

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE U	PAGE OF PAGES 1   2	
2. AMENDMENT/MODIFICATION NO. 01	3. EFFECTIVE DATE 14-Aug-2009	4. REQUISITION/PURCHASE REQ. NO. Various		5. PROJECT NO. (If applicable) N/A
6. ISSUED BY NSWC, CRANE DIVISION 300 Highway 361 - Building 64 Crane IN 47522-5001 audra.dant@navy.mil 812-854-3308	CODE N00164	7. ADMINISTERED BY (If other than Item 6) DCMA TWIN CITIES B.H. WHIPPLE FEDERAL BUILDING, ROOM 1150, 1 FEDERAL DRIVE FT. SNELLING MN 55111		CODE S2401A

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) Applied Technical Systems 3505 NW Anderson Hill Rd., Suite 200 Silverdale WA 98383		9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
		10A. MODIFICATION OF CONTRACT/ORDER NO. N00178-06-D-4684-FC01
		10B. DATED (SEE ITEM 13) 29-Jun-2009
CAGE CODE 2T143	FACILITY CODE 004821021	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

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

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
SEE SECTION G

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

<input type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input checked="" type="checkbox"/>	D. OTHER (Specify type of modification and authority) Mutual Agreement between contracting parties

E. IMPORTANT: Contractor  is not,  is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
SEE PAGE 2

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 2 of 2	DRAFT
----------------------------------	----------------------------	----------------------------------	----------------	-------

## GENERAL INFORMATION

The purpose of this modification is to 1) Provide incremental funding and 2) Incorporate an additional CDRL. Accordingly, said Task Order is modified as follows:

### 1) Incremental Funding

The total task order amount remains \$13,014,214.00.

CLIN 4000

CLIN 4000 is hereby incrementally funded by \$268,468.00 from \$1,520,000.00 to \$1,788,468.00. An informational SLIN is provided as follows:

SLIN	ACRN	REQ. NO.	AMOUNT	TI
400002	A1	9216 0645	\$ 268,468.00	001

CLIN 6000

CLIN 6000 is hereby incrementally funded by \$150,712.00 from \$180,000.00 to \$330,712.00. Informational SLINs are provided as follows:

SLIN	ACRN	REQ. NO.	AMOUNT	TI
600003	A1	9216 0664	\$ 83,366.00	001
600004	A2	9223 3045	\$ 14,132.00	001
600005	A2	9223 3044	\$ 53,214.00	001

The total amount of funds allotted to the task order is increased by \$419,180.00 from \$1,700,000.00 to \$2,119,180.00.

The Clause Limitation of Funds (FAR 52.232-22) applies. The Government is not obligated to reimburse the Contractor for costs incurred in excess of \$2,119,180.00, unless additional funds are made available and are incorporated as a modification of this task order.

### 2) Incorporation of CDRL

Section C, Statement of Work, and Section J, List of Attachments, are hereby modified as follows:

CDRL B011 is hereby incorporated into the task order via Attachment 11, CDRL B011. CDRL B011 requires the Contractor to provide a monthly task order funding notification letter to the Task Order Manager (TOM), Contracting Officer (KO), and Requiring Technical Activity (RTA).

A conformed copy of this Task Order is attached to this modification for informational purposes only.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 1 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

**SECTION B SUPPLIES OR SERVICES AND PRICES**

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	Supplies/Services Qty	Unit	Est. Cost	Fixed Fee	CPFF
-----					
4000	Labor - Engineering and Technical Support Services for CDSA core system. (TBD)	1.0 Lot	\$10,083,930.00	\$558,273.00	\$10,642,203.00
400001	Incremental funding in the amount of \$1,520,000 in support of Labor only. (RDT&E)				
400002	Incremental funding in the amount of \$268,468 in support of TI 001 (ACRN A1) (RDT&E)				
4400	Labor - Engineering and Technical Support Services for CDSA core system. (TBD) Option	1.0 Lot	\$469,098.00	\$26,122.00	\$495,220.00
4500	Labor - Engineering and Technical Support Services for CDSA core system. (TBD) Option	1.0 Lot	\$477,286.00	\$26,502.00	\$503,788.00

For ODC Items:

Item	Supplies/Services Qty	Unit	Est. Cost
-----			
6000	ODCs - Engineering and Technical Support Services for CDSA core system. (TBD)	1.0 Lot	\$1,357,383.00
600001	Incremental funding in the amount of \$140,000 in support of		

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 2 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

Material only  
(RDT&E)

600002 Incremental  
funding in the  
amount of \$40,000  
in support of  
Travel only  
(RDT&E)

600003 Incremental  
funding in the  
amount of \$83,366  
in support of TI  
001 (ACRN A1)  
(RDT&E)

600004 Incremental  
funding in the  
amount of \$14,132  
in support of TI  
001 (ACRN A2)  
(RDT&E)

600005 Incremental  
funding in the  
amount of \$53,214  
in support of TI  
001 (ACRN A2)  
(RDT&E)

6400	ODCs - Engineering and Technical Support Services for CDSA core system. (TBD) Option	1.0 Lot	\$7,810.00
------	--	---------	------------

6500	ODCs - Engineering and Technical Support Services for CDSA core system. (TBD) Option	1.0 Lot	\$7,810.00
------	--	---------	------------

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 3 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

## SECTION C DESCRIPTIONS AND SPECIFICATIONS

### 1.0 Introduction

Total life-cycle systems management (TLCSM) establishes clear lines of responsibility and accountability for meeting warfighter support performance and sustainment requirements for the life of the system from acquisition to disposal. Under TLCSM there is no longer a transition of management from the program manager (PM) to a sustainment command after production and fielding. The PM is the life-cycle manager (LCM) for assigned program(s) and will retain the responsibility for managing, sustaining, upgrading, and disposing of system(s) throughout the service life. The PM will ensure supportability is equally considered with cost, schedule, and performance throughout the life cycle of the assigned system(s). Throughout this policy, we will refer to the TLCSM as the PM to be consistent with Navy acquisition policy.

### 1.1 Scope

This statement of work (SOW) identifies the tasks that the contractor shall accomplish to manage, design, and build the Common Digital Sensor Architecture (CDSA) core system. This includes system program goals, cost and schedule reporting requirements, documentation, logistics, engineering, and test requirements.

### 1.2 Background

The Program Executive Office Integrated Warfare System above water sensor directorate (PEO IWS 2.0) has determined that the historical approach for design, development, and sustainment of deployed above water sensors for the United States Navy (USN), where each above water sensor is developed and procured in relative isolation, should be consolidated within a single total life cycle system management (TLCSM) approach using a common architecture and support process across all above water sensors. This decision is intended to eliminate multiple procurement programs, reduce duplication of support infrastructures, and harmonize resource requirements in order to sustain long-term system operational effectiveness including lower overall total ownership cost (TOC) among deployed USN above water sensors. The sensors targeted for CDSA will be in service for the next forty years.

As a key facet of this unified TLCSM approach, the CDSA Program was initiated to procure a common computing platform for above water sensors with the objective to eliminate all unique processing elements, to establish a common human machine interface (HMI), reduce the knowledge and skills required to operate and maintain the sensor systems, and to improve the quality, quantity, and compatibility of collected field data. The TLCSM approach will also implement a common product data management (PDM) capability to collect, process, and manage relevant engineering, logistics support, and all other associated data required to implement an effective sustainment strategy across all designated above water sensor lifecycles. This document defines the proposed concept of operation for a unified above water sensor TLCSM approach to address the overarching PEO IWS 2.0 program objectives of sustained operational effectiveness at reduced TOC across deployed above water sensors.

This statement of work is for the design and development of the CDSA core system. Integration of CDSA into targeted sensor systems will be performed through other contracts at a later date.

### 2.0 Applicable Documents

The following documents of the revision or issue in effect at the date of this task order (TO) award form a part of this SOW for the convenience of reference. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall prevail.

89 SPC 09 9003	CDSA System Requirements Document
89 SPC 09 9002	CDSA Statement of Objectives (SOO)

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 4 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

89 SPC 09 9004	CDSA Concept of Operations (CONOPS)
89 SPC 09 9007	CDSA to AN/SPS-49 Integration Statement of Objectives (SOO)
89 SPC 09 9008	CDSA to AN/SPQ-9B Integration Statement of Objectives (SOO)
89 SPC 09 9009	CDSA to AN/SPS-74 Integration Statement of Objectives (SOO)
89 SPC 09 9001	CDSA Product Data Management Statement of Objectives (SOO)
89 SPC 09 9013	CDSA Test Philosophy
MIL-STD-882D	Systems Safety Program Requirements
PEOIWSINST 3058.1	Guidance, policy, and definition for the PEO IWS Risk Management Process
MIL-STD-461F	Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment
DOD Directive 8500.1D (E)	Information Assurance (IA)
DODD 8510.1-M	DOD Information Technology Security Certification and Accreditation Process (DITSCAP)
GEIA STD 0009	Reliability Program Standard for Systems Design, Development and Manufacturing
ISO-9000-3	Guideline for Application of ISO 9001 to the Development, Supply, and Maintenance of Software
MIL-STD-1472 F	DOD Design Criteria Standard, Human Engineering
DD-254	Security Form
MIL-HDBK-759C	Human Engineering Design Guidelines
MIL-HDBK-46855 A	Human Engineering Guidelines for Military Systems
EIA/IS-632	Systems Engineering, September 2003
MIL-HDBK-502 Notice 1	Acquisition Logistics, 20 Jan 2005
ANSI/ASQ Q9001	Quality Management Systems – Requirements
IEEE/EIA 12207.0	Standard for Information Technology, Software Lifecycle Processes
IEEE/EIA 12207.1	Standard for Information Technology, Software Lifecycle Processes, Lifestyle Data
IEEE/EIA 12207.2	Standard for Information Technology, Software Lifecycle Processes, Implementation Considerations
NAVSEA 06 INST	Technical Review Manual (TRM) April 2003
ANSI/EIA-748 B	Earned Value Management
MIL-HDBK-881 A	DoD Handbook -- Work Breakdown Structure 30 JULY 2005
OPNAVINST 1500.76	Navy Training System Requirements, Acquisition, and Management
MIL-HDBK-470	Maintainability Program Requirements (for Systems and Equipment)
MIL-HDBK-217	Reliability Predictions for Electronic Equipment
GEIA-649-A	National Consensus Standard for Configuration Management
GEIA-HB-649	Implementation Guide for Configuration Management
ISO 15288	Systems and software engineering - System life cycle processes
NAVSEA TRM	Naval Sea Systems Command (NAVSEA) Technical Review Manual (TRM) dated August 2006
ISO 10303	Industrial Automation Systems, Data exchange
NAVSEA INST 9040.3A	Standard for Exchange of Product Data
MIL-PRF-49506	Logistics Management Information

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 5 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

GEIA-STD-0007	Logistics Product Data Handbook
S9081-AB-GIB-010/MAINT	RCM Handbook
ICAPS-PC Application	Interactive Computer Aided Provisioning System- Personal Computer
NAVSEA 4423/3NAVSEA	Provisioning Data Cover Page
DOD 5220.22-M	National Industrial Security Program Operating Manual
OPNAVINST 5102.1	Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
NAVWPNSUPPCENINST 5510.1	Information, Personnel, and Industrial Security Manual
SECNAVINST 5370.2J	Standards of Conduct
NAVFAC P-1021	Smoking Policy, NSWC Crane
DFARS 252.227-7026	Delivery of items
MIL-DTL-31000C	Technical Data Packages
ASN RAM Policy Memo	Reliability, Availability, and Maintainability Policy Dated August 25, 2008

### 3.0 Requirements

#### 3.1 CDSA General Requirements

##### 3.1.1

The CDSA Core System shall meet all requirements in the CDSA System Requirements Document (SRD) 89 SPC 09 9003 and specifications developed under this TO.

##### 3.1.2

The contractor shall deliver seven (7) CDSA Core System Form, Fit, and Function Engineering Development Models (EDM). The EDMs shall utilize production representative hardware.

##### 3.1.3

The contractor shall provide a build-to-print Technical Data Package (TDP) in accordance with MIL-DTL-31000C for third party production.

##### 3.1.4

The contractor shall implement Capability Maturity Model Integration (CMMI) V1.2 like processes to develop the CDSA Core System. The contractor shall utilize metrics with associated contingency plans, and report against the Government-approved cost, schedule, performance, and risk baseline. The contractor shall calculate all metrics in a timely manner so that contingencies can be executed to effectively reduce cost, performance, or risk impacts of adverse situations. This management approach shall support flexible and innovative management of program cost, schedule, performance, risks, contracts, subcontracts, and data to deliver an effective and affordable system.

##### 3.1.5

The contractor shall develop, document, and implement software development plans, processes, and capabilities necessary to achieve program objectives and provide for through-life software support in accordance with the Institute of Electrical and Electronic Engineers (IEEE)/Electronic Industries Alliance (EIA) Standard 12207.0 and ISO 15288. The contractor shall be in full compliance with Software Engineering Institute (SEI) CMMI LEVEL III for software development.

##### 3.1.6

The contractor shall develop, document, and implement effective hardware development and production plans and processes necessary to achieve program objectives and provide for through-life hardware support.

##### 3.1.7

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 6 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

The contractor shall implement an Integrated Product Team (IPT) construct for program structure using MIL-HDBK-502, section 9 as guidance.

### **3.1.8**

The contractor shall update design documentation based on government-contractor agreements during technical interchange meetings (TIMs) and program decision points. The contractor shall demonstrate technical and design maturity at program decision points including the System Requirements Review (SRR), Preliminary Design Review (PDR), Critical Design Review (CDR), Test Readiness Review (TRR), First Article Testing (FAT), Functional Configuration Audit (FCA), Physical Configuration Audit (PCA) milestones, utilizing the Naval Sea Systems Command (NAVSEA) TRM dated August 2006 as guidance.

### **3.1.9**

The contractor shall define, document, coordinate, manage, and verify all interface/integration requirements applicable to the CDSA Core System. The contractor shall identify, document, coordinate, verify, and support development of all interface/integration requirements from the CDSA Core System to external Sensor Systems and Distance Support. The contractor shall provide traceability of all requirements and interfaces to the CDSA Core System performance specifications.

### **3.1.10**

The contractor shall plan and implement a robust and disciplined hardware and software test and evaluation program to validate the designed sub-system against CDSA Core System performance specifications.

### **3.1.11**

The contractor shall ensure development and evolution of a supportable system design that enables future implementation of the affordable, comprehensive integrated logistics support capability necessary to support program objectives as verified at program milestone points.

### **3.1.12**

Development of the CDSA Core System software and hardware shall be via an iterative development, which shall include the development and delivery of requirements, design, and test documentation for each stage of the development process. The contractor, in the case of utilization of off the shelf (OTS) components, shall determine through analysis that the OTS component achieves mission requirements.

### **3.1.13**

The contractor shall adhere to approved budget as designated with each approved Rough Order of Magnitude (ROM), schedule, and development goals.

### **3.1.14**

The contractor shall utilize a model based design, development, and sustainment strategy.

### **3.1.15**

The contractor shall provide technical reports and/or technical data packages as requested by the government via technical instructions (TIs), TIMs, and program decision points.

### **3.1.16**

The contractor shall maintain the EDMs through the life of the TO. The contractor may be required to travel to facilities throughout CONUS, including U. S. Navy Ships, to maintain the EDMs.

## **3.2 Product Data Management (PDM)**

### **3.2.1**

The contractor shall implement and maintain a PDM framework that will manage and control all data pertinent to the CDSA program including management, financial, engineering, design, test, technical, and logistics support data and program documentation. The PDM shall transfer data in

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 7 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

accordance with ISO 10303. The contractor shall also maintain all briefing materials, memoranda, engineering notebooks, and technical reports used in Interim Program Reviews (IPRs) and TIMs in the PDM environment specified in this order. The PDM framework shall use commercially available tools and industry-standard communication and data management protocols. Data objects in the PDM framework shall be web-enabled and accessible using a commercial off the shelf (COTS) browser (CDRL A001). The contractor shall document the structure, access methods, toolset and related information in a PDM Plan (CDRL A002) and obtain PEO IWS 2R117 approval prior to PDM activation.

### **3.2.1.1 PDM Plan Detail.**

The PDM plan shall include processes necessary to enable and maintain Maintenance CONOPS at each level of repair. Additionally, the plan shall designate/define data configuration items, data flows, authorities, data stores and their associated applications, data elements, data exchanges, and data synchronization processes. The plan shall include data update mechanisms within logistics/maintenance/diagnostics applications and associated algorithms and firmware. PDM actions, tasks, and subtasks shall be fully defined in the PDM plan.

### **3.2.2**

The contractor shall provide the Government (and/or Government support contractors) electronic access to its PDM throughout the term of the contract.

### **3.2.3**

The contractor shall have their PDM operational prior to the SRR Milestone.

### **3.2.4**

The contractor shall notify the Government CDSA project manager (or their designee) via email each time new data is placed in PDM. The PDM tool may perform this action automatically to satisfy this requirement. Notification frequency shall be established by TI.

### **3.2.5**

Teamcenter software will be provided by the Government at no cost to the contractor if required to assist in the development of the PDM.

## **3.3 Program Management**

### **3.3.1**

The principal management vehicle for this development shall be integrated product teams. The teams shall be led by a program management team with PEO IWS 2R117 assigned participation on the teams. The contractor shall recommend teams to be established and present the teams in their response to the Request for Proposal (RFP) with further discussion at the post award conference.

### **3.3.2**

These functional IPTs and their associated working groups shall provide specific and detailed management oversight and administrative support throughout the development period. Each of the IPTs shall be in full partnership between the Government and contractor. Integrating IPTs shall synchronize the activities of the functional IPTs and shall be responsible for overall program planning, coordination, and reporting to the Program Management IPT.

### **3.3.3**

The contractor shall designate a project manager who shall have complete responsibility to PEO IWS 2R117 for planning, execution, control, and reporting all aspects of the program, and for directing the contractor and subcontractor efforts. The contractor's project manager shall be authorized to deal directly with the PEO IWS 2R117 Project Manager and other Government representatives authorized by the PEO IWS 2R117 CDSA Project Manager on programmatic issues. The contractor shall utilize a Program Management Plan.

#### **3.3.3.1**

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 8 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

The Program Management Plan shall be an integrated document showing technical, cost and schedule data to a common base, the contract work breakdown structure (CWBS). It shall also provide information on the contractor's organization and practices and techniques to be used in managing the program, specifically management of subcontracts. The plan shall also include milestones for the program in linear time phasing. The plan shall identify equipment and facilities to be utilized. The plan shall include purchase charts depicting major subcontracts and equipment or material purchases. The program management plan shall also include labor loading information depicting the estimated labor hours for each major task. A cost chart shall be part of the plan showing by month, the estimated cost, including any subcontractor cost. The plan shall explain the methods the contractor will use to measure performance. The program management plan shall be maintained in the contractor's PDM.

#### **3.3.4**

The contractor shall maintain and update program schedules showing all major events and milestones. Schedule deviations affecting product delivery dates (interim or final) or major milestones and events shall require PEO IWS 2R117 concurrence.

#### **3.3.5**

The contractor shall conduct IPRs and TIMs as required.

#### **3.3.6**

The contractor shall identify design risks and issues and present them to the Government for resolution in a team environment.

#### **3.3.7**

The contractor shall not prohibit subcontractors from working tasks from multiple prime contractors.

### **3.4 Program Planning, Scheduling and Reporting Requirements**

#### **3.4.1**

The contractor shall provide quarterly program status reports (CDRL A003), which will include an updated index of technical memoranda and reports and a listing of data delivered to date under the contract and data planned to be delivered within the next quarter. The contractor shall report all deficiencies or errors in government furnished information (GFI) (CDRL A004).

#### **3.4.2**

The contractor shall develop and maintain a product-oriented CWBS. The CWBS shall be used for defining tasks associated with the project, maintaining traceability of all contractor efforts to the elements of the CWBS, identifying critical technologies used to meet program objectives, and to prepare applicable project progress and management reports. MIL-HDBK-881A shall be used for CWBS guidance.

#### **3.4.3**

The contractor shall develop and maintain an Integrated Master Schedule (IMS) tied to the program management plan. Schedule deviations affecting production product interim or final delivery dates or major milestones and events shall require PEO IWS 2R117 approval.

##### **3.4.3.1**

The schedule shall contain the TO milestones, accomplishments, and discrete tasks/activities (including planning packages) from TO award to the completion of the TO. The schedule shall be an integrated, logical network-based schedule that correlates to the CWBS, and is vertically and horizontally traceable to the cost/schedule reporting instrument used to address variances. The schedule shall have a numbering system that provides traceability to management plans and the SOW. It shall contain contractual milestones and descriptions and display summary, intermediate, and detailed schedules, and periodic analysis of progress to date. It shall include fields and data that enable the user to access the information by product, process, or organizational lines.

#### **3.4.4**

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 9 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	-----------------	-------

The contractor shall develop and maintain a test plan. The test plan shall outline the plans and performance objectives at every level of testing on systems or equipment. The plan shall provide the test concept, objectives and requirements to be satisfied, test methods, elements, responsible activities associated with the testing, measures required and recording procedures to be used. PEO IWS 2R117 reserves the right to assign government witnesses to all tests and demonstrations

#### **3.4.5**

The contractor shall develop and maintain a cost baseline for the program. The contractor shall develop a set of tools and metrics for tracking and reporting progress and expenditures against the cost baseline. The contractor shall use management systems consistent with Earned Value (EV) Management Systems Standard EIA-748-B as a management tool for integrating cost, schedule and technical performance. The contractor shall include EV as an integral part of periodic reviews and reports. Relevant performance monitoring/reporting metrics shall include Cost Performance Index (CPI), Schedule Performance Index (SPI), staffing vs. plan, material purchases vs. plan, radar set design verification testing (DVT), integration and test, requirements volatility, software lines of code, software trouble reports (severity, open/closed, trends, etc.), product trouble reports (severity, open/closed, trends, etc.), Design To Unit Production Cost (DTUPC) data, assumptions, and rationale. The contractor shall provide a description of the tools and metrics, which are to be used to maintain and report progress against the program baseline.

#### **3.4.6**

The contractor shall report program cost, schedule and EV status in a Contractor Performance Report (CDRL A005).

### **3.5 Reviews and Milestones**

#### **3.5.1**

The contractor shall conduct formal program reviews covering program progress and problems. The contractor shall use NAVSEA Technical Review Manual dated April 2003 as guidance for conducting reviews. The contractor can combine reviews to the extent practical and with PEO IWS 2R117 concurrence. The contractor shall coordinate all reviews (scheduling, location, entrance and exit criteria, and agenda) with PEO IWS 2R117 approval. Presentation materials and minutes from the program and technical reviews shall be provided and maintained by the contractor. The contractor shall utilize an action item data base tool for use at meetings and reviews. Following is a minimum list of program reviews and milestones:

- a. Post Award Conference (PAC) for the CDSA Core System
- b. System Requirements Review (SRR) for the CDSA Core System
- c. Initial Baseline Review (IBR) for the CDSA Core System
- d. Preliminary Design Review (PDR) for the CDSA Core System
- e. Critical Design Review (CDR) for the CDSA Core System
- f. Test Readiness Reviews (TRR)
- g. Functional Configuration Audit (FCA)
- h. Physical Configuration Audit (PCA)

### **3.6 Systems Engineering**

#### **3.6.1 General.**

The contractor shall provide the systems engineering effort to design and develop the CDSA Core System. The contractor shall develop a System Engineering Management Plan (SEMP) (CDRL A006). EIA/IS-632 shall be used as guidance to generate the plan. The plan shall be maintained in the contractor's PDM.

#### **3.6.2**

The contractor shall provide a 3D technical data package (TDP) of sufficient detail and content to support design, development, logistics support, manufacturing, and TLCSM. It shall be based on fully parametric, computer based solid models. TDPs shall be maintained in the contractor's PDM.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 10 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

### **3.6.3**

Product drawings/models and associated lists shall be prepared to provide the design, engineering, manufacturing, and quality assurance requirements information necessary to enable the procurement or manufacture of an item essentially identical to the original item. The product shall be defined to the extent necessary for a competent manufacturer to produce an item that duplicates the physical, interface, and functional characteristics of the original product, without additional design engineering effort or recourse to the current design activity. Product data shall reflect the approved, tested, and accepted configuration of the defined delivered item. Product drawings/models and associated lists shall be maintained in the contractor's PDM.

### **3.6.4**

The contractor shall provide a Software Development Plan (SDP) (CDRL A020). The contractor shall follow this SDP for all computer software to be developed or maintained under this effort. The SDP shall identify the proposed life cycle model, as defined in IEEE/EIA STD 12207.0. The SDP shall describe the overall life cycle and shall include primary, supporting, and organizational processes based on the work content of this solicitation. The SDP shall define the processes, the activities to be performed as a part of the processes, the tasks which support the activities, and the techniques and tools to be used to perform the tasks. The SDP shall be maintained in the contractor's PDM.

### **3.6.5 Functional Allocation.**

The contractor shall perform required analyses, functional allocation, and flow-down of program requirements to meet and sustain the long-term reliability, maintainability, availability, and supportability goals of the CDSA Core System. This shall be achieved through a system engineering design that upgrades technology, incorporates open architecture, improves maintainability and logistics processes to accommodate future upgrades, and reduces total ownership costs over the system's extended lifecycle.

### **3.6.6 System Specification.**

The contractor shall develop and deliver a CDSA Core System-Subsystem Specification. The CDSA Core System-Subsystem specification shall contain the detail required to achieve full requirements traceability for the system. This specification shall be presented to PEO IWS 2R117 for review and approval. The CDSA system-subsystem specification shall be maintained in the contractor's PDM and delivered to the Government in accordance with contract requirements. The contractor shall update the CDSA System Requirements Document through findings in the research and development effort and as directed by the Government.

### **3.6.7 System Architecture.**

The contractor shall deliver a System Architecture. This architecture shall be presented to PEO IWS 2R117 for review and approval.

### **3.6.8 Traceability Database.**

The database shall include system, design, software/hardware, interface, and test requirements. The database shall provide the traceability flow-down for requirements, which includes the source of each requirement. The contractor shall also develop and maintain traceability for assembly, subassembly, and component level requirements in this database. The traceability database shall be integrated into and managed in the PDM.

### **3.6.9 Requirements Flow Down.**

Based on the system requirements contained in the CDSA System Requirements Document and the System-Subsystem Specification, the contractor shall flow the requirements down to the affected subsystems, and shall document these requirements in the traceability database. The contractor shall baseline CDSA Core System requirements and traceability into the PDM at SRR. The contractor shall update and maintain requirements allocation to hardware and software configuration items throughout the life of the contract.

### **3.6.10 Analysis and Trade Studies.**

The contractor shall perform Engineering Analysis and Trade Studies consistent with its systems

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 11 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

engineering approach. These shall include, but not be limited to, a Technology Refresh Plan, and Reliability and Availability Models. The results of these analyses shall be presented to PEO IWS 2RI17 at the regularly scheduled program reviews.

#### **3.6.10.1**

The contractor shall develop a Technology Refresh Plan (CDRL A021). The contractor shall include the planned approach to meet all requirements in the CDSA Core SRD. This includes identification of risks with and overview of the mitigation planned. A schedule for achieving these requirements shall also be provided in the tech refresh plan. The plan shall include planned technology insertion and a technology roadmap. The plan shall explain the architectural approach and shall support the rapid and affordable insertion and refreshment of technology through the use of open standards and open interfaces. The plan also shall include, but not be limited to, software and hardware architecture; and system recertification risks and the associated risk mitigation plans.

#### **3.6.10.2**

The contractor shall perform an engineering analysis to recommend power, weight, moment, cooling, and Heating, Ventilation, and Air Conditioning (HVAC) allocations for the CDSA Core System. The contractor shall also perform engineering analysis to recommend input/output and processing requirements for the CDSA Core System computing environment. These allocations shall be driven by an effort to minimize overall system life cycle cost. The results of these analyses shall be presented to PEO IWS 2RI17 for approval prior to establishing the results as system design requirements and managed in the requirements management tool.

#### **3.6.10.3**

The contractor shall develop CDSA Core System Reliability and Availability Models (RAMs). The contractor shall use ASN RAM policy dated 25 August, 2008 as guidance to develop RAMs.

#### **3.6.10.4**

All data for analysis and trade studies shall be maintained in the contractor's PDM.

### **3.6.11 Design and Integration.**

The contractor shall design and develop the CDSA Core System in a manner that eliminates a long-term dependence on closed or proprietary interface standards or architectures. The contractor shall use an IPT environment, with Government representation, to develop the format and content of reports and forms that are generated by the CDSA Core System

#### **3.6.11.1 Design Information Documentation.**

The contractor shall document and model the system using industry standard formats (e.g., Unified Modeling Language(UML)). The contractor shall identify the proposed standards and formats to be used. The contractor shall maintain the design information, including any models used, so that it is current with the as-built system. This design information shall be maintained in the contractor's PDM.

#### **3.6.11.2 Interfaces.**

The contractor shall develop and/or analyze interface design documents as necessary to meet the requirements of this order. The contractor shall develop an Interface Design and Management Report that clearly defines all component and system interfaces. Some interfaces may be developed by other contractors working on the CDSA tasking. The Government will be responsible for collecting third party interface data and providing this information to the contractor for inclusion in the management report and subsequent interface documents. The report shall also define and document all subsystem and configuration item (CI) level interfaces to provide full functional, logical, and physical specifications. The report shall identify the interface and data exchange standards between the component, module or system and the interconnectivity or underlying information exchange medium. Interfaces described shall include, but not be limited to, mechanical, electrical (power and signal wiring), software, firmware, and hardware. The Contractor shall eliminate the use of proprietary, vendor-unique or closed components or interfaces. All interface information shall be maintained in the contractor's PDM. The following Interface Design Descriptions shall be developed.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 12 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

#### **3.6.11.2.1**

The contractor shall develop and deliver the HMI Interface Design Description (IDD).

#### **3.6.11.2.2**

The contractor shall develop and deliver the Integrated Data Environment (IDE) IDD.

#### **3.6.11.2.3**

The contractor shall develop and deliver Supply Support IDD.

#### **3.6.11.2.4**

The contractor shall develop and deliver the Distance Support IDD.

#### **3.6.11.2.5**

The contractor shall develop and deliver the Timing Services IDD.

#### **3.6.11.3 Third Party Development.**

The contractor shall prepare a technical report to address how it will provide to the Government information needed to support third-party development and delivery of competitive alternatives of designs for software or other components or modules. The contractor shall include a list of those proprietary, vendor-unique elements that it requests be exempt from this review.

#### **3.6.11.4 Hardware Detailed Design.**

The contractor shall provide the hardware detailed design using computer aided design (CAD) modeling tools for developed hardware. The hardware detailed design shall contain the as-designed drawings, Build-To Lists, design documents, interface specifications, and other technical data necessary to support the fabrication, integration, and testing of the subsystems and overall CDSA Core System. All hardware detailed design data shall be maintained in the contractor's PDM.

#### **3.6.11.5 Software Detailed Design.**

The contractor shall develop software detailed design achieving the highest level of abstraction using software modeling toolset which support all of the element requirements contained in the CDSA specifications, the software subsystem Item Specifications, and the Interface Design Descriptions. All software detailed design data shall be maintained in the contractor's PDM.

#### **3.6.11.6 Firmware.**

Firmware required by hardware subsystems shall be maintained as Software Configuration Items within the respective hardware items, and shall be treated as part of the overall software configuration for each CDSA. The contractor shall apply the same analysis, design and document process to the firmware as is applied to other Software Configuration Items within the CDSA. The contractor shall be required to develop a Firmware Support Manual (FSM) (CDRL A007). The FSM shall identify and record information needed to program and reprogram any firmware devices. The information shall include all applicable items in the FSM. The FSM shall be maintained in the contractor's PDM.

### **3.7 Human Systems Integration (HSI)**

#### **3.7.1**

The contractor shall develop a CDSA Core System design that conforms to standard HSI engineering practices in accordance with MIL-STD-1472. MIL-HDBK-46855 and MIL-HDBK-759 shall be used as guidance.

#### **3.7.2 HSI Program Plan.**

The contractor shall develop a HSI Program Plan. This plan shall describe in detail the various actions and analyses required to baseline the Human Factors approach for CDSA Core System. This plan shall provide detailed instructions on how the various analyses will be performed, data requirements needed for the completion of these analyses, and how the analysis results will be validated. The HSI program plan shall be maintained in the contractor's PDM.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 13 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

### **3.7.3 HSI Report.**

The contractor shall generate a HSI Final Report. This report shall consist of the results of the analyses identified in the HSI Program Plan. The report shall be maintained in the contractor's PDM.

## **3.8 Embedded Data Capabilities**

### **3.8.1**

The contractor shall embed all organizational level maintenance and operational data.

### **3.8.2**

The contractor shall develop common operator controls, common operator displays, common content areas for display of sensor specific tactical operational information, and common maintenance displays in an IPT environment with the Government and its assigned representatives. The contractor shall document the design of these common areas in a software detailed description (CDRL A024). The contractor shall also maintain this design in PDM.

## **3.9 Test and Evaluation**

### **3.9.1**

The contractor shall plan, schedule, conduct, support, and document all tests necessary to demonstrate compliance with CDSA System Requirements Document and CDSA System-Subsystem Specification as specified in the Requirements Traceability Verification Matrix (RTVM). The contractor shall develop a Test Plan (CDRL A008). The plan shall incorporate all concepts of the CDSA Test Philosophy (89 SPC 09 9013). PEO IWS 2R17 shall be kept advised of all test schedules. The test plan shall be delivered to the government and maintained in the contractor's PDM.

### **3.9.2 Software Testing.**

The contractor shall develop a Software Test Plan to supplement the System Test Plan. The Software Test Plan shall describe the plan for qualification testing of Computer Software Configuration Items (CSCIs) and software systems. The plan shall describe the software test environment to be used for the testing, identify the tests to be performed, and provide schedules for test activities. The contractor shall develop Software Test Procedures. The contractor shall plan and conduct testing at the contractor's facility to meet the verification requirements and objectives listed in the CDSA System Requirements Document and CDSA System-Subsystem Specification. This testing shall be conducted on each incremental development build to permit early testing to verify requirements and design implementation. The contractor shall analyze test failures and implement corrective measures. All failures that occur shall be separately identified, analyzed, recorded, and correlated with previous failures reported by the contractor. The contractor shall document the results of developmental testing in a Software Test Report. The software test plan, software test procedures and software test reports shall be maintained in the contractor's PDM.

### **3.9.3 Hardware Testing.**

The contractor shall include Hardware Test plans in the System Test Plan. The contractor shall develop Hardware Test Procedures required for production and factory acceptance testing. The contractor shall conduct hardware testing on engineering development models (production representative hardware). The contractor shall have prior approval from the Government to conduct hardware testing. The contractor shall plan and conduct testing at the contractor's facility to meet the verification requirements and objectives listed in the CDSA System Requirements Document and CDSA System-Subsystem Specification. This testing shall verify requirements and design implementation. The contractor shall analyze test failures and implement corrective measures. All failures that occur shall be separately identified, analyzed, recorded, and correlated with previous failures reported by the contractor. The contractor shall document the results of testing in a Hardware Test Report. Hardware testing shall include any environmental tests. The hardware test

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 14 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

procedures and test reports shall be maintained in the contractor's PDM.

#### **3.9.3.1**

The contractor shall include Hardware Configuration Item (HWCI) Design Qualification testing requirements for all new or modified hardware to ensure compliance with HWCI design specifications.

#### **3.9.4 First Article Testing (FAT).**

The contractor shall prepare first article test documentation as defined in this paragraph. The contractor shall include FAT plans in the System Test Plan. The contractor shall develop FAT Procedure(s). The first article test procedures shall be maintained in the contractor's PDM. Any software required to support these tests shall be controlled and managed in the contractor's PDM. Note: First article testing will be performed via other contracts on production hardware.

#### **3.9.5 Government Participation in Testing.**

PEO IWS 2R117 will witness all testing using assigned representatives. The contractor shall notify PEO IWS 2R117 in writing thirty (30) calendar days in advance of all test events.

#### **3.9.6 Deviations.**

Any deviations in testing or test procedures, substitution of test equipment, modification of unit under test, or any other exception(s) to the test, shall be approved in advance, by PEO IWS 2R117, and shall be explained by the contractor and documented in the contractor's test logs, on the official test record, and in the test report.

#### **3.9.7 Test Resources.**

The contractor shall ensure that all test equipment, test facilities, other supporting equipment, spare assemblies and parts, test procedures, data logs, and other contractual items necessary for testing are available for the start of testing. The contractor shall maintain test logs throughout all testing and they shall be managed and controlled for the respective test report and PDM.

### **3.10 Transition to Production**

#### **3.10.1**

The contractor shall develop the transition process to production using MIL-HDBK-727 as guidance. This process shall include the product definition in the form of a technical data package verified through the Functional and Physical Configuration Audits.

#### **3.10.2 Functional Configuration Audit.**

The contractor shall conduct a functional configuration audit using MIL-HDBK-61 as guidance.

#### **3.10.3 Physical Configuration Audit.**

The contractor shall conduct a Physical Configuration Audit using MIL-HDBK-61 as guidance.

### **3.11 Risk Management**

#### **3.11.1**

The contractor shall develop and maintain a Risk Management Plan (CDRL A009) using PEOIWSINST 3058 as guidance to assess risks associated with achievement of program objectives within cost and schedule constraints. Specific risk management functions shall identify known and potential risks, including the associated risk drivers. The risk management plan shall assess the risks and provide a relative ranking by program impact, and establish critical thresholds. The plan shall also define methods or alternatives to mitigate or minimize risks, including the identification of criteria upon which programmatic decisions can be made. The plan shall explain how risk will be tracked and reported.

### **3.12 Integrated Logistics Support (ILS)**

#### **3.12.1 General.**

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 15 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

The contractor shall coordinate logistics/systems engineering activities that affect redesign of system hardware and software to achieve and sustain mission support requirements and system reliability, maintainability, and availability (RM&A), supportability, accessibility, and cost objectives.

### **3.12.2**

The Contractor shall support the CDSA Supportability IPT in developing an ILSP (CDRL A010) that responds to the development objectives and achieves the logistics support objectives of this program. Using the Interim ILSP and data gathered, the contractor shall expand upon the entire document with specific focus on the ILS milestone schedule; LSA Strategy; maintenance concept and planning, the logistics management process; the data management environment; the defined goals for the logistics support elements; obsolescence planning; operational support requirements.

### **3.12.3 Through Life Costs/Life Cycle Costs (LCC).**

The contractor shall establish a CDSA Core System life cycle cost program that achieves the cost goals of the program. The contractor shall obtain a Cost Analysis Strategy Assessment (CASA) tool at no cost from the Government.

#### **3.12.3.1**

Key elements pertaining to contractor's LCC program shall include determination of cost drivers in acquisition, operation and support, identification of risk areas relative to LCC, early identification of system design problems, and determination of the optimum logistics support program. The LCC tasks shall be integrated into the Logistics Support Analysis Record as a decision-making tool.

### **3.12.4 Logistics Product Data (LPD).**

The contractor shall generate LPD as a result of the supportability analysis conducted during the design, development, and initial fielding of a system or end item using MIL-HDBK-502 as guidance. LPD shall capture information related to logistics design requirements, reliability and maintainability, system safety, maintenance engineering, support and test equipment, training and training devices, manpower and skills, facilities, transportation, supply support, and parts packaging IAW GEIA-STD-0007. LPD shall be used to demonstrate the operational effectiveness requirements of the program are met. All LPD shall be maintained in the contractors PDM.

#### **3.12.4.1**

PowerLOG-J software will be provided by the Government at no cost to the contractor if required to assist in the development of the LPD.

#### **3.12.4.2**

A PGC shall be held at the contractor facility no later than 60 days after the contract award date. The Provisioning Requirements Statement (PRS) and Provisioning Performance Schedule (PPS) will be discussed and finalized during the provisioning guidance conference (PGC). The resulting PRS and PPS tasks will be identified in a technical instruction (TI).

#### **3.12.4.3**

A PGC shall be held at the contractor no later than 60 days after contract award date. The Provisioning Technical Data (PTD) requirements will be discussed during the PGC. The requirement and criteria for a Provisioning Conference will be addressed during the PGC.

### **3.12.4.4 Configuration Management.**

The contractor shall establish, implement, and maintain a configuration management program for the hardware and software configuration items in accordance with GEIA-EIA-649-A. The contractor shall use GEIA-HB-649 as guidance for the configuration management program. The contractor's shall develop a Configuration Management Plan (CDRL A014). The plan shall describe processes required to establish and manage As-Built As-Delivered Baselines with transition strategy to manage As-Maintained Baselines.

#### **3.12.5 Life Cycle Management and Open Systems.**

The contractor's architecture shall provide for insertion of COTS into the system and demonstrate that COTS, reusable non-developmental item (NDI), and other components are logistically supported throughout the life cycle.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 16 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

### **3.12.5.1**

The contractor shall develop a Life-Cycle Management Plan. The plan shall be maintained in the contractor's PDM. The plan shall address the following:

#### **3.12.5.1.1**

Describe and demonstrate the strategy for reducing product or system and associated supportability costs through insertion of COTS and other reusable COTS or NDI products.

#### **3.12.5.1.2**

Establish a process to logistically support COTS or NDI products.

#### **3.12.5.1.3**

Describe the availability of commercial repair parts and repair services, facilities, and manpower required for life cycle support and demonstrate they are adequate to ensure long term support for COTS or NDI products.

#### **3.12.5.1.4**

Provide the proposed methodology for pass through of COTS warranties to the Government.

### **3.12.6 Reliability Program.**

The contractor shall establish and implement a reliability program in accordance with GEIA-STD-0009. The reliability program shall include reliability monitoring, control, evaluation, and testing tasks. MIL-HDBK-217 may be used as guidance for reliability calculations. The reliability program shall consider the results of the Alternative Maintenance, Logistics Support Analysis (LSA), and Integrated Data Environment (IDE) requirements.

## **4.0 GOVERNMENT FURNISHED ITEMS**

### **4.1 Government Furnished Information (GFI).**

The contractor shall identify and request any GFI deemed necessary to complete SOW requirements. PEO IWS will assist the contractor in obtaining information. This includes technical manuals, training materials and information, drawings, specifications, procedures, processes, and quality system documents required for the performance of engineering, logistics, and technical support. GFI will be furnished as determined with individual TIs.

### **4.2 Government Furnished Material (GFM) and Government Furnished Equipment (GFE).**

The Government will furnish "as built" electronic components/ modules/assemblies as required to allow the Contractor to establish the data packages and perform software and interface development specified in Section 3.0 of this SOW. Additional GFM and GFE may be provided when the contractor has a requirement for special or specific Government material in the performance of specific tasking. GFM and GFE will be identified during major milestone reviews and specified with individual TIs.

#### **4.2.1**

The contractor shall obtain Teamcenter and PowerLOG-J software from the Government at no cost as required to develop and implement the PDM and LPD environment.

#### **4.2.2**

The Government will provide local telephone service for the contractor when performing onsite. Long distance and Federal Telephone System (FTS) calls shall be made only when necessary for the performance of work under this SOW. The contractor is advised that the Government requires certification of toll calls and FTS calls as being official under the terms of this TO. Non-official calls will be billed back to the contractor. GFE will be identified on each specific TI.

### **4.3 Government Furnished Facilities (GFF).**

The Government and contractor will jointly determine facility requirements and locations for meetings and program reviews to manage program requirements to support the scope of activities.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 17 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

#### 4.4 Return of Government Furnished Items.

All GFI, GFE, and GFM provided to or acquired by the contractor shall be returned to PEO IWS 2R117 upon completion of assigned tasking.

#### 5.0 DATA DELIVERABLES

All data deliverables shall be made as specified and in contractor format unless otherwise directed. All deliverables shall be delivered in contractor format, and after approval by PEO IWS 2R117, shall be posted on iPDM located at <https://ipdm.navy.mil/PMS473/cm.cfm>. If unable to submit electronically, data shall be provided by U.S.P.S. mail to: NSWC Crane, Ms. Naydine Armstrong, address: 300 Hwy 361, Code GXL, Bldg. 3168, Crane, IN 47522, telephone: 812-854-8526.

#### 5.1 Contract Data Requirements Lists

Below is a list of Contract Data Requirement Lists (CDRLs) which shall be submitted by the Contractor documenting activities accomplished to date. As a minimum, CDRL A003 (Contractor's Status Report) shall contain a summary of activity during the past month, including a running summary of man-hours and expenditures, work performed status relative to work scheduled, and any issues or concerns.

CDRL:	A001
DID Number:	No DID
DID Title:	CDSA Product Data Management
SoW Paragraph:	Sec. 3.2.1
CDRL:	A002
DID Number:	DI-MGMT-80004A
DID Title:	Product Data Management Plan (PDM Plan)
SoW Paragraph:	Sec. 3.2.1
CDRL:	A003
DID Number:	DI-MGMT-80227
DID Title:	Contractor's Status Report
SoW Paragraph:	Sec. 3.4.1
CDRL:	A004
DID Number:	DI-MGMT-80596
DID Title:	Government Furnished Information Deficiency Report
SoW Paragraph:	Sec. 3.4.1
CDRL:	A005
DID Number:	DI-NDTI-81466A
DID Title:	Contractor Performance Report
SoW Paragraph:	Sec. 3.4.6
CDRL:	A006
DID Number:	DI-MGMT-81024
DID Title:	Systems Engineering Management Plan (SEMP)
SoW Paragraph:	Sec. 3.6.1
CDRL:	A007
DID Number:	DI-IPSC-81448A
DID Title:	Firmware Support Manual
SoW Paragraph:	Sec. 3.6.11.6
CDRL:	A008
DID Number:	DI-NDTI-80566

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 18 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

DID Title:	Test Plan
SoW Paragraph:	Sec. 3.9.1
CDRL:	A009
DID Number:	DI-MGMT-80004A
DID Title:	Risk Management Plan
SoW Paragraph:	Sec. 3.11.1
CDRL:	A010
DID Number:	DI-ILSS-80095
DID Title:	Integrated Logistics Support Plan (ILSP)
SoW Paragraph:	Sec. 3.12.2
CDRL:	A011
DID Number:	DI-CMAN-80858B
DID Title:	Configuration Management Plan
SoW Paragraph:	Sec. 3.12.4.3
CDRL:	A012
DID Number:	DI-SESS-81343A
DID Title:	Information Assurance Plan
SoW Paragraph:	Sec. 6.1
CDRL:	A013
DID Number:	DI-CMAN-80776
DID Title:	Technical Data Package
SoW Paragraph:	Sec. 3.1.16
CDRL:	A014
DID Number:	DI-MISC-80508B
DID Title:	Technical Report Study Services
SoW Paragraph:	Sec. 3.1.16
CDRL:	A015
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (HMI)
SoW Paragraph:	Sec. 3.6.11.3.1
CDRL:	A016
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (IDE)
SoW Paragraph:	Sec. 3.6.11.3.2
CDRL:	A017
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (SUPPLY SUPPORT)
SoW Paragraph:	Sec. 3.6.11.3.4
CDRL:	A018
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (DISTANCE SUPPORT)
SoW Paragraph:	Sec. 3.6.11.3.5

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 19 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

CDRL:	A019
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (TIMING SERVICES)
SoW Paragraph:	Sec. 3.6.11.3.6
CDRL:	A020
DID Number:	DI-IPSC-81427A
DID Title:	Software Development Plan
SoW Paragraph:	Sec. 3.6.4
CDRL:	A021
DID Number:	DI-CMAN-80776
DID Title:	Technical Data Package (Technology Refresh Plan)
SoW Paragraph:	Sec. 3.6.10.1
CDRL:	A022
DID Number:	DI-CMAN-80776
DID Title:	Technical Data Package (XML Schema)
SoW Paragraph:	Sec. 3.6.10.1.1
CDRL:	A023
DID Number:	DI-CMAN-80640C
DID Title:	Request for Deviation
SoW Paragraph:	Sec. 3.9.6
CDRL:	A024
DID Number:	DI-IPSC-81435A
DID Title:	Software Design Description
SoW Paragraph:	Sec. 3.8.2

CDRL:	B011
DID Number:	DI-FNCL-80331
DID Title:	TO Funding NotificationLetter
SoW Paragraph:	N/A

## 6.0 SPECIAL CONDITIONS.

The following special conditions shall apply to the contractor in the performance of the tasks of this TO.

### 6.1 Security Requirements

A Security Clearance: DD FORM 254 is required. A SECRET Clearance may be required to perform certain tasks of this SOW. The Contractor may have access to Department of Defense classified drawings. However, the Contractor shall not input classified data into any personal computer either linked or not linked to a Government Defense network.

The work performed under this SOW may involve access to, handling of, and generation of classified material up to and including SECRET. The contractor shall appoint a Security Officer, who shall (1) be responsible for all security aspects of the work performed under this SOW, (2) assure compliance with all DOD and U.S. Navy regulations regarding security, and (3) assure compliance with any written instructions

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 20 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

from the Security Officer of the activity issuing SOW. The contractor shall conform to the provisions of DOD 5220.22-M, and shall provide for obtaining SECRET security clearances for contractor employees requiring access to classified information and/or entry to controlled areas. Only those persons who have a "need-to-know" shall be given application for security clearances. Visit requests will be provided to the Crane Division Security Department on all employees requiring access to classified information.

The contractor shall coordinate the requirement to access the SIPRNET or other appropriately encrypted link (s). Access to classified data will be on a need-to-know basis.

The contractor shall develop an Information Assurance Plan in accordance with DOD 8500.1D (E) CDRL A015) that identifies critical program information and describes the approach for protecting that information. The contractor shall mark and treat data according to appropriate security classification guides.

In the event that any individual tasking requires a higher level of clearance, a separate DD Form 254 will be prepared and issued. The Contractor may be required to have access to live data during the performance of this TO. Any records and data or information the Contractor may have access to may be highly sensitive and confidential. The Contractor must not divulge any information about files, data processing activities or functions, user ids or passwords or any other knowledge that may be gained to anyone not authorized to have access to such information. It is the Contractor's responsibility to ensure that all required employees have proper authority. All classified material shall be processed and protected in accordance with the provisions of this performance work statement and all required instructions and directives in effect concerning the processing of classified material. U.S. Citizenship is required for all positions.

## **6.2 Travel**

The contractor may be required to travel throughout the continental United States (CONUS) and to locations outside of the continental United States (OCONUS). When required to obtain access to a Government facility, ship, aircraft, or other duty station, the contractor shall initiate requests for Need-to-Know Certification and submit these requests to the TOM for appropriate action.

### **6.2.1 Travel Authorization**

All travel undertaken by the contractor for performance of tasking must have prior authorization by the Contracting Officer or the Task Order Manager (TOM) and will be issued with a specific TI and/or Travel Authorization (TA).

## **6.3 Place of Performance**

The majority of the tasking will take place at the contractor's facility. All CDSA design and EDM manufacture shall be performed at the contractor's facility. Minimal tasking may be performed at Naval Surface Warfare Center, Crane IN and at other radar integration facilities.

## **6.4 Task Order Manager (TOM)**

The TOM is the point of contact for non-substantiative communications of a technical nature. Only the Contracting Officer has the authority to change the requirements of this order(s). The TOM for this task order is: Yvette Anderson, NSWC Crane, IN, Code GXLL; phone: 812-854-5176; and, email: [denise.anderson@navy.mil](mailto:denise.anderson@navy.mil)

## **6.5 Requiring Technical Activity (RTA)**

The RTA contact is: Terry Callahan, NSWC Crane, IN, Code GXRМ; telephone: 812-854-6946; and, email: [terry.callahan@navy.mil](mailto:terry.callahan@navy.mil).

## **6.6 Contracting Point of Contact (POC)**

The POC for the Contracting Division is: Jordan Schnarr, NSWC Crane, IN, Code 0561SE; telephone: 812-854-8765; and email: [Jordan.schnarr@navy.mil](mailto:Jordan.schnarr@navy.mil).

## **6.7 Incremental Funding**

This task order will be funded incrementally as required. Each project will be identified with a specific TI and funded on separate Sub-Contract Line Item Numbers (SLINs).

## **6.8 Safety and Health**

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 21 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

The requirements of this order may require contractor personnel to come in contact or be exposed to hazardous conditions. The Contractor shall abide by all applicable federal, local and state occupational safety and health requirements. The Government will provide Standard Operating Procedures (SOP) when applicable and identify hazardous conditions. The contractor must have on record a corporate safety plan and shall provide a copy to the TOM when instructed. The Contractor shall ensure all employees have appropriate Personal Protection Equipment (PPE). The Contractor shall ensure employees have all required training and certifications related to Occupational Safety and Health Requirements. The contractor shall maintain an accurate record of and shall report all accidents to the TOM and/or the Crane Division Security Department as prescribed by OPNAVINST 5102.1.

### **6.9 Period of Performance**

The initial award will result in a three (3) year base period of performance which will include one (1) year for Phase One and two (2) years for Phase Two. Phase Two of this tasking also includes the possibility of two additional years in the form of 1-year option periods. These two 1-year option periods are in addition to the awarded 3-year base period. The total Period of Performance, including option periods, is 5-years.

### **6.10 Control of Contractor Personnel**

The contractor shall comply with the requirements of NAVWPNSUPPCENINST 5510.1 and NAVWPNSUPPCENINST 5910.1. All persons engaged in work while on Government property shall be subject to search of their persons (no bodily search) and vehicles at any time by the Government, and shall report any known or suspected security violations to the Crane Division Security Department. Assignment, transfer, and reassignment of contractor personnel shall be at the discretion of the contractor. However, when the Government directs, the contractor shall remove from contract performance any person who endangers life, property, or national security through improper conduct. All contractor personnel engaged in work while on Government property shall be subject to the Standards of Conduct contained in SECNAVINST 5370.2J. Prior to conducting work under this contract, the contractor shall provide a list of employees that will be working on site. The employee list shall contain full names, security clearance levels, social security numbers, and job titles. This list shall be updated within forty-eight hours after changes occur.

### **6.11 Identification Badges**

The contractor shall be required to obtain identification badges from the Government for contractor personnel to be located on Government property. The identification badge shall be visible at all times while employees are on Crane Division property. The contractor shall furnish all requested information required to facilitate issuance of identification badges and shall conform to applicable regulations concerning the use and possession of the badges. The contractor shall be responsible for ensuring that all identification badges issued to contractor employees are returned to the Crane Division Security Department within forty-eight hours following the completion of the contract, relocation or termination of an employee issued an identification badge, and upon request by the Contracting Officer.

### **6.12 Accident Reporting**

The contractor shall maintain an accurate record of and shall report all accidents to the TOM and/or the Crane Division Security Department as prescribed by OPNAVINST 5102.1.

### **6.13 Smoking Regulations**

Smoking on Crane Division, Crane, IN premises shall be in approved areas only in accordance with NAVFAC P-1021. Smoking in vehicles is prohibited.

### **6.14 Hours of Operation**

The following hours of operation shall apply to the contractor's on-site personnel and the contractor's liaison facility personnel.

#### **6.14.1 Normal Hours on-site**

The Government's hours of operation at NSWC Crane in the Radar Systems Division are between the hours of 6:00 a.m. to 5:00 p.m. Eastern Daylight Time Monday through Friday except Federal Holidays or pre-planned closed days. Hours before or beyond 5:00 p.m., Monday through Friday are dependent upon availability of Government employees on-site. A 30-minute lunch break is allowed between the hours of 1030-1230. The contractor may be required to respond to an

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 22 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

emergency requirement and work outside of regular working hours to perform the work required by the TI.

#### **6.14.2 Closed Days**

All closed days will be designated by the Commander, NSWC, Crane Division. Closed days will be associated with holidays, National Security and/or inclement weather/dangerous conditions. The Contractor will not be allowed to work on NSWC, Crane Division during designated closed days, unless they are deemed to be essential personnel. Essential personnel will be identified by the Government, and communicated to the contractor prior to the designated closed day, and will be authorized by TOM/KO and specified on individual TI. In the event the Contractor is prevented from performance as the result of an Executive Order or an administrative leave determination applying to the using activity, such time may be charged to leave or indirect charges in accordance with the company policy.

#### **6.14.3 Inclement Weather**

When Crane Division, Crane, IN, is closed by the Commander because of inclement weather conditions (per current Inclement Weather Plan), notification of closing will be broadcast over local radio and television stations.

#### **6.14.4 Holidays**

A list of Government Agency observed holidays and/or closed days in conjunction with holidays will be published at the beginning of each calendar year. Contractor employees will not be allowed to work on Government property on a holiday and/or closed day unless they are deemed to be essential personnel. The contractor is advised that access to the Government installation may be restricted on these holidays:

New Year's Day	Birthday of Martin Luther King, Jr.
Washington's Birthday	Memorial Day
Independence Day	Labor Day
Columbus Day	Veteran's Day
Thanksgiving Day	Christmas Day

In the event any of the above holidays occur on a Saturday or a Sunday, then such holiday shall be observed by the Contractor in accordance with the practice as observed by the assigned Government employees at the using activity.

#### **6.14.5 Overtime**

Overtime shall be performed as required but only to the extent authorized by Chief of Contracting Office (CCO). The definition of overtime is as follows: work in excess of forty hours per week or work performed on Saturday, Sunday, and holidays.

### **6.15 Certification, Training, and Licensing Requirements**

The contractor shall provide personnel with the correct certification, training, and licenses to perform the mission work safely and correctly. The following types of certification or training may be required to complete tasking. Each TI will identify the certification, training, and licensing requirements. Contractor employees shall obtain the necessary training/certifications required in the performance of their assigned tasks. Certification training specific to the Government may be funded/provided by the Government. This includes certifications such as Electrostatic Discharge. Contractor shall successfully complete other Government specific training courses such as Government contracting, procurement, Government business/financial, funding, etc. The following training is considered to be employee development and shall not be provided/funded by the Government:

- CPR Certification
- AED Certification
- Forklift Operator

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 23 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

### **6.16 Data Rights**

Products shall open in the appropriate software without regeneration errors or warnings. All data/documentation delivered/created in support of this effort becomes the property of the US Government and will be delivered without proprietary markings.

### **6.17 Safety Program**

The Contractor shall ensure that all work shall be conducted in a safe manner and while on Center, the contractor shall abide by all federal safety, security, and environmental regulations and be authorized use of NMCI equipment and IT services. If the Contractor fails to promptly comply with safety requirements, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

The contractor shall establish, implement, and maintain a System Safety Program (SSP) in accordance with MIL-STD-882. The contractor shall develop the documentation below (as required) in accordance with MIL-STD-882. The contractor shall recommend corrective actions for all safety issues. The PEO IWS 2R117 Program Manager shall have final determination of the hazard classification and the risk acceptance level as defined in the SSP. PEO IWS 2R117 shall have the right to review internal contractor information related to system safety hazard classification and risk levels. The contractor shall generate and log Hazard Action Reports (HARs) for any observed or detected, actual or potential hazard. HAR format shall be as identified in the SSP.

### **6.18 Release of Information**

All technical data provided to the Contractor shall be protected from the public. All other information relating to the items to be delivered and services to be performed under this SOW may not be disclosed by any means without prior approval of the authorized representative of the Contracting Officer. Dissemination or public disclosure includes but is not limited to permitting access to such information by foreign nationals by any other person or entity or publication of technical or scientific papers or advertising or any other proposed public release. The Contractor shall provide adequate physical protection to such information so as to preclude access by any person or entity not authorized such access.

### **6.19 Privacy Act**

Under US Code Title 5, Section 552, information accessed in completing this SOW is subject to the Privacy Act.

### **6.21 Damage Reporting**

The Contractor shall maintain an accurate record of and shall report to the TOM all damages to Government Furnished Equipment and Facilities as prescribed by OPNAVINST 5102.1.

### **6.22 Non-Personal Services**

The Government will not supervise contractor employees. Under no circumstances shall the Government assign tasks to, or prepare work schedules for, individual contractor employees. It shall be the responsibility of the contractor to manage its employees and to guard against any actions that are of the nature of personal services, or give the perception of personal services. If the contractor feels that any actions constitute, or are perceived to constitute personal services, it shall be the contractor's responsibility to notify the Contracting Officer (KO) immediately. These services shall not be used to perform work of a policy/decision making or management nature, i.e., inherently Governmental functions. All decisions relative to programs supported by the contractor shall be the sole responsibility of the Government.

### **6.23 Quality Assurance**

The contractor shall establish, implement, maintain, and document a value-added Quality Assurance System (QAS) that is integral to the overall development process. This system shall be comprised of management, technical resources, plans, procedures, schedules, and controls necessary to ensure conformance to contractual requirements. The QAS shall address the requirements of ANSI/ASQ Q9001, or an equivalent model. IEEE/EIA 12207.0, 12207.1, and 12207.2 shall be used as guidance for software lifecycle processes. The software design, documentation, and review process shall be in accordance with current standard business practices that represent the approved processes for the SEI level III or better.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 24 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

### **6.23.1 Procuring Activity Verification**

All quality assurance (QA) operations performed by the contractor will be subject to procuring activity verification at any time. Verification will consist of, but not limited to, (a) surveillance of the operations to determine that practice, methods, and procedures of the written quality assurance program are being properly applied, and (b) Government inspection of delivered items to assure compliance with the CDSA System Requirements Document and CDSA System-Subsystem Specification.

### **6.23.2 Production Screening**

A series of tests shall be designed and conducted to disclose weak parts, workmanship problems, and design deficiencies. These tests shall be applied at the part, module, unit, equipment, and systems level for delivered hardware and manufactured to the CDSA System Requirements Document and the CDSA System-Subsystem Specification in accordance with an approved QAS developed in accordance with this SOW.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 25 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## SECTION D PACKAGING AND MARKING

### SECTION D PACKAGING AND MARKING

All provisions and clauses in SECTION D of the basic contract apply to this task order, unless otherwise specified in this task order.

#### DATA PACKAGING LANGUAGE (5503)

All unclassified data shall be prepared for shipment in accordance with best commercial practice. Classified reports, data, and documentation shall be prepared for shipment in accordance with National Industrial Security Program Operating Manual (NISPO), DOD 5220.22-M dated January 1995.

#### MARKING OF REPORTS (NAVSEA) (SEP 1990) (5506)

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

Name and business address of the Contractor  
Contract number  
Task order number  
Sponsor:

\_\_\_\_\_  
(Name of Individual Sponsor)

\_\_\_\_\_  
(Name of Requiring Activity)

\_\_\_\_\_  
(City and State)

#### PROHIBITED PACKING MATERIALS (5512)

The use of asbestos, excelsior, newspaper or shredded paper (all types including waxed paper, computer paper and similar hygroscopic or non neutral material) is prohibited. In addition, loose fill polystyrene is prohibited for shipboard use.

#### INSTRUCTIONS FOR MARKING DISTRIBUTION STATEMENT (5513)

The Contractor shall comply with the instructions cited below for placement of the distribution statement associated with data. The applicable distribution statement is identified on each Contract Data Requirements List (DD Form 1423-1). The distribution statement shall be displayed conspicuously on technical documents so as to be recognized readily by receipts. The distribution statement shall appear on each front cover and title page of a report. If the technical document does not have a cover or title page, the applicable distribution statement shall be stamped or typed on the front page in a conspicuous position.

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

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 26 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## **SECTION E INSPECTION AND ACCEPTANCE**

### **INSPECTION AND ACCEPTANCE LANGUAGE FOR DATA (5602)**

Inspection and acceptance of all data shall be as specified in the Contract Data Requirements List as described within the SOW.

### **GOVERNMENT FURNISHED MATERIAL (NAVSEA) (MAY 1995)**

Government Furnished Material: When material is furnished by the Government, the contractor's procedures shall include at least the following:

- Examination upon receipt, consistent with practicality, to detect damage in transit;
- Inspection for completeness and proper type;
- Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and deterioration during storage;
- Functional testing, either prior to or after installation, or both, as required by task order to determine satisfactory operation;
- Identification and protection from improper use or disposition; and
- Verification of quantity.

### **SECTION E INSPECTION AND ACCEPTANCE**

All provisions and clauses in SECTION E of the basic contract apply to this task order, unless otherwise specified in this task order.

### **INSPECTION AND ACCEPTANCE TERMS**

Supplies/services will be inspected/accepted at DESTINATION.

Damaged Government Furnished Material: The contractor shall report to the TOM any Government-furnished property found damaged, malfunctioning, or otherwise unsuitable for use. In event of damage or malfunction during or after installation, the contractor shall determine and record probable cause and necessity for withholding material from use.

Bailed Property: The contractor shall, as required by the terms of the Bailment Agreement, establish procedures for the adequate storage, maintenance, and inspection of bailed Government property. Records of all inspections and maintenance performed on bailed property shall be maintained. These procedures and records shall be subject to review by the Government representative.

[As used in the foregoing, the term "material" applies to Government-furnished equipment to be installed in or furnished with the end item. The term "property" is Government equipment that is used in the fabrication or assembly of the end item, and is not delivered as part of the end item.]

### **CLAUSES INCORPORATED BY REFERENCE**

- 52.246-3 Inspection of Supplies-Cost Reimbursement MAY 2001
- 52.246-5 Inspection of Services-Cost Reimbursement APR 1984
- 252.246-7000 Material Inspection and Receiving Report MAR 2003

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 27 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## SECTION F DELIVERABLES OR PERFORMANCE

### CLIN - DELIVERIES OR PERFORMANCE

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

4000	6/29/2009 - 6/28/2012
6000	6/29/2009 - 6/28/2012

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

4400	6/29/2012 - 6/28/2013
4500	6/29/2013 - 6/28/2014
6400	6/29/2012 - 6/28/2013
6500	6/29/2013 - 6/28/2014

Services to be performed hereunder will be provided at (insert specific address and building etc.)

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 28 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## SECTION G CONTRACT ADMINISTRATION DATA

### SECURITY ADMINISTRATION

The highest level of security required under this task order is SECRET as designated on DD Form 254 attached hereto and made a part hereof. The Commander, Defense Security Service, Director of Industrial Security, Western Region, is designated Security Administrator for the purpose of administering all elements of military security hereunder.

All provisions and clauses in SECTION G of the basic contract apply to this task order, unless otherwise specified in this task order.

### TASK ORDER MANAGER (TOM)

Denise Yvette Anderson  
300 Highway 361; B-3168  
Crane, IN 47522  
[Denise.anderson@navy.mil](mailto:Denise.anderson@navy.mil)  
812-854-5176

### INVOICING INSTRUCTIONS AND PAYMENT FOR SERVICES

Invoices for services rendered under this task order shall be submitted electronically through Wide Area Work Flow – Receipt and Acceptance (WAWF): The vendor shall self-register at the web site <https://wawf.eb.mil>. Vendor training is available on the internet at <https://wawftraining.eb.mil>. Additional support can be accessed by calling the NAVY WAWF Assistance Line: 1-800-559-WAWF (9293). Select the Cost Voucher within WAWF as the invoice type. The cost voucher prepares the interim voucher. Back up documentation (such as timesheets, cost breakdowns, etc.) can be included and attached to the invoice in WAWF.

Attachments created in any Microsoft Office product are attachable to the invoice in WAWF. The following information regarding Naval Surface Warfare Center, Crane, Indiana is provided for completion of the invoice in WAWF:

PAY DODAAC:	To be completed at time of award
WAWF Invoice Type:	Cost Voucher
Issue by DODAAC:	N00164
Admin DODAAC:	To be completed at time of award
DCAA DODAAC (if applicable):	To be completed at time of award
Service Approver:	N00164
Inspect by DODAAC:	N/A
Service Acceptor DODAAC:	N00164
LPO DODAAC:	N/A

The contractor shall submit invoices for payment per contract terms. The contractor shall invoice per ACRN by SLIN (sub-contract line item number). The Government shall process invoices for payment per contract terms. Payment is not to be pro-rated across ACRNs. ACRNs are to be paid in accordance with contractor's invoice. After clicking the submit button a Notice or successful/unsuccessful submission screen will appear. This screen allows you to enter an additional e-mail notification address. You must click on the "Send More E-mail Notifications" link and add the e-mail address listed below for submittal of the acceptor:

Or e-mail the invoice to the following address:

TASK ORDER MANAGER (TOM)  
Yvette Anderson  
300 Highway 361; B-3168  
Crane, IN 47522  
[Denise.anderson@navy.mil](mailto:Denise.anderson@navy.mil)  
812-854-5176

Additional WAWF Information:

On the Miscellaneous Tab of the invoice in WAWF attach the cost breakdown for the cost voucher amount being submitted IAW the invoicing instructions.

**CONTRACT ADMINISTRATION DATA LANGUAGE (5802)**

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 29 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

Enter below the address (street and number, city, county, state and zip code) of the Contractor's facility which will administer the task order if such address is different from the address shown on the proposal.

Address: \_\_\_\_\_  
Street & number: \_\_\_\_\_  
City & State: \_\_\_\_\_  
County: \_\_\_\_\_  
Zip Code: \_\_\_\_\_

**CONTRACTOR PERFORMANCE ASSESSMENT RATING SYSTEM (CPARS) (JAN 2001)**

Pursuant to FAR 42.1502, this task order is subject to DoD's Contractor Performance Assessment Rating System (CPARS). CPARS is an automated centralized information system accessible via the Internet that maintains reports of contractor performance for each contract/task order. CPARS is located at <http://www.cpars.navy.mil/>. Further information on CPARS is available at that web-site.

Under CPARS, the Government will conduct annual evaluations of the contractor's performance. The contractor has thirty (30) days after the Government's evaluation is completed to comment on the evaluation. The opportunity to review and comment is limited to this time period and will not be extended. Failure to review the report at this time will not prevent the Government from using the report.

The contractor may request a meeting to discuss the CPAR. The meeting is to be requested via e-mail to the CPARS Program Manager no later than seven days following receipt of the CPAR. A meeting will then be held during the contractor's 30-day review period.

The CPARS system requires the Government to assign the contractor a UserID and password in order to view and comment on the evaluation. Provide the name(s) of at least one individual (not more than three) that will be assigned as your Defense Contractor Representative for CPARS.

**PURCHASING OFFICE REPRESENTATIVE LANGUAGE**

PURCHASING OFFICE REPRESENTATIVE:

Audra Dant  
300 Highway 361, B-64  
Crane, IN 47522  
audra.dant@navy.mil  
812-854-3308

**EXPEDITING CONTRACT CLOSEOUT (NAVSEA) (DEC 1995)**

As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of \$500 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either part at the end of the contract except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party may be considered to the extent permitted by law.

This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either part associated with collected such small dollar amounts could exceed the amount to be recovered.

```
Accounting Data
SLINID  PR Number          Amount
-----
400001  9174-0433            1520000.00
LLA :
A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0
Standard Number: N0002409WX11708 (AA)

600001  9174-0434            140000.00
LLA :
A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0
Standard Number: N0002409WX11708 (AA)

600002  9174-0436            40000.00
LLA :
A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0
```

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 30 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

Standard Number: N0002409WX11708 (AA)

BASE Funding 1700000.00  
Cumulative Funding 1700000.00

MOD 01

400002        9216 0645                    268468.00  
LLA :  
A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0  
Standard Number: N0002409WX11708 (AA)  
In support of TI 001

600003        9216 0664                    83366.00  
LLA :  
A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0  
Standard Number: N0002409WX11708 (AA)  
In support of TI 001

600004        9223 3045                    14132.00  
LLA :  
A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)  
Standard Number: N0002409WX11707  
In support of TI 001

600005        9223 3044                    53214.00  
LLA :  
A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)  
Standard Number: N0002409WX11707  
In support of TI 001

MOD 01 Funding 419180.00  
Cumulative Funding 2119180.00

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 31 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## SECTION H SPECIAL CONTRACT REQUIREMENTS

### GOVERNMENT FURNISHED PROPERTY (SEP 1990) (NAVSEA 5252.245-9108)

The Government will provide only that property set forth below, notwithstanding any term or condition of this task order to the contrary. Upon Contractor's written request to the cognizant Task Order Manager, via the cognizant Procuring Contract Office (NSWC Crane), the Government will furnish the following for use in the performance of this task order:

\* To be identified upon issuance of each Technical Instruction (TI).

### TECHNICAL INSTRUCTIONS (MAY 1993)(NAVSEA 5252.242-9115)

(a) Performance of the work hereunder shall be subject to written technical instructions signed by the Task Order Manager specified in Section G of this task order. 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 task order. Technical Instructions may not be used to:

1. Assign additional work under the task order
2. Direct a charge as defined in the "CHANGES" clause of this task order
3. Increase or decrease the task order price or estimated task order amount (including fee), as applicable, the level of effort, or the time required for task order performance
4. Change any of the terms, conditions or specifications of the task order.

(c) If, in the opinion of the contractor, any technical instruction calls for effort outside the scope of the task order or is inconsistent with this requirement, the contractor shall notify the Procuring Contracting Officer (NSWC Crane) 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 Procuring Contracting Officer (NSWC Crane) that the technical instruction is within the scope of the task order.

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

### H20S INSURANCE - WORK ON A GOVERNMENT INSTALLATION

The following types of insurance are required in accordance with the clause entitled. Insurance - Work On A Government Installation (FAR 52.228-5), and shall be maintained in the minimum amounts shown:

1. Comprehensive General Liability: \$200,000 per person and \$500,000 per accident for bodily injury.
2. Automobile Insurance: \$200,000 per person and \$500,000 per accident for bodily injury and \$20,000 per accident for property damage.
3. Standard Workmen's Compensation and Employer's Liability Insurance (or, where maritime employment is involved, Longshoremen's and Harbor Worker's Compensation Insurance) in the minimum of \$100,000.

### ALLOTMENT OF FUNDS (MAY 1993) (NAVSEA 5252.232-9104)

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

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 32 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

performance for which it is estimated the allotted amount(s) will cover is as follows:

\* See Section G

**H30S LIMITATION OF LIABILITY - INCREMENTAL FUNDING (JUN 2004)**

This task order is incrementally funded and the amount currently available for payment hereunder is limited to \$1,700,000 inclusive of fee, profit and all other charges. The clause entitled, Limitation of Funds (FAR 52.232-22) applies. The Government is not obligated to reimburse the Contractor for costs incurred in excess of this amount unless additional funds are made available and are incorporated as a modification to this task order.

**H81S TRAVEL COSTS AND RESPONSIBILITIES**

(a) Performance under this task order may require travel by contractor personnel. If travel, domestic or overseas, is required, the Contractor shall be responsible for making all needed arrangements for his personnel. This includes, but is not limited to, medical examinations; immunizations; passports, visas, etc. and security clearances. If any work will take place on a U.S. Navy vessel, the Contractor shall obtain boarding authorization for all contractor personnel from the Commanding Officer of the vessel. Authorization shall be obtained prior to boarding.

(b) The Government will reimburse the Contractor for allowable travel costs incurred by the Contractor in performance of the task order in accordance with FAR subpart 31.2 or 31.3 as applicable.

**H83S SERVICE CONTRACT ACT WAGE DETERMINATION (JUN 2004)**

The applicable Service Contract Wage Determinations by the Secretary of Labor are provided as attachment J-1 in Section J.

**HC25S ACCESS TO GOVERNMENT SITE (JUN 2004)**

1. Contractor personnel shall comply with all current badging and security procedures required to gain access to any Government site.
2. The contractor shall ensure that contractor personnel employed on any Government site become familiar with and obey Activity Regulations.
3. Contractor personnel shall not enter restricted areas unless required to do so and until cleared for such entry.
4. The contractor shall request permission to interrupt any activity roads or utility services in writing a minimum of 15 calendar days prior to the date of interruption.
5. Contractor personnel shall bear personal protective equipment in designated areas.
6. All contractor equipment shall be conspicuously marked for identification.
7. 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.

**HG10S CONTRACTUAL AUTHORITY AND COMMUNICATIONS (JUN 2004)**

(a) Except as specified in subparagraph (b) below, no order, statement, or conduct of any Government personnel who visit the contractor's facilities or in any other manner communicates with contractor personnel during the performance of this task order shall constitute a change under the Changes clause of this task order.

(b) The contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this task order.

(c) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this task order and, notwithstanding provisions contained elsewhere in this task order, the said authority remains solely the Contracting Officer's. In the event the contract effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the task order price to cover any increase in charges incurred as a result thereof.

**HQ-C-2-0014 CONTRACTORS PROPOSAL (NAVSEA)(SEP 1990)**

(a) Performance of this task order by the contractor shall be conducted and performed in accordance with detailed obligations to which the contractor committed itself in proposal dated 22 May 2009 in response to NSWC Crane solicitation N00024-09-R-3295.

(b) The technical volume(s) of the contractor's proposal is incorporated by reference and hereby made subject to the provisions of the "ORDER OF PRECEDENCE" (FAR 52.215-08) clause of this task order. Under the "ORDER OF PRECEDENCE" clause, the technical volume of the contractor's proposal referenced herein is hereby designated as item (f) of the clause following "The Specifications" in order of precedence.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 33 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## H-XX NOTIFICATION CONCERNING DETERMINATION OF SMALL BUSINESS SIZE STATUS

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

### 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUNE 2003)

(a) Definition. "Small business concern" as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected. (2) Any award resulting from this solicitation will be made to a small business concern.

(c) Agreement. A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply to construction or service contracts.

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 34 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## **SECTION I CONTRACT CLAUSES**

FAR 52.222-41 Service Contract Act (1965)

FAR 52-227-14 Data Rights (DEC 2007)

DFARS 252-227-7013 Rights in technical data – Noncommercial items (NOV 1995)

CONTRACT NO. N00178-06-D-4684	DELIVERY ORDER NO. FC01	AMENDMENT/MODIFICATION NO. 01	PAGE 35 of 35	DRAFT
----------------------------------	----------------------------	----------------------------------	------------------	-------

## SECTION J LIST OF ATTACHMENTS

Attachment 1 - DD254

Attachment 2 - CDRLs

Attachment 3 - 89 SPC 09 9001

Attachment 4 - 89 SPC 09 9002

Attachment 5 - 89 SPC 09 9003

Attachment 6 - 89 SPC 09 9004

Attachment 7 - 89 SPC 09 9007

Attachment 8 - 89 SPC 09 9008

Attachment 9 - 89 SPC 09 9009

Attachment 10 - CDSA Test Philosophy

Attachment 11 - CDRL B011