in providing summarization, analysis and recommendations across a range of labor, personnel, non-labor, financial, sponsor and contractual aspects of a program across requisite timeframes.

(8) Welder:

Minimum Education: Individuals under this labor category shall have a High School Diploma or GED.

Minimum Experience: These individuals shall have a minimum of five (5) years of experience welding ferrous and/or non-ferrous materials using arc-welding, robotic welding, or friction stir welding.

(9) NDE Technician:

Minimum Education: Individuals under this labor category shall have a Bachelor's degree from an accredited university.

Minimum Experience: This individual shall have a minimum of five (5) years of experience and applicable certifications in non-destructive evaluation techniques. Such techniques include: inspection, magnetic particle inspection, radiographic inspection, and ultrasonic inspection.

(10) Clerk:

Minimum Education: Individuals under this labor category shall have a High School Diploma or GED.

Minimum Experience: The individual shall have at least one (1) year of experience as a clerk/typist including entry-level experience in the use of Microsoft Office suite of applications. The individual shall have experience in timekeeping and report editing.

11.0 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA)

The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this task order via a secure data collection

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site. The contractor is required to completely fill in all required data fields using the following web address https://doncmra.nmci.navy.mil. Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://doncmra.nmci.navy.mil.

12.0 NAVY INFORMATION ASSURANCE (IA) WORKFORCE REQUIREMENTS

Contractor shall ensure that employees keep all required certifications current to meet Navy Information Assurance (IA) Workforce requirements. The definitions of the categories in the IA Workforce and the acceptable certification for each category can be found at the following web site: http://www.dtic.mil/whs/directives/corres/pdf/857001m.pdf *See also DFARS clause 252.239-7001, Information Assurance Contractor Training and Certification, by full text in Section I.

NOTE: THE BELOW CERTIFICATIONS ARE REQUIRED AT TIME OF TASK ORDER AWARD.

A table listing the Labor Categories and their associated IA Workforce Category follows:

Labor Category	Task Area	Duties	IAWF Level	Baseline Certification	OS Certification
Technology (Sr.	3.2.1.1 3.2.3.1, 2, 6,	System design activities in support of development and implementation of machinery life cycle management systems. Support real-time data acquisition, analysis, storage and analysis system design, and integrated user and data interface applications	IAM-1	Security +	Linux + or MCITP-EA
Technology (Sr. Software	5, 6, 8 3.2.3.3, 4, 6	Develop software development plans, software programs, testing plans, software upgrades and enhancements; provide computer and software engineering support services.	IAM-1	Security +	Linux + or MCITP-EA

CAR-C02 On-Site Environmental Awareness (APR 2015):

(a) The contractor shall strictly adhere to Federal Occupational Safety and Health Agency (OSHA) Regulations, Environmental Protection Agency (EPA) Regulations, and all applicable state and local requirements.

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(b) The contractor shall ensure that each contractor employee reads the document entitled, "Carderock Division Environmental Policy and Commitment" within 30 days of commencing performance at NAVSSES. This document is available at:

https://crbewebappdev.dt.navy.mil/intra/code10/eosh/documents/ENV.%20Policy%20Statement%2011-7-13.pdf

(c) The contractor shall ensure that each contractor employee who will be resident at NAVSSES completes the Environmental Management System (EMS) Awareness training within 30 days of commencing performance at NAVSSES. This document is available at:

https://crbewebappdev.dt.navy.mil/intra/code10/eosh/documents/Contractor%20EMS%20Awareness%20Training.doc

- (d) The Contractor shall certify by e-mail to Paul Breeden/Code 1023 (paul.breeden@navy.mil) that on-site employees have read the "Carderock Division Environmental Policy and Commitment" and taken the Environmental Management System (EMS) Awareness training within 30 days of commencing performance at NNASSES. The e-mail shall include the employee name, work site, and contract number.
- (e) The contractor shall contact Paul Breeden/Code 1023 (paul.breeden@navy.mil) or Al D'Imperio/Code 1024 (albert.dimperio@navy.mil) if unable to access the training links provided within in order to obtain a copy of the documents.

CAR-C03 On-Site Safety Awareness (APR 2015):

- (a) The contractor shall strictly adhere to Federal Occupational Safety and Health Agency (OSHA) Regulations, Environmental Protection Agency (EPA) Regulations, and all applicable state and local requirements.
- (b) The contractor shall ensure that each contractor employee reads the document entitled, "Carderock Division Occupational Safety and Health Policy Statement" within 30 days of commencing performance at NAVSSES. This document is available at:

https://crbewebappdev.dt.navy.mil/intra/code10/eosh/documents/OSH%20Policy%20Statement%2011-8-13.pdf

(c) The contractor shall ensure that each contractor employee who will be resident at NAVSSES completes the Voluntary Protection Program (VPP) Awareness Training within 30 days of commencing performance at NAVSSES. This document is available at:

https://crbewebappdev.dt.navy.mil/intra/code10/eosh/vol_prot_prog.html

(d) The Contractor shall certify by e-mail to Al D'Imperio/Code 1024 (albert.dimperio@navy.mil) that employees have read the "Carderock Division Occupational Safety and Health Policy Statement" and taken the Voluntary Protection Program (VPP) awareness training within 30 days of commencing performance at NAVSSES. The e-mail shall include the employees name, work site, and contract number.

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- (e) The contractor shall submit their OSHA 300 Logs (injury/illness rates) within 30 days of commencing performance at NAVSSES for review by the Safety Office (Code 1024). If a contractor's injury/illness rates are above the Bureau of Labor Statistics industry standards, a safety assessment will be performed by Code 1024 to determine if any administrative or engineering controls can be utilized to prevent further injuries/illnesses, or if any additional PPE or training will be required.
- (f) The contractor shall post their OSHA 300 Logs in a conspicuous place where employee notices are customarily posted immediately upon commencing performance at NAVSSES.
- (g) Applicable contractors shall submit Total Case Incident Rate (TCIR) and Days Away, Restricted and Transfer (DART) rates for the past three years within 30 days of commencing performance at NAVSSES for review by the Safety Office (Code 1024). A contractor meets the definition of applicable if its employees worked 1,000 hours or more in any calendar quarter on site and were not directly supervised in day-to-day activities by the command.
- (h) The contractor shall report all work-related injuries/illnesses that occurred while working at NAVSSES to the Safety Office (Code 1024).
- (i) The contractor shall ensure that all contractor work at NAVSSES is in accordance with the Occupational Safety and Health (OSH) Program Manual (NAVSSESINST 5100.14). The OSH Program Manual is available at:

https://crbewebappdev.dt.navy.mil/intranet/instr/s5100-14g-withch1.pdf

(j) The contractor shall contact	or
) if unable to access the training links provided
within in order to obtain a copy of the documents	S.

HQ C-2-0059 UPDATING SPECIFICATIONS AND STANDARDS (NAVSEA) (AUG 1994)

If, during the performance of this or any other contract, the contractor believes that any contract contains outdated or different versions of any specifications or standards, the contractor may request that all of its contracts be updated to include the current version of the applicable specification or standard. Updating shall not affect the form, fit or function of any deliverable item or increase the cost/price of the item to the Government. The contractor should submit update requests to the Procuring Contracting Officer with copies to the Administrative Contracting Officer and cognizant program office representative for approval. The contractor shall perform the contract in accordance with the existing specifications and standards until notified of approval/disapproval by the Procuring Contracting Officer. Any approved alternate specifications or standards will be incorporated into the contract.

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SECTION D PACKAGING AND MARKING

HQ D-2-0008 Marking Of Reports (NAVSEA) (SEP 1990):

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

- (1) name and business address of the Contractor
- (2) contract number
- (3) task order number
- (4) sponsor: (To be specified on each individual Technical Instruction)

(Name of Individual Sponsor)

(To be specified on each individual Technical Instruction)

(Name of Requiring Activity)

(To be specified on each individual Technical Instruction)

(City and State)

Shipping of Reports:

Ship all Reports/Data to the Contracting Officer's Representative (COR) identified in Section G.

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

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SECTION E INSPECTION AND ACCEPTANCE

Inspection and Acceptance will be performed by the Contracting Officer's Representative (COR) identified in Section G, unless otherwise specified in the Technical Instructions (TIs) issued under this Task Order.

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SECTION F DELIVERABLES OR PERFORMANCE

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

7000	5/9/2016 - 5/8/2017
7001	5/9/2016 - 5/8/2017
7002	5/9/2016 - 5/8/2017
7003	5/9/2016 - 5/8/2017
7004	6/30/2016 - 12/1/2016
7005	6/30/2016 - 5/8/2017
7006	6/30/2016 - 5/8/2017
9000	5/9/2016 - 5/8/2017
9001	5/9/2016 - 5/8/2017
9002	5/9/2016 - 5/8/2017

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

7000	5/9/2016 - 5/8/2017
7001	5/9/2016 - 5/8/2017
7002	5/9/2016 - 5/8/2017
7003	5/9/2016 - 5/8/2017
7004	6/30/2016 - 12/1/2016
7005	6/30/2016 - 5/8/2017
7006	6/30/2016 - 5/8/2017
9000	5/9/2016 - 5/8/2017
9001	5/9/2016 - 5/8/2017
9002	5/9/2016 - 5/8/2017

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

7100	5/9/2017 - 5/8/2018
7200	5/9/2018 - 5/8/2019
9100	5/9/2017 - 5/8/2018
9200	5/9/2018 - 5/8/2019

The periods of performance for the Award Term Items are as follows:

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7300	5	5/9/2019 - 5/8/2020		
7400	5	5/9/2020 - 5/8/2021		
9300	5	5/9/2019 - 5/8/2020		
9400	5	5/9/2020 - 5/8/2021		

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DELIVERY ORDER NO.

Ship To Address:

CONTRACT NO.

Ship all data item deliverables to the Contracting Officer's Representative (COR) as specified in the task order.

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SECTION G CONTRACT ADMINISTRATION DATA

Contracting Officer Representative:



Alternate Contracting Officer Representative:



252.204-0002 Line Item Specific: Sequential ACRN Order. (SEP 2009)

The payment office shall make payment in sequential ACRN order within the line item, exhausting all funds in the previous ACRN before paying from the next ACRN using the following sequential order: Alpha/Alpha; Alpha/numeric; numeric/alpha; and numeric/numeric.

252.232-7006 Wide Area Workflow Payment Instructions (MAY 2013):

(a) Definitions. As used in this clause—

"Department of Defense Activity Address Code (DoDAAC)" is a six position code that uniquely identifies a unit, activity, or organization.

"Document type" means the type of payment request or receiving report available for creation in Wide Area Work Flow (WAWF).

"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

- (b) *Electronic invoicing*. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS <u>252.232-7003</u>, Electronic Submission of Payment Requests and Receiving Reports.
 - (c) WAWF access. To access WAWF, the Contractor shall—
- (1) Have a designated electronic business point of contact in the Central Contractor Registration at https://www.acquisition.gov; and
- (2) Be registered to use WAWF at https://wawf.eb.mil/ following the step-by-step procedures for self-registration available at this web site.

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- (d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at https://wawf.eb.mil/
- (e) WAWF methods of document submission. Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.
- (f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:
 - (1) Document type. The Contractor shall use the following document type(s).

COST VOUCHER

(2) *Inspection/acceptance location*. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

SEE SECTION E

(3) *Document routing*. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

Field Name in WAWF	Data to be entered in WAWF
Pay Official DoDAAC	HQ0338
Issue By DoDAAC	N64498
Admin DoDAAC	S2101A
Inspect By DoDAAC	N00167
Ship To Code	N00167
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	N65540
Service Acceptor (DoDAAC)	N65540
Accept at Other DoDAAC	N/A

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N/A
HAA211
N/A

- (4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.
- (5) WAWF email notifications. The Contractor shall enter thee-mail address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

cory.upmeyer@navy.mil

- (g) WAWF point of contact.
- (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

(2) For technical WAWF help, contact the WAWF helpdesk at (End of clause)

HQ G-2-0009, Supplemental Instructions Regarding Electronic Invoicing (NAVSEA) (SEP 2012)

(a) The Contractor agrees to segregate costs incurred under this Task Order (TO), as applicable, at the lowest level of performance, either at the technical instruction (TI), sub line item number(SLIN), or contract line item number (CLIN) level, rather than on a total TO basis, and to submit invoices reflecting costs incurred at that level. Supporting documentation in Wide Area Workflow (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 other direct costs (ODCs), materials, and travel, by TI, SLIN, or CLIN level. For other than firm fixed price

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subcontractors, 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 (CO)and Contracting Officer Representative (COR). Should the subcontractor lack encryption capability, the subcontractor may also email detailed supporting cost information directly to the CO and COR; or other method as agreed to by the CO.

(b) Contractors submitting payment requests and receiving reports to WAWF using either Electronic Data Interchange(EDI) or Secure File Transfer Protocol (SFTP) shall separately send an email notification to the COR and CO on the same date they submit the invoice in WAWF. No payments shall be due if the contractor does not provide the COR and CO email notification as required herein.

Accounting Data SLINID PR Number Amount 130055953800001 AA 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003351523 In Accordance With Technical Instruction Number 16-002-00 130055941900001 LLA : AB 9711X8242 2884 000 74842 0 065916 2D PAT044 307680010GRI Standard Number: N0002415WX05508 In Accordance With Technical Instruction Number 16-003-00 130055941700001 T.T.A : AC 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003350486 In Accordance With Technical Instruction Number 16-004-00 9001 130055953800002 LLA : AA 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003351523 In Accordance With Technical Instruction Number 16-002-00 9002 130055941900002 AB 9711X8242 2884 000 74842 0 065916 2D PAT044 307680010GRI Standard Number: N0002415WX05508 In Accordance With Technical Instruction Number 16-003-00 BASE Funding Cumulative Funding MOD 01 7004 130055937000001 LLA : AD 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003349788 In Accordance With Technical Instruction Number 16-005-00. 7005 130056112500001 AE 97X4930 NH1C 254 77777 0 050120 2F 000000 A00003362150 In Accordance With Technical Instruction Number 16-006-00.

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7006 130056292800001

LLA :

AF 97X4930 NH1C 251 77777 0 050120 2F 000000 A00003375352 In Accordance With Technical Instruction Number 16-007-00.

MOD 01 Funding
Cumulative Funding

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SECTION H SPECIAL CONTRACT REQUIREMENTS

SEA 5252.232-9104 Allotment Of Funds – Alternate I (JAN 2008):

- (a) This contract is incrementally funded with respect to both cost and fee. The Amounts presently available and allotted to this contract for payment of base fee, if any, and award fee are set forth below. Base fee amount is subject to the clause entitled "FIXED FEE"(FAR 52.216-8). Award fee amount is subject to the requirements delineated in. 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 CLINs/SLINs covered thereby, and the period of performance for which it is estimated the allotted amount(s) will cover will be specified in each modification.
- (b) The parties contemplate that the Government will allot additional amounts to this task order 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 coveredthereby, 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 OFCOST" (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.

(End of Text)

5252.242-9115 Technical Instructions (APR 1999):

- (a) Performance of the work hereunder may be subject to written technical instructions signed by the Contracting Officer's Representative specified in Section G of this contract. 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 statement of work.
- (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 contract. Technical instructions may not be used to: (1) assign additional work under the task order; (2) direct a change as defined in the "CHANGES" clause of this contract; (3)increase or decrease the contract price or estimated contract amount (including fee), as applicable, the level of effort, or the time required for contract performance; or (4) change any of the terms, conditions or specifications of the contract.
- (c) If, in the opinion of the Contractor, any technical instruction calls for effort outside the scope of the contract 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

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this contract.

(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.

H-5 Task Order Process:

Ombudsman Description.

The Local Warfare Center Site Deputy for Small Business has been designated as the NAVSEA and related Program Executive Offices Ombudsman for this contract. The NSWCCD Ombudsman will review complaints from the contractors and ensure that all contractors are afforded a fair opportunity to be considered, consistent with the procedures in the contract. Complaints to the NSWCCD Ombudsman must be forwarded to:

CAR H11 – Contractor Personnel Security Requirements (DEC 2014):

a. In accordance with SECNAVM-5510.30 Chapters 5 and 6, all Contractor personnel that require access to Department of Navy (DON) information systems and/or work on-site are designated Non-Critical Sensitive/IT-II positions, which require an open investigation or favorable adjudicated National Agency Check (NACLC) by the Industrial Security Clearance Office (DISCO). Investigations should be completed using the SF-86Form and the SF-87 finger print card. An interim clearance can be granted by the company Security Officer and recorded in the Joint Personnel Adjudication System (JPAS). An open or closed investigation with a favorable adjudication is required prior to issuance of a badge providing access to NSWCCD sites and buildings. If an unfavorable adjudication is determined by DISCO all access will terminated. For Common Access Card (CAC) card you must have a favorably adjudicated investigation, or a final security clearance. A CAC Card will not be issued to contractors who has an interim security clearance.

b. Within 30 days after contract award, the Contractor shall submit a list of all Contractor personnel, including subcontractor employees, who will have access to DON information systems and/or work on-site at one of the NSWCCD sites to the appointed Contracting Officer Representative (COR) via email. The Contractor shall provide each employee's first name, last name, contract number, the NSWCCD technical code, work location, whether or not the employee has a CAC card and/or swipe card, the systems the employee can access (i.e., NMCI, RDT&E), and the name of the Contractor's local point of contact, phone number and email address. Throughout the period of performance of the contract, the Contractor shall immediately provide any updated information to the COR when any Contractor personnel changes occur including substitutions or departures.

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HQ C-2-0037 Organizational Conflict of Interest (NAVSEA) (JUL 2000)

Clause HQ C-2-0037 "Organizational Conflict of Interest" (NAVSEA) (JUL 2000) is hereby invoked in accordance with the Basic Contract.

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SECTION I CONTRACT CLAUSES

09RA 52.217-9 -- OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2008):

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days prior to completion of the base period; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (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 options under this clause, shall not exceed five years.

252.222-7006 RESTRICTIONS ON THE USE OF MANDATORY ARBITRATION AGREEMENTS (DEC 2010):

(a) Definitions. As used in this clause-

"Covered subcontractor" means any entity that has a subcontract valued in excess of \$1 million, except a subcontract for the acquisition of commercial items, including commercially available off-the-shelf items.

"Subcontract" means any contract, as defined in Federal Acquisition Regulation subpart 2.1, to furnish supplies or services for performance of this contractor a higher-tier subcontract thereunder.

- (b) The Contractor—
- (1)Agrees not to-
- (i)Enter into any agreement with any of its employees or independent contractors that requires, as a condition of employment, that the employee or independent contractor agree to resolve through arbitration—
 - (A) Any claim under title VII of the Civil Rights Act of 1964; or
- (B) Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; or
- (ii) Take any action to enforce any provision of an existing agreement with an employee or independent contractor that mandates that the employee or independent contractor resolve

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through arbitration-

- (A) Any claim under title VII of the Civil Rights Act of 1964; or
- (B)Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; and
- (2) Certifies, by signature of the contract, that it requires each covered subcontractor to agree not to enter into, and not to take any action to enforce, any provision of any existing agreements, as described in paragraph(b)(1) of this clause, with respect to any employee or independent contractor performing work related to such subcontract.
- (c) The prohibitions of this clause do not apply with respect to a contractor's or subcontractor's agreements with employees or independent contractors that may not be enforced in a court of the United States.
- (d)The Secretary of Defense may waive the applicability of the restrictions of paragraph (b) of this clause in accordance with Defense Federal Acquisition Regulation Supplement 222.7404.

(End of clause)

52.216-10 INCENTIVE FEE:

Incentive Fee (Jun 2011)

- (a) *General*. The Government shall pay the Contractor for performing this contract a fee determined as provided in this contract.
- (b) *Target cost and target fee*. The target cost and target fee specified in the Schedule are subject to adjustment if the contract is modified in accordance with paragraph (d) of this clause.
- (1) "Target cost," as used in this contract, means the estimated cost of this contract as initially negotiated, adjusted in accordance with paragraph (d) of this clause.
- (2) "Target fee," as used in this contract, means the fee initially negotiated on the assumption that this contract would be performed for a cost equal to the estimated cost initially negotiated, adjusted in accordance with paragraph (d) of this clause.
- (c) Withholding of payment.
- (1) Normally, the Government shall pay the fee to the Contractor as specified in the Schedule. However, when the Contracting Officer considers that performance or cost indicates that the Contractor will not achieve target, the Government shall pay on the basis of an appropriate lesser fee. When the Contractor demonstrates that performance or cost clearly indicates that the Contractor will earn a fee significantly above the target fee, the Government may, at the sole

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discretion of the Contracting Officer, pay on the basis of an appropriate higher fee.

- (2) Payment of the incentive fee shall be made as specified in the Schedule; provided that the Contracting Officer withholds a reserve not to exceed 15 percent of the total incentive fee or \$100,000, whichever is less, to protect the Government's interest. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of an adequate certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.
- (d) *Equitable adjustments*. When the work under this contract is increased or decreased by a modification to this contract or when any equitable adjustment in the target cost is authorized under any other clause, equitable adjustments in the target cost, target fee, minimum fee, and maximum fee, as appropriate, shall be stated in a supplemental agreement to this contract.
- (e) Fee payable.
- (1) The fee payable under this contract shall be the target fee increased by 50 cents for every dollar that the total allowable cost is less than the target cost or decreased by 50 cents for every dollar that the total allowable cost exceeds the target cost. In no event shall the fee be greater than 8 percent or less than 2 percent of the target cost.
- (2) The fee shall be subject to adjustment, to the extent provided in paragraph (d) of this clause, and within the minimum and maximum fee limitations in paragraph (e)(1) of this clause, when the total allowable cost is increased or decreased as a consequence of—
- (i) Payments made under assignments; or
- (ii) Claims excepted from the release as required by paragraph (h)(2) of the Allowable Cost and Payment clause.
- (3) If this contract is terminated in its entirety, the portion of the target fee payable shall not be subject to an increase or decrease as provided in this paragraph. The termination shall be accomplished in accordance with other applicable clauses of this contract.
- (4) For the purpose of fee adjustment, "total allowable cost" shall not include allowable costs arising out of—
- (i) Any of the causes covered by the Excusable Delays clause to the extent that they are beyond the control and without the fault or negligence of the Contractor or any subcontractor;
- (ii) The taking effect, after negotiating the target cost, of a statute, court decision, written ruling, or regulation that results in the Contractor's being required to pay or bear the burden of any tax or duty or rate increase in a tax or duty;
- (iii) Any direct cost attributed to the Contractor's involvement in litigation as required by the Contracting Officer pursuant to a clause of this contract, including furnishing evidence and information requested pursuant to the Notice and Assistance Regarding Patent and Copyright Infringement clause;

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- (iv) The purchase and maintenance of additional insurance not in the target cost and required by the Contracting Officer, or claims for reimbursement for liabilities to third persons pursuant to the Insurance Liability to Third Persons clause;
- (v) Any claim, loss, or damage resulting from a risk for which the Contractor has been relieved of liability by the Government Property clause; or
- (vi) Any claim, loss, or damage resulting from a risk defined in the contract as unusually hazardous or as a nuclear risk and against which the Government has expressly agreed to indemnify the Contractor.
- (5) All other allowable costs are included in "total allowable cost" for fee adjustment in accordance with this paragraph (e), unless otherwise specifically provided in this contract.
- (f) *Contract modification*. The total allowable cost and the adjusted fee determined as provided in this clause shall be evidenced by a modification to this contract signed by the Contractor and Contracting Officer.
- (g) *Inconsistencies*. In the event of any language inconsistencies between this clause and provisioning documents or Government options under this contract, compensation for spare parts or other supplies and services ordered under such documents shall be determined in accordance with this clause.

(End of Clause)

52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990):

- (a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed \$TBD or the overtime premium is paid for work --
- 1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- (4) That will result in lower overall costs to the Government.
- (b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall—
- (1)Identify the work unit; *e.g.*, department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

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- (2)Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3)Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4)Provide reasons why the required work cannot be performed by using multi-shift operations or by employing additional personnel.

(End of Clause)

252.204-7012 Safeguarding of Unclassified Controlled Technical Information:

As prescribed in 204.7304, use the following clause:

SAFEGUARDING OF UNCLASSIFIED CONTROLLED TECHNICAL INFORMATION (NOV 2013)

- (a) Definitions. As used in this clause—
- "Adequate security" means protective measures that are commensurate with the consequences and probability of loss, misuse, or unauthorized access to, or modification of information.
- "Attribution information" means information that identifies the Contractor, whether directly or indirectly, by the grouping of information that can be traced back to the Contractor (e.g., program description or facility locations).
- "Compromise" means disclosure of information to unauthorized persons, or a violation of the security policy of a system, in which unauthorized intentional or unintentional disclosure, modification, destruction, or loss of an object, or the copying of information to unauthorized media may have occurred.
- "Contractor information system" means an information system belonging to, or operated by or for, the Contractor.
- "Controlled technical information" means technical information with military or space application that is subject to controls on the access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. Controlled technical information is to be marked with one of the distribution statements B-through-F, in accordance with DoD Instruction 5230.24, Distribution Statements on Technical Documents. The term does not include information that is lawfully publicly available without restrictions.
- "Cyber incident" means actions taken through the use of computer networks that result in an actual or potentially adverse effect on an information system and/or the information residing therein.
- "Exfiltration" means any unauthorized release of data from within an information system. This includes copying the data through covert network channels or the copying of data to unauthorized media.
- "Media" means physical devices or writing surfaces including, but is not limited to, magnetic tapes, optical disks, magnetic disks, large-scale integration memory chips, and printouts onto which information is recorded, stored, or printed within an information system.
- "Technical information" means technical data or computer software, as those terms are defined in the clause at DFARS <u>252.227-7013</u>, Rights in Technical Data-Non Commercial Items, regardless of whether or not the clause is incorporated in this solicitation or contract. Examples of technical information include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software executable code and source code.
- $(b) \ \ \textit{Safeguarding requirements and procedures for unclassified controlled technical information}. \ \ The \ \ Contractor$

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shall provide adequate security to safeguard unclassified controlled technical information from compromise. To provide adequate security, the Contractor shall—

- (1) Implement information systems security in its project, enterprise, or company-wide unclassified information technology system(s) that may have unclassified controlled technical information resident on or transiting through them. The information systems security program shall implement, at a minimum—
- (i) The specified National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 security controls identified in the following table; or
- (ii) If a NIST control is not implemented, the Contractor shall submit to the Contracting Officer a written explanation of how—
- (A) The required security control identified in the following table is not applicable; or
- (B) An alternative control or protective measure is used to achieve equivalent protection.
- (2) Apply other information systems security requirements when the Contractor reasonably determines that information systems security measures, in addition to those identified in paragraph (b)(1) of this clause, may be required to provide adequate security in a dynamic environment based on an assessed risk or vulnerability.

Table 1 -- Minimum Security Controls for Safeguarding

Minimum required security controls for unclassified controlled technical information requiring safeguarding in accordance with paragraph (d) of this clause. (A description of the security controls is in the NIST SP 800-53, "Security and Privacy Controls for Federal Information Systems and Organizations" (http://csrc.nist.gov/publications/PubsSPs.html).)

Access	Audit &	Identification and	Media Protection	System &
<u>Control</u>	Accountability	<u>Authentication</u>	ND 4	Comm
AC-2	AU-2	IA-2	MP-4	<u>Protection</u>
AC-2	AU-2	1A-2	MP-6	SC-2
AC-3(4)	AU-3	IA-4	1111 0	
				SC-4
AC-4	AU-6(1)	IA-5(1)	Physical and	00.7
AC-6	AU-7		Environmental	SC-7
AC-0	AU-7	-	<u>Protection</u>	SC-8(1)
AC-7	AU-8	<u>Incident</u>	PE-2	, ,
		Response	FE-2	SC-13
AC-11(1)	AU-9	IR-2	PE-3	SC-15
AC-17(2)		IK-2		SC-13
110 17(2)	Configuration	IR-4	PE-5	SC-28
AC-18(1)	Management	,		
AC-19		IR-5	Program Management	-
AC-19	CM-2	IR-6	<u>Management</u>	System &
AC-20(1)	CM-6		PM-10	Information
		_		<u>Integrity</u>
AC-20(2)	CM-7	Maintenance	i -	SI-2
AC-22	CM			31-2
AC-22	CM-8	MA-4(6)	-	SI-3
		MA-5	Risk Assessment	
	-	14111 3	DA 5	SI-4
			RA-5	

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Awareness & Training	Contingency Planning	MA-6	-	-
AT-2	CP-9			_

Legend:

AC: Access Control MA: Maintenance
AT: Awareness and Training MP: Media Protection

AU: Auditing and Accountability PE: Physical & Environmental Protection

CM: Configuration Management
CP: Contingency Planning
PM: Program Management
RA: Risk Assessment

IA: Identification and Authentication SC: System & Communications Protection

IR: Incident Response SI: System & Information Integrity

- (c) *Other requirements*. This clause does not relieve the Contractor of the requirements specified by applicable statutes or other Federal and DoD safeguarding requirements for Controlled Unclassified Information (CUI) as established by Executive Order 13556, as well as regulations and guidance established pursuant thereto.
- (d) Cyber incident and compromise reporting.
- (1) Reporting requirement. The Contractor shall report as much of the following information as can be obtained to the Department of Defense via (http://dibnet.dod.mil/) within 72 hours of discovery of any cyber incident, as described in paragraph (d)(2) of this clause, that affects unclassified controlled technical information resident on or transiting through the Contractor's unclassified information systems:
- (i) Data Universal Numbering System (DUNS).
- (ii) Contract numbers affected unless all contracts by the company are affected.
- (iii) Facility CAGE code if the location of the event is different than the prime Contractor location.
- (iv) Point of contact if different than the POC recorded in the System for Award Management (address, position, telephone, email).
- (v) Contracting Officer point of contact (address, position, telephone, email).
- (vi) Contract clearance level.
- (vii) Name of subcontractor and CAGE code if this was an incident on a Sub-contractor network.
- (viii) DoD programs, platforms or systems involved.
- (ix) Location(s) of compromise.
- (x) Date incident discovered.
- (xi) Type of compromise (e.g., unauthorized access, inadvertent release, other).
- (xii) Description of technical information compromised.
- (xiii) Any additional information relevant to the information compromise.
- (2) Reportable cyber incidents. Reportable cyber incidents include the following:
- (i) A cyber incident involving possible exfiltration, manipulation, or other loss or compromise of any unclassified controlled technical information resident on or transiting through Contractor's, or its subcontractors', unclassified information systems.

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- (ii) Any other activities not included in paragraph (d)(2)(i) of this clause that allow unauthorized access to the Contractor's unclassified information system on which unclassified controlled technical information is resident on or transiting.
- (3) Other reporting requirements. This reporting in no way abrogates the Contractor's responsibility for additional safeguarding and cyber incident reporting requirements pertaining to its unclassified information systems under other clauses that may apply to its contract, or as a result of other U.S. Government legislative and regulatory requirements that may apply (e.g., as cited in paragraph (c) of this clause).
- (4) Contractor actions to support DoD damage assessment. In response to the reported cyber incident, the Contractor shall—
- (i) Conduct further review of its unclassified network for evidence of compromise resulting from a cyber incident to include, but is not limited to, identifying compromised computers, servers, specific data and users accounts. This includes analyzing information systems that were part of the compromise, as well as other information systems on the network that were accessed as a result of the compromise;
- (ii) Review the data accessed during the cyber incident to identify specific unclassified controlled technical information associated with DoD programs, systems or contracts, including military programs, systems and technology; and
- (iii) Preserve and protect images of known affected information systems and all relevant monitoring/packet capture data for at least 90 days from the cyber incident to allow DoD to request information or decline interest.
- (5) DoD damage assessment activities. If DoD elects to conduct a damage assessment, the Contracting Officer will request that the Contractor point of contact identified in the incident report at (d)(1) of this clause provide all of the damage assessment information gathered in accordance with paragraph (d)(4) of this clause. The Contractor shall comply with damage assessment information requests. The requirement to share files and images exists unless there are legal restrictions that limit a company's ability to share digital media. The Contractor shall inform the Contracting Officer of the source, nature, and prescription of such limitations and the authority responsible.
- (e) Protection of reported information. Except to the extent that such information is lawfully publicly available without restrictions, the Government will protect information reported or otherwise provided to DoD under this clause in accordance with applicable statutes, regulations, and policies. The Contractor shall identify and mark attribution information reported or otherwise provided to the DoD. The Government may use information, including attribution information and disclose it only to authorized persons for purposes and activities consistent with this clause.
- (f) Nothing in this clause limits the Government's ability to conduct law enforcement or counterintelligence activities, or other lawful activities in the interest of homeland security and national security. The results of the activities described in this clause may be used to support an investigation and prosecution of any person or entity, including those attempting to infiltrate or compromise information on a contractor information system in violation of any statute.
- (g) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (g), in all subcontracts, including subcontracts for commercial items.

(End of clause)

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SECTION J LIST OF ATTACHMENTS

Exhibit A - DD Form 254 - Contract Security Classification Specification

Exhibit B - DD Form 1423, Contract Data Requirements List (CDRL) Number A001

Exhibit B - DD Form 1423, Contract Data Requirements Lists (CDRL) Number A002

Attachment 1 - Cost Summary Format

Attachment 2 - Labor Rate Substantiation Table

Attachment 3 - SeaPort-e Standard Ratings Definitions