

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE S	PAGE OF PAGES 1 25
2. AMENDMENT/MODIFICATION NO. 0005	3. EFFECTIVE DATE 18-Dec-2014	4. REQUISITION/PURCHASE REQ. NO. N5005414RCFOC30		5. PROJECT NO.(If applicable)
6. ISSUED BY CODE N00189 NAVSUP FLC NORFOLK CONTRACTING NORFOLK OFFICE ATTN: J. ANDREWS 1968 GILBERT STREET, SUITE 600 NORFOLK VA 23511-3392		7. ADMINISTERED BY (If other than item 6) CODE See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		<input checked="" type="checkbox"/> X	9A. AMENDMENT OF SOLICITATION NO. N00189-15-R-0003	
		<input checked="" type="checkbox"/> X	9B. DATED (SEE ITEM 11) 12-Nov-2014	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer 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 <u> 1 </u> copies 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 ACKNOWLEDGMENT 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)				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) The purpose of this modification is to update PWS Section C.4(b).				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED 18-Dec-2014	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION C - DESCRIPTIONS AND SPECIFICATIONS

The following have been modified:

PERFORMANCE WORK STATEMENT

PERFORMANCE WORK STATEMENT (PWS) TECHNICAL SERVICES

C.1 SCOPE OF WORK

(a) This Performance Work Statement (PWS) describes the minimum effort required to provide the Hull Mechanical and Electrical (HM&E) engineering, analytical, logistics and technical support to Mid Atlantic Regional Maintenance Center (MARMC). Technical Support shall be defined as: providing the equipment and system expertise to aid in trouble shooting, repair, assessment analysis, inspection, root cause localization and identification, maintenance training, logistics configuration support, alteration development /installation, and/or long term problem resolution related to the specific equipment type.

(b) Due to the flexible nature of the configuration of the various classes of U.S. Navy ships in use and supported by MARMC; and since not all ships have the same systems/equipments installed and many of the systems/ equipments have more than one version; a complete list of these systems and equipments is not possible. Additionally, systems/equipments are continually being added and/or deleted from service as they are developed or become obsolete. Essentially, ship systems include any and all systems and equipments both major and minor that comprise the Hull Mechanical and Electrical systems, including their power supplies, ancillary, peripheral, sensors, support equipment, trainers, training and tactical software, and handling systems. The contractor shall be tasked to perform on any shipboard mechanical/electrical system and or the equipment that may be installed in any vessel or shore facility worldwide.

(c) A major portion of the work required under this contract will be troubleshooting, assessment, installation, test, certification, incidental repair, refurbishment and the logistical support to Hull Mechanical and Electrical support (including but not limited to, ventilation, cooling water, electrical, cable, fiber, diesel systems and hydraulic subsystems) worldwide.

(d) When ordered in individual Performance Work Statements (PWS), the Contractor shall provide the requisite engineering, analytical, logistical, and technical support of a non-personal nature for ship Hull Mechanical and Electrical. Support shall be provided in the following areas:

- (1) Technical Assistance
- (2) Equipment Operation Assessment
- (3) Shipboard Alteration (SHIPALTs), Temporary Alterations (TEMPALTs), Alteration Installation Team (AIT) Engineering Change (ECs) and Field Change (FCs) Support
- (4) Extended Shipyard or Pier side Availability Repair and Modification support
- (5) Integrated Logistics Support (ILS)
- (6) Program Planning
- (7) Reliability Engineering Support
- (8) Training Support

(e) The Contractor may be directed to perform tasks on board United States Navy (USN), United States Coast Guard (USCG), Military Sealift Command (MSC), Foreign Military Sales (FMS) and other vessels or at various government/commercial shore facilities both in and out of the Continental United States (CONUS/OCONUS) as

designated in individual PWSs.

C.2 APPLICABLE DOCUMENTS

- (a) Obtaining Copies of Documents. When needed for performance of ordered tasks, contractor shall obtain and provide necessary copies of Specifications, Standards, Handbooks, and Data Item Descriptions stocked at Naval Publications and Forms Center (NPFC) or to an industry standard adopted by DOD. If the required document is not in stock at NPFC, then the originator of the individual PWS shall provide it.
- (b) When needed for performance of ordered tasks, the technical assistant of the individual PWS, will provide technical documents such as Military Standards, instructions, technical manuals, engineering drawings, maintenance documentation, ILS documentation, etc. which are not stocked at NPFC.

C.3 TASK REQUIREMENTS

- (a) Work to be performed and required deliverables shall be described in PWSs to be placed against the contract by the Contracting Officer or designated Ordering Officer and shall be within the parameters of one or more of the general tasks listed below in paragraphs C.3.1-C.3.8.
- (b) As may be required to perform the level of effort described in the PWS, the Contractor shall furnish all labor and facilities in order to: fabricate, assemble, receive, install, remove, inventory, verify, package, store, and ship both material and equipment as necessary in the performance of these efforts except for those facilities, material, and equipment specifically provided by the Government . The Contractor shall acquire or procure those incidental material items necessary to complete tasking.
- (c) The Contractor is solely responsible for the technique which will be used to fulfill the terms of this Performance Work Statement (PWS). Further, the Contractor remains solely responsible for control and supervision of their contracted personnel in performance of this PWS.
- (d) The Contractor is solely responsible for the safety of their personnel while working on board ships, as well as when working in shipboard tanks and confined spaces. The contractor shall perform atmospheric safety certification when work is required in tanks and unventilated space.

C.3.1 FLEET TECHNICAL ASSISTANCE (FTA) TASKS: Provide Hull Mechanical and Electrical technical support for the evaluation and correction of fleet equipment/system casualties; provide technical assistance on mechanical/electrical to incidental repair or replace malfunctioning or failed components, units or subsystems. This assistance will generally consist of problem analysis, troubleshooting, isolation, correction and checkout testing to return the Hull Mechanical and Electrical systems/equipment to fully operational condition.

- (a) The Contractor shall perform this system and/or equipment troubleshooting, repair and evaluation in naval Vessels and shore-based activities CONUS and/or OCONUS. Typical of the type of service that may be required, but not intended to be an all-inclusive list are:
- (1) Provide on-site and distance support (DS) technical assistance and coordination for Atlantic and Pacific fleet U.S. Navy Ship mechanical/electrical/electronic/combat systems and related equipment.
 - (2) The Contractor shall provide hardware and software technical expertise to troubleshoot equipment failures, determine corrective repair action and repair equipment.
 - (3) Provide logistical or logistics support as an integral part of on-site technical assistance.
 - (4) The Contractor shall provide hardware and software technical expertise to train ship's force personnel in the operation, maintenance and logistics support of specific equipment.

- (5) Preparation of written debriefs to ship's force and MARMC managers or other designated Government representatives. The format for this effort would be in accordance with the Joint Fleet Maintenance Manual (current revision), Technical Assistance Visit Report (TAVR), and or MARMC Branch heads or designated governmental representative direction.
- (6) Original Equipment Manufacturer (OEM) technical support as required.
- (7) The Contractor shall support/use current government software systems for tracking of problems associated with equipments/systems, and for system analysis.

C.3.2 SYSTEM EQUIPMENT ASSESSMENT TASKS: The Contractor shall perform assessment and maintenance of Hull Mechanical and Electrical shipboard systems and equipment, training in maintenance/overhaul processes, identification, compilation and production of Measures of Effectiveness (MOE's) and other metrics as required, as well as data analysis and reliability engineering.

- (a) Typical of the type of service that may be required, but not intended to be an all-inclusive list are:
 - (1) The Contractor shall identify the need for, and then develop, maintain, assess, and/or modify formalized ship-visit programs, equipment test programs which will include the ship visit criteria, plans, tests, procedures to be employed, and/or related documentation.
 - (2) The Contractor shall, using established operation and maintenance data reporting systems whenever feasible, perform measurement of the operational and maintenance performance of systems/equipments and logistic support items.
 - (3) The Contractor shall identify the need for, and then develop, maintain, assess, and/or modify engineering change proposals, instructions, technical manuals, maintenance requirement cards, engineering drawings, and other technical documents. This effort may include manuscript, preliminary, and/or document preparation.
 - (4) The Contractor shall utilize TAAS, Maintenance Data System/Casualty Reports (MDS/CASREP) and other data to determine whether ship specific equipment is properly supported and provide data as necessary.
 - (5) The Contractor shall operate, test, inspect, align, groom, repair and assess equipment material condition during TSRA, HM& ERA / INSURV's, CSA, INSURV, and Pre-Deployment grooms, or similar test and inspection programs as necessary.
 - (6) The Contractor shall support/use current government software systems for tracking of problems associated with equipments/systems.
- (b) Participation in the aforementioned efforts may require frequent and extended travel to various naval homeport locations, as well as remote locations OCONUS.

C.3.3 SHIPBOARD ALTERATIONS (SHIPALTS), ALTERATION INSTALLATION TEAM (AIT), ENGINEERING CHANGES (ECS) AND FIELD CHANGES (FCS) SUPPORT: The contractor shall be responsible for performing systems alterations to shipboard Hull Mechanical and Electrical systems. This tasking may include (but not be limited to):

- (a) Develop concepts, define requirements, conduct system analysis, develop design requirements and specifications, prepare implementation plans, and propose applications.
- (b) Develop plans, conduct hardware and software tests, and/or prepare related procedures involving environmental surveys, periodic acceptance certification, quality assurance, failure analysis, and similar test requirements.

- (c) Provide engineering, planning acquisition, scheduling, and expediting functions, associated with removals, modifications, installations, and repair, of assorted equipment and systems.
- (d) Conduct pre and post testing of shipboard system modifications/installations.
- (e) Determine availability of critical parts for installations/repairs and perform progressing and expediting functions as required to meet delivery schedules.
- (f) Provide shop facilities to prefabricate parts and components as needed for alterations.
- (g) Procure, store, and stage incidental material to support alterations.
- (h) Install equipment/systems including rip out, removals, platform installations, equipment, pipes, valves, wiring, electronic components, foundations, supports, cables, connectors and other components required for complete systems.
- (i) Provide program support to include adapting and modifying alteration documentation as required. Provide data packages, results or reports. Compile complete documentation required for government certification of all installed systems.
- (j) OEM technical support as required.
- (k) The contractor shall provide for Quality System Management Support.

C.3.4 EXTENDED SHIPYARD OR PIER SIDE AVAILABILITY REPAIR AND MODERNIZATION

SUPPORT TASKS: The Contractor shall, independently or as a member of a government/contractor/shipyard repair team perform the following tasks:

- (a) The shipyard or pier side availability repair tasks and related services necessary to provide the support the Hull Mechanical and Electrical are typical tasks, which include but are not limited to:
 - (1) Repair, align, calibrate, and test designated mechanical, electrical, equipments, including removal from and reinstallation at shore sites or onboard various US Naval ships, in accordance with formal procedures from applicable technical manuals and instructions.
 - (2) Install or prepare newly installed or existing mechanical /electrical systems/equipments for formal testing at shore sites or onboard various ships. Perform the designated formal tests to validate the specific operational and performance criteria. Submit a formal report certifying the overall and specific physical, operational and performance status.
 - (3) Shall develop, analyze, assess, validate, comment on, maintain, and/or modify technical criteria and/or repair and overhaul of systems/equipments that prescribe the scope, depth, and frequency of maintenance and inspections to be performed.
 - (4) Identify the need for, develop, analyze, maintain, assess, and/or modify plans and other documents for the establishment, certification or improvement facilities, documentation, and support equipment, training, and manning to assure continuing fleet support.
 - (5) The Contractor shall provide engineering services and assistance for equipment repairs beyond the skill level and resource capability of the fleet, shore maintenance activities and shipyards.
 - (6) Participation in the efforts described above may require frequent and extended travel both in and out of CONUS.

- (b) The Contractor shall support/use current government software systems for tracking of problems associated with equipment/system.

C.3.5 INTEGRATED LOGISTIC SUPPORT TASKS: The Contractor shall perform those integrated logistics and related support services as necessary to include logistics audits, reviews and assessments, which determine the adequacy of logistics support and recommend corrective actions to technical documentation, tools, support equipment, configuration, test equipment, and repair parts.

- (a) Typical of the type of service required to maintain shipboard Hull Mechanical and Electrical systems that may be required, but is not intended to be an all-inclusive list are:
 - (1) The Contractor shall develop, execute, maintain, assess and recommend changes to ILS plans, policies, procedures, and other related documentation.
 - (2) The Contractor shall identify the need for, develop, assess, present and/or maintain operations and maintenance training material.
 - (3) Perform shipboard ILS validations and verifications, review logistic documentation and submit 4790/CK forms to document configuration changes. This type of update includes Coordinated Shipboard Allowance List (COSAL) reviews for proper Allowance Parts List (APL) coverage, identification of material requisitions for items that are required to correct discrepancies, the preparation of PMS documentation, the development of Allowance Appendage Pages (AAP) for new support items, the development of Provisioning Technical Documentation (PTD) and the maintenance of ship system configuration data.
 - (4) Assist in updating of ship's Current Ships Maintenance Project (CSMP) with validated deferrals in accordance with specified uploading procedures. The development of line diagram and system operating procedures as well as equipment/system maintenance requirements may also be required.
 - (5) Develop or update configuration base lines through component validations of installed equipment and systems.
 - (6) Assist in identifying, locating, requisitioning, tracking and storing parts, material, and specialized tools and equipment required for routine periodic and specialized maintenance actions.
 - (7) Assist in the inspection, receipt, loading, transportation and issue of parts, material, and specialized tools and equipment required for routine periodic and specialized maintenance actions.
- (b) The Contractor shall support/use current government software systems for tracking of problems associated with equipment/system.

C.3.6 PROGRAM PROJECT MANAGEMENT SUPPORT TASKS: Program/project support tasking may include any and all existing programs or new programs that affect the shipboard maintenance which MARMC has the cognizant responsibility to execute in support of shipboard Hull Mechanical and Electrical systems. Tasking may include:

- (a) The Contractor shall perform those program support tasks and related services necessary to prepare, update, and maintain various presentation packages consisting of charts, graph handouts, etc.
- (b) The Contractor shall attend and participate in various reviews, meetings, conferences, boards, working groups, demonstrations, tests, audits, surveys, etc., in the performance of the other tasking elements of this PWS.
 - (1) Attendance and participation in the efforts described above may require the preparation of graphic and/or textual presentation material; the taking of minutes; and/or the publication of agendas, reports, and/or action items lists.

- (2) Develop and maintain various government controlled off-line databases and Internet Web databases in support of these programs.
- (3) The contract may be required to provide OEM technical support as required. The contractor is required to supply personnel through using the Prime or subcontractor (Teaming partners) personnel. If needed, Prime contractor may use purchase orders to secure personnel to accomplish task order.

C.3.7 RELIABILITY ENGINEERING SUPPORT: Reliability Engineering support tasking may include any shipboard Hull Mechanical and Electrical system, all existing programs, and/ or new programs that affect the shipboard maintenance which MARMC has the cognizant responsibility to execute. Typical of the type of service that may be required, but not intended to be an all-inclusive list are:

- (a) Provide system and equipment engineers to support/evaluate overall Hull Mechanical and Electrical maintenance philosophies, maintenance strategies, diagnostic systems and machinery data measurement and analysis.
- (b) Provide reliability centered maintenance support for the review and revision of individual equipment system maintenance strategies.
- (c) Perform inspections, examinations and analysis in order to:
 - (1) Recommend Reliability and Maintainability (R&M) alterations.
 - (2) Perform failure mode analysis on designated shipboard equipment/systems.
 - (3) Identify and correct logistics deficiencies.
 - (4) Recommend equipment specific training in proper maintenance, logistic practices and in using diagnostic data.
 - (5) Provide condition monitoring that can be used to anticipate necessary maintenance actions and preclude catastrophic equipment or system failures and time directed overhauls.
- (d) Perform comparative analysis of technical manuals, repair specifications, test procedures, engineering drawings and associated technical, logistic and PMS data to verify compliance with established philosophies and directives.
- (e) Conduct site surveys and provide technical reports on findings.
- (f) Provide engineering analysis using equipment/system diagnostic performance data or material condition assessments to develop repair recommendations.
- (g) Conduct studies and analysis, research the scientific and technical community, develop concepts, and provide reports on state-of-the-art or emerging technology.
- (h) Develop recommendations for improved maintenance methods and actions, including productivity and quality enhancements, maintenance schedules, diagnostic tools, safety features, etc.
- (i) Develop comparative analysis optimization procedures within program parameters using diagnostic trend data, condition assessment historical data, maintenance deferral data and historical casualty data that, if adopted, would reduce fleet maintenance cost, increase Mean Time Between Failures (MTBF) and/or increase fleet material readiness.
- (j) Conduct verifications and validations to ensure system performance parameters meet design requirements in accordance with post overhaul test requirements, installations or alterations.
- (k) Perform analysis to identify and track configuration changes for various equipment and systems documented in the Navy 3M system.

- (l) Perform trending studies from equipment diagnostic and maintenance data and operational logs in order to develop failure mode analysis curves and recommendations for improvement.
- (m) Develop optimization procedures within program parameters, such as cost, time, material, labor, etc. through engineering analysis.
- (n) Provide technical assistance and guidance to Ship's Force, Type Commanders, and other cognizant Navy Technical Activities pertinent to the operation and support of program systems and requirements.
- (o) Identify the need for developing, maintaining, reviewing and/or modifying technical manuals, maintenance requirements cards, engineering drawings, technical repair standards, and other technical documents. This effort may include manuscripts, preliminary, or final levels of preparation.
- (p) Provide OEM technical support as required.

C.3.8 TRAINING SUPPORT: The Contractor shall perform those training of Hull Mechanical and Electrical systems and related support services as necessary to include Plan, develop, and prepare training curriculum. Typical of the type of service that may be required, but not intended to be an all-inclusive list are:

- (a) Conduct classroom technical training in the operation, maintenance, and repair of systems and equipment. Conduct on-the-job training, in conjunction with repair assistance tasking, in the proper operation and maintenance of various systems and equipment. Develop training curricula, student handouts; instructor guides for use in accomplishing courses, i.e., Type Commander requested onboard training seminars or system familiarization workshops for ship's force personnel, Government agencies, IMA personnel etc. who are tasked with aligning, repairing, operating or maintaining ship board systems and equipment. Maintain records of all classroom and on-the-job technical training conducted for Government personnel including identification of person(s) trained, parent command of person trained, location of training, subject of training, date of training conducted, and duration of training.
- (b) Revise existing curriculum to meet changing overall training and/or course objectives. Curricula development will conform to appropriate MIL-STDs covering courseware and content. Evaluate existing training curriculum. Validate the effectiveness of training and the meeting of training objectives. Provide appropriate reports and recommendations.

C.4 LOCATION OF WORK

The work under this contract shall be performed at the locations specified in individual PWS, which may be issued under this contract. It is estimated that the work will be ordered at the following locations, in the following estimated percentages of the total level of effort:

- (a) It is anticipated that the following level of effort for each lot year will be utilized as follows:

Approximately 75% Hampton Roads, VA
Approximately 20% Other
Approximately 5% Other outside CONUS

Note:

- For pricing purposes, consider 100% of work to take place at Government Site.
 - This does not constitute a guarantee by the Government that these personnel will be utilized by, or may be billed to the Government.
- (b) The Contractor is required to have liaison offices in accordance with the following:

- (1) Upon award of contract, the Contractor shall maintain a primary facility within a Fifty (50) miles commuting distance of MARMC. The facility will have at least 4000 square feet of space certified in accordance with DOD5220.22/M (NISPOM) for storage of up to and including CONFIDENTIAL equipment/material. The facility will have at least 100 square feet of space, certified in accordance with DOD5220.22/M (NISPOM) for storage of material up to and including SECRET. Additional adequate storage space shall be available to maintain, package, ship, and temporarily store test equipment and fixtures, and technical documentation. This storage area shall meet the following humidity and temperature requirements as specified: Winter 75 degrees F and 35-40% relative humidity; and summer, 75 degrees F and 45-50% relative humidity.

C.5. CONTRACT SECURITY CLASSIFICATION SPECIFICATION

- (a) The Department of Defense Contract Security Classification Specification (Form DD254), attached hereto, itemizes the security classification requirements for this contract. The work to be performed under this contract requires access to, and the handling of classified information up to and including the SECRET security level. The Contractor shall obtain personnel clearances from the Department of Industrial Security Program prior to starting work under this contract.
- (b) All personnel performing classified duties under this contract shall possess at minimum, a DOD industrial Security Clearance of at least CONFIDENTIAL for all personnel assigned to perform work on board U.S. Navy Ships and the ability to obtain a SECRET clearance as required for all personnel assigned to perform work on the Hull Mechanical and Electrical spaces on board U.S. Navy Ships. Contractor requests for visit authorizations shall be submitted in accordance with DOD 5520.2M (Industrial Security Manual for Safeguarding Classified Information) as early as possible and not later than five working days prior to visit (except in cases of urgency).

C.6 REQUIRED STANDARDS OF WORKMANSHIP

Unless otherwise specifically provided for in this contract, the quality of all services and work performed hereunder shall conform to the highest standards in the relevant profession, trade or field of endeavor.

- (a) All services shall be rendered by or supervised directly by individuals fully qualified in the relevant profession, trade or field, and holding the appropriate licenses required by law.
- (b) All work to be performed hereunder will be in accordance with specifications, references and/or engineering drawings specified in the contract or in individual PWSs.
- (c) All material and workmanship shall be subject to inspection and test at any time during the Contractor's performance of the work involved to determine quality and suitability for the purpose intended and compliance with the terms of the contract. In the event any material or workmanship furnished by the Contractor is found to be deficient, prior to final acceptance, the Government shall have the right to reject such material or workmanship, and to require its correction or replacement. The Contractor shall provide and maintain an inspection system acceptable to the Government covering the work specified in the contract and subsequent PWSs. Records of all inspection work by the Contractor shall be complete and available to the Government.
- (d) The Contractor shall exercise reasonable care to protect designated sites and vessels from fire and shall maintain effective supervision over the activities of craftsmen, and similar workers, including authorized subcontractor.
- (e) The Contractor shall at all times keep the work site free from accumulation of waste material, debris or rubbish caused by his employees and their work, and at the end of each work day shall leave the site and its immediate vicinity "broom clean", unless more exactly specified in a PWS.
- (f) The Contractor shall have a quality program in compliance with ISO 9000 requirements, unless higher requirements are specified in the PWS.

C.7 REPORTS

Within sixty (60) days of contract award, the Contractor shall complete development of, and maintain, a Internet site accessible through the latest version of Firefox, Netscape, and/or Internet Explorer, and capable of supporting on-line real time cost and technical reporting as further described in paragraphs C.7.1, C.7.1.1.1, C.7.1.1.2, C.7.1.1.2.1, C.7.1.1.2.2, C.7.1.2.3, C.7.1.2.4, C.7.1.2.5, C.7.1.2.6, C.7.1.1.3, C.7.1.2, C.7.1.2.1 and C.7.1.2.2 below. The following paragraphs are an example of one way of setting up an Internet base site. These reports shall support a print capability and have the option to download into an electronic format. "Electronic format" is defined as Microsoft Office 2000 ACCESS, EXCEL, or a format, which can be converted to any of the preceding file formats from within the listed software programs.

The Internet site shall be capable of supporting two (2) distinct levels of Government personnel access as follows:

1. Supervisory Access – MARMC Code 200 Technical Support Section heads shall be granted access (Read Only) to delivery orders for each of their respective contractor support delivery orders.
2. COR/ACOR Access – The MARMC COR and ACOR assigned to this contract shall be granted full access (Read Only) to all delivery order reporting.

C.7.1. COST REPORTING

The cost reporting system shall be linked to the contractor’s Defense Contract Audit Agency (DCAA) approved accounting system in order to assure timely cost data reporting.

C.7.1.1.1 DELIVERY ORDER SUMMARY REPORT

(a) The Task Order Summary Report is a high level status of all costs associated with an individual task order. This report shall include the following data:

- (1) Task Order Number
- (2) Task Order Title
- (3) Start Date
- (4) Completion Date
- (5) Contractor Program Manager or Engineer (P.O.C.) assigned to task
- (6) In addition to the aforementioned data, the contractor shall provide the following cost accounting data.
- (7) Awarded/Expended to Date/Remaining Total Funding/Funded
- (8) Dollar Percentage Expended
- (9) Awarded/Expended to Date/Remaining Labor Dollars
- (10) Awarded/Expended to Date/Remaining Straight Time (ST) and Overtime (OT) Labor Hours
- (11) Percentage Hours Expended [ST/OT/Cumulative]
- (12) Awarded/Expended to Date/Committed/Remaining Travel Dollars
- (13) Awarded/Expended to Date/Committed/Remaining ODC Dollars

Example Format:

Task Order #:
 Task Order Title:
 Start Date: MM/DD/YYYY
 Completion Date: MM/DD/YYYY
 Contractor Program Manager:

	Hours			Dollars		
	TOTAL	ST	OT	Labor	ODC	Total
Awarded						
Expended						
Committed						

Remaining						
Funded						

- (b) Furthermore, the contractor shall present the data graphically associated with each Task order. Separate graphs shall be maintained for the following: Labor Hours, Labor Dollars, ODC Dollars, and Total Task Order Dollars.
- (c) The established ceiling (Control) amount for either dollars or hours shall be depicted on each graph. At the task's inception, the contractor shall then establish a planned spend rate over the duration of the project. Finally, the actual spend rate of dollars or hours shall be graphically presented.

The graphical presentations, provided in Attachment IX – Graphical Presentation Summary Report, are submitted as a representation example only. Figures 1 through 4 are minimum suggestions for data inputs and graphical representations of the data. The Contractor shall develop the format and the COR will authorize use of the final product.

C.7.1.1.2 TASK ORDER DETAIL REPORTS

From the Task Order Summary Report interface, hypertext mark-up language (HTML) hotlinks shall be provided to enable viewers to access Task Order Detail Reports as described below.

C.7.1.1.2.1 LABOR DETAIL REPORT

A list of each individual (by name) charging time against the Task order shall be provided with the following information included:

- (1) Cumulative Labor Hours/Dollars
- (2) Total Labor Hours Charged, to Date, Against the Task Order
- (3) Awarded Hours per Labor Category
- (4) Expended Hours per Labor Category
- (5) By PLAD
- (6) Employee name

C.7.1.1.2.2 ODC DETAIL REPORT

A list of all material related charges shall be provided, including the following:

- (1) Date(s) of Purchase
- (2) Dollar Amount(s)
- (3) Total Material Charges, to Date, Against the Task Order
- (4) Privately Owned Vehicle (POV) Mileage Cost(s)
- (5) Total Travel Charges, to Date, Against the Task Order
- (6) Total Sub-Contracting Charges, to Date, Against the Task Order

C.7.1.1.3 CONTRACT PROGRESS AND STATUS (CDRL A002)

- (a) The contractor shall maintain a Contract Progress and Status Report indicating overall contract man-hours and cost conditions. Access to this report shall be limited to the COR and ACOR.
- (b) The contractor's Contract Progress and Status Report shall be maintained electronically via the Internet. Report shall include, but not be limited to, the following:
 - (1) Contractor's Name and Address
 - (2) Contract Number

- (3) Total Contract Awarded Hours and Dollars
- (4) Contract Awarded Hours and Dollars by Lot/Option Year/Fiscal Year
- (5) Total Cumulative Hours and Dollars Awarded to Date
- (6) Cumulative Hours and Dollars Awarded to Date by Lot/Option Year/Fiscal Year
- (7) Total Remaining Contract Hours and Dollars
- (8) Remaining Contract Hours and Dollars by Lot/Option Year/Fiscal Year
- (9) Percentage Contract Hours and Dollars Remaining
- (10) Percentage Contract Hours and Dollars Remaining by Lot/Option Year/Fiscal Year
- (11) Cumulative ODC Dollars Invoiced Against the Contract
- (12) Man-hour and cost curves portraying actual/projected conditions throughout the contract
- (13) Matrix of hours charged by individuals and labor categories against contract (totaled by individual and labor category).

NOTE – Fiscal Year refers to the Government’s fiscal year of October 1st to September 30th.

C.7.1.2 TECHNICAL/STATUS REPORTING

The following Technical/Status Reports shall be made available via the Internet and shall be posted in a Microsoft Word format.

C.7.1.2.1 TASK ORDER PROGRESS AND STATUS (CDRL A001 and A003)

- (a) The Contractor shall post Task Order Progress and Status Reports indicating work progress and status of assigned tasks and milestones. This report shall be submitted on a monthly basis, unless the Task Order’s Contract Data Requirements List, DD Form 1423, specifies more frequent reporting. An e-mail notification shall be sent to the Code 200 Branch head/COR/ACOR, assigned to the task, alerting them to the posting.
- (b) The Contractor's Task Order Progress and Status Report shall include, but is not limited to, the following:
 - (1) Contractor's Name and Address
 - (2) Contract Number, PWS Number & Title and MARMC Code
 - (3) Date of Report
 - (4) Title and Brief Description of PWS
 - (5) Serial Number of Report
 - (6) Period covered by report and identification of which task is covered.
 - (7) Description of progress made during period reported, including problem areas encountered, and recommendations, if any, for subsequent solution beyond the scope of the task.
 - (8) Results obtained related to previously identified problem areas.
 - (9) Task schedule status
- (c) Any Task order progress and status report identifying problem areas encountered, shall initiate an e-mail notification to the Code 200 Branch head assigned the function and to the COR/ACOR.

C.7.1.2.2 TRIP REPORTS

The contractor shall post Trip Reports to the web within ten (10) working days of returning from any period of travel. These reports shall indicate the following:

- (1) PWS #
- (2) Date(s) of Travel
- (3) Location of Trip
- (4) Names of Individuals on the Trip
- (5) Purpose of Trip
- (6) Trip Liaison Efforts
- (7) Significant Results

An e-mail notification shall be sent to the appropriate Code 200 branch head assigned to the task, alerting them to the posting.

C.8 PRIOR WRITTEN PERMISSION REQUIRED FOR SUBCONTRACTS

C.8.1 Pursuant to FAR 44.101, subcontractor is defined as "any supplier, distributor, vendor, or firms that furnish supplies or services to or for "prime contractor."

C.8.2 Pursuant to FAR 9.6, "The government will recognize the integrity and validity of contractor team arrangements; provided, the arrangements are identified and company relationships are fully disclosed in an offer or, for arrangements entered into after submission of an offer, before the arrangement becomes effective." If the Contracting Officer determines prior to award that the teaming arrangement meets the requirements of FAR 44, no further consent is required.

C.8.3 After award subcontract services less than \$250,000 may be subcontracted to or performed by persons other than the contractor or the contractor's employees without the prior written consent of the Ordering Officer.

C.9 PLACE OF PERFORMANCE

Engineering and Technical Support Services shall be performed at the Contractor's facility, on U.S. Naval Ships, in U.S. Navy and commercial shipyards, at various contractor sites and U.S. Naval facilities or as otherwise specified in individual PWS. Support services may also be required on-board Ships while operating at sea, and outside the continental United States.

C.9.1 The contractor and all subcontractors shall be required to comply with COMUSFLTFORCOM/COMPACFLTINST 6320.3A (Medical Screening for U.S. Government Civilian Employees, Contractor Personnel, and Guest Prior to Embarking Fleet Units) while working on this contract. This instruction references that all non naval personnel that embark on Naval Ships for at-sea operations and sea trials, complete a Medical Screening for Civilian Embarkation aboard a United States Navy Vessel form and meet medical screening requirements. Embarkation is defined as the boarding of a U.S. Naval vessel for the purpose of a voyage away from shore.

C.10 PERSONNEL QUALIFICATIONS (MINIMUM) (JAN 1992) (SUP 5252.237-94C)

- (a) Personnel assigned to or utilized by the Contractor in the performance of this contract shall, as a minimum, meet the experience and/or other background requirements set forth below and shall be fully capable of performing in an efficient, reliable, and professional manner. If the contractor does not identify the labor categories listed in C.10.1 through C.10.29 by the same specific title, then a cross-reference list shall be provided in the contractor's proposal identifying the difference.
- (b) The contractor shall submit resumes for those individuals (identifying the labor category) proposed for the PWS with their cost proposal unless the individual has already been approved for that particular labor category. In those instances, the contractor will list the individual's name and labor category proposed in the cost proposal. **The Government will review the resume of contractor personnel proposed** to be assigned to any PWS prior to the PWS's commencement date. If personnel are not currently in the employ of the Contractor, a written agreement from the potential employee to work will be part of the technical proposal, as well as the individuals resume.
- (c) If the Contracting Officer (KO), questions the qualifications or competence of any person performing under the contract, the burden of proof to sustain that the person is qualified as prescribed herein shall be upon the Contractor.
- (d) The Contractor shall have the personnel, organization, and administrative control necessary to ensure that the services performed meet all requirements specified in the PWS. The work history of each Contractor employee shall contain experience directly related to the tasks and functions to be assigned. The Contracting Officer or

Ordering Officer reserves the right to determine if a given work history contains necessary and sufficiently detailed, related experience to reasonably ensure the ability for effective and efficient performance.

- (e) The following describes the Labor Categories and minimum personnel requirements for personnel performing under this contract: (General experience and specialized experience requirements can be obtained concurrently unless otherwise specified in the job description.)

SPECIAL PROVISIONS:

- (a) Concurrent General and Specialized Experience: Experience may be credited towards both General and Specialized experience requirements, provided it meets each of the separate requirements.
- (b) General or Specialized Experience: The General or Specialized experience identified under labor categories below can be gained in the armed forces or civilian community. The source of the experience is not as important as the kind of experience.
- (c) Technical Experience: When technical experience is required, the proposed resume shall provide proof of hands-on experience, not managerial experience of persons performing hands-on-work.
- (d) Discipline Resume Qualifications: If the Contractor attempts to qualify an individual for more than one discipline, a separate resume for each discipline shall be provided.

C.10.1 DRAFTER/CAD OPERATOR IV:

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: Three (3) year experience within last 10 years producing electrical or mechanical drawings, schematics, statistical charts, graphs, illustrations, training materials, etc.
- (c) SPECIALIZED EXPERIENCE: One (1) year experience within last 5 years in computer aided drawings (AutoCAD or similar).
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.2 ENGINEERING TECHNICIAN II (ELECTRICAL):

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: Six (6) years experience within last 15 years in the operation, repair and maintenance of naval or marine propulsion and auxiliary electrical equipment and power distribution including: experience that clearly demonstrates the ability to read and interpret blueprints, drawings, diagrams, schematics or other electrical technical data pertaining to the construction, repair, maintenance and operation of naval or marine electrical equipment and systems.
- (c) SPECIALIZED EXPERIENCE: Two (2) years experience within last 10 years working with U.S. Navy HM&E systems or Combat Systems and equipment or similar systems and equipment. Specialized experience shall demonstrate individual's ability to:
 - (1) Work independently
 - (2) Provide on the job training to technical personnel in operation, trouble shooting, maintenance and repair (including use of test equipment)
 - (3) Provide accurate and concise technical task reports
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.3 ENGINEERING TECHNICIAN II (MECHANICAL):

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: Six (6) years experience within last 15 years in the operation, repair and maintenance of naval or marine propulsion machinery and auxiliary equipment including: experience that clearly demonstrates the ability to read and interpret blueprints, drawings, diagrams, or other mechanical technical data pertaining to the construction, repair, maintenance and operation of naval or marine propulsion, hull or mechanical equipment and systems. At a minimum two (2) of the years shall have been in a position of team leader of subordinate work groups.
- (c) SPECIALIZED EXPERIENCE: Two (2) years experience within last 5 years working with U.S. Navy HM&E systems or Combat Systems and equipment or similar systems and equipment. Specialized experience shall demonstrate individual's ability to:
- (1) Work independently
 - (2) Provide on the job training to technical personnel in operation, trouble shooting, maintenance and repair (including use of test equipment)
 - (3) Provide accurate and concise technical task reports
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.4 ENGINEERING TECHNICIAN III:

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE:
- (1) Mandatory: No requirement specified.
 - (2) Desired: Ten (10) years experience within the last 20 years in the operation, repair and maintenance of naval or marine propulsion machinery, electrical distribution or ordnance systems. A minimum of four (4) of the years should have been in a position of team leader or coordinator over a subordinate work force involved in the physical maintenance and repair of US Navy mechanical, electrical or electronic equipment and systems.
- (c) SPECIALIZED EXPERIENCE:
- (1) Mandatory: No requirement specified.
 - (2) Desired: Four (4) years experience within the last 10 years with 600 psi or 1200 psi steam propulsion, diesel propulsion or gas turbine propulsion and ancillary equipment.
 - A. At a minimum two (2) of the years should have been in the administration of the Navy 3-M and supply system, **OR**
 - B. At a minimum four (4) of the years should have been in auxiliary and deck machinery, **OR**
 - C. At a minimum two (2) of the years should have been in the administration of Navy 3-M and supply system.
 - D. The specialized experience should demonstrate the individual's ability to:
 - i. Work independently.
 - ii. Supervise technical personnel in performance of operation, maintenance, modification and repair.
 - iii. Provide on the job training to technical personnel in operation, repair and maintenance (including use of equipment).
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.5 ENGINEERING TECHNICIAN IV (ELECTRICAL) (KEY CATEGORY):

(a) EDUCATION: No requirement specified.

(b) GENERAL EXPERIENCE:

(1) Mandatory: No requirement specified.

(2) Desired: Twelve (12) years experience within the last 25 years in the installation, operation, repair, testing and maintenance of naval or marine propulsion and ancillary equipment or ordnance systems. At a minimum of six (6) of the years should have been in a position of team leader or coordinator over a subordinate work force involved in the physical maintenance and repair of electronic or electrical equipment or systems.

(c) SPECIALIZED EXPERIENCE:

(1) Mandatory: None.

(2) Desired is Five (5) years experience within last 10 years with shipboard power distribution, interior communications or electronic systems repair and maintenance including qualification as CIC Watch Supervisor or Chief Electrical Watch on a conventional powered ship or as Load Dispatcher on a nuclear powered ship or similar commercial qualifications:

A. A minimum of two (2) of the years experience in availability planning, modernization, repair and testing of shipboard equipment and systems;

B. A minimum of four (4) of the years experience in administration of the Navy 3-M and supply system;

C. A minimum of one (1) of the years experience as a technical instructor or as an IMA quality assurance inspector.

D. The specialized experience shall demonstrate the individual's ability to:

i. Work independently

ii. Supervise technical personnel in performance of operation, maintenance, modification and repair

iii. Provide on the job training to technical personnel in operation, repair, and maintenance (including use of test equipment)

(d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.6 ENGINEERING TECHNICIAN IV (MECHANICAL) (KEY CATEGORY):

(a) EDUCATION: No requirement specified.

(b) GENERAL EXPERIENCE: Twelve (12) years experience within last 25 years in the operation, repair and maintenance of naval or marine propulsion and auxiliary equipment. A minimum of six (6) of the years must have been in a position of team leader or coordinator over a subordinate work force involved in the physical maintenance and repair of mechanical equipment or systems

(c) SPECIALIZED EXPERIENCE: Five (5) years experience within last 10 years:

(1) with 600 PSI or 1200 PSI steam propulsion, diesel propulsion or gas turbine propulsion and auxiliary equipment at a level equivalent to the qualification of an engineering officer of the watch;

(2) A minimum of two (2) of the years in availability planning, modernization, repair and testing of shipboard equipment and systems;

(3) A minimum of one (1) of the years as a technical instructor or as an IMA quality assurance inspector.

(4) The specialized experience shall demonstrate the individual's ability to:

A. Work independently

B. Supervise technical personnel in performance of operation, maintenance, modification and repair

C. Provide OJT to technical personnel in operation, repair and maintenance (including use of test equipment)

(5) Desired is a minimum of four (4) of the years in administration of the Navy 3-M and supply system;

(d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.7 GENERAL ENGINEER:

(a) EDUCATION: Bachelor's Degree in Engineering, or Physics from an accredited four (4) year college or university.

(b) GENERAL EXPERIENCE: A minimum of five (5) years experience within the last 10 years as an Engineer.

(c) SPECIALIZED EXPERIENCE: A minimum of two (2) years experience within the last 5 years in engineering or design projects related to ship's systems. Desired is Knowledge of policies, procedures and organizations as related to the Navy's engineering, logistic and maintenance commands (NAVSEA, NSWC, MARMC, TYCOMS, etc), or a minimum of two (2) years experience in the development of installation drawings and work package development related to machinery alterations, ship alteration upgrades and modification of ship systems and equipment.

(d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.8 JUNIOR ENGINEER:

(a) EDUCATION: Bachelor's Degree in Engineering, or Physics from an accredited four (4) year college or university.

(b) GENERAL EXPERIENCE: N/A

(c) SPECIALIZED EXPERIENCE: N/A

(d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.9 SYSTEMS ANALYST (KEY CATEGORY):

(a) EDUCATION: No requirement specified.

(b) GENERAL EXPERIENCE: Four (4) years experience within last 10 years in such areas as computer program analysis, design and development of management information systems, work breakdown structures, or work simplification techniques. Desired is A minimum of two (2) of the years must have been working on Naval engineering projects including design, maintenance, repair, testing, installation, or ship upgrade of naval systems. Also desired is knowledge in commonly used concepts, practices, and procedures within HM&E Systems.

(c) SPECIALIZED EXPERIENCE: Two (2) years experience within last 5 years in database management and the concepts dealing with various computer languages and programs. Desired is A minimum of one (1) of the year shall have been with the 3-M System (PMS, CSMP, OARS), COSAL, ILS and/or SHIPALT/FMP process. Also desired is knowledge of relationships, policies, and procedures for ship maintenance between MARMC, NAVSEA, TYCOMS, Naval Shipyards and SUPSHIP/IMA Organizations.

(d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.10 SENIOR DATA ANALYST (STATISTICS) (Key Category):

(a) EDUCATION: No requirement specified.

- (b) **GENERAL EXPERIENCE:** A minimum of ten (10) years managerial experience within last 20 years on projects including design, maintenance, repair, testing, installation, or ship upgrade of naval or similar systems. Must be able to compile reports, charts and tables based on established statistical methods and relies on experience and judgment to plan and accomplish goals. May be required to direct and lead the work of others. Desired is the ability to analyze the reliability in design and cost of Navy Combat Systems and/or HM&E Systems and equipment.
- (c) **SPECIALIZED EXPERIENCE:** A minimum of six (6) years analytical experience within last 10 years in Combat Systems or HM&E Systems including RM&A analysis. A minimum of three (3) of the years shall have been with the 3-M System (PMS, CSMP, OARS), COSAL, ILS and/or SHIPALT/FMP process. Desired is knowledge of relationships, policies, and procedures for ship maintenance between NSSA, NAVSEA, TYCOMS, Naval Shipyards and SUPSHIP/IMA Organizations.
- (d) **EQUIVALENCY:** No equivalencies of education to experience or vice versa.

C.10.11 SENIOR ENGINEER (KEY CATEGORY):

- (a) **EDUCATION:** Bachelor's Degree in Engineering, or Physics from an accredited four (4) year college or university.
- (b) **GENERAL EXPERIENCE:** At least ten (10) years experience within the last 15 years in design, maintenance or support engineering for shipboard HM&E systems.
- (c) **SPECIALIZED EXPERIENCE:** At least five (5) years of engineering experience within the last 10 years in design or support engineering for HM&E systems of Navy or similar ships. At least two (2) years must have involved system overhaul/installation and testing.
- (d) **EQUIVALENCY:** No equivalencies of education to experience or vice versa.

C.10.12 TECHNICAL INSTRUCTION SPECIALIST:

- (a) **EDUCATION:** No requirement specified.
- (b) **GENERAL EXPERIENCE:** Three (3) years experience within last 15 years to effectively plan, develop, and present technical instruction on specific technical projects or processes.
- (c) **SPECIALIZED EXPERIENCE:** No requirement specified.
- (d) **EQUIVALENCY:** No equivalencies of education to experience or vice versa.

C.10.13 TECHNICAL PROGRAM MANAGER (KEY CATEGORY):

- (a) **EDUCATION:** No requirement specified.
- (b) **GENERAL EXPERIENCE:** At least eight (8) years engineering experience within last 15 years in design, installation, operation, repair and maintenance of HM&E systems.
- (c) **SPECIALIZED EXPERIENCE:** Ten (10) years managerial experience within last 15 years involving direct control and responsibility over subordinate groups working in an engineering discipline. The management experience must include defining project objectives and requirements, directing, coordinating and completing project efforts, interfacing with government personnel, and providing progress reports. Desired is that at least Three (3) of the years must have involved Navy program management support relating to technical assists, ship repair, availability, planning and TYCOM operations.
- (d) **EQUIVALENCY:** No equivalencies of education to experience or vice versa.

C.10.14 TECHNICAL WRITER:

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: Minimum of five (5) years experience within last 15 year in technical writing.
- (c) SPECIALIZED EXPERIENCE: A total of five (5) years experience within the last 10 years. At a minimum, Experience of one (1) year in each of the following is required:
 - (1) Experience in technical documentation development including origination of text, layout and outline.
 - (2) Knowledge of applicable specifications and standards which govern development and maintenance of technical manuals, test procedures, charts, graphs, and engineering drawings and form and format of various technical data and documentation
 - (3) Experience in writing and editing technical documentation, in use of computers, data base programs, work processing programs, and graphics programs
 - (4) Experience with and proficiency in desktop publishing
 - (5) Desired is knowledge of terminology and abbreviation of DOD and/or DON, and HM&E specific technical manuals, plans, and procedures and other documentation.
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.15 TRAINING SPECIALIST, LEAD:

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: A minimum of seven (7) years instructional experience within last 15 years.
- (c) SPECIALIZED EXPERIENCE: Three (3) years experience within last 10 years as a classroom instructor. Writing and text organizational skills are required to prepare classes and instructional handouts. Desired is at least two (2) years as a technical instructor on U.S. Navy HM&E systems listed in SCOPE OF WORK herein above.
- (d) EQUIVALENCY: No equivalencies of education to experience or vice versa.

C.10.16 WORD PROCESSOR II:

- (a) EDUCATION: No requirement specified.
- (b) GENERAL EXPERIENCE: A minimum of one (1) year practical word processing experience within last 5 years of knowledge of varied and advanced functions of different types of software.
- (c) SPECIALIZED EXPERIENCE: A minimum of one (1) year of practical word processing experience within last 5 years which includes the organization and formatting of technical manuscripts and associated data to produce final documentation from rough drafts provided by engineers and technicians. Typing Proficiency must be 45 words per minute with no more that 3 errors in 5 minutes. Desired is experience in transcription of written text into type written documents using correct and appropriate formats regarding DOD and commercial correspondence.
- (d) EQUIVALENCY: Formal specialized training, not inclusive of high school, may be substituted on the basis of one (1) month of training for one (1) month of specialized experience, not to exceed six (6) months

C.10.17 MACHINERY, MAINTENANCE TECHNICIAN:

- (a) EDUCATION: None specified.

- (b) **GENERAL EXPERIENCE:** A minimum of three (3) years of work related experience within last 10 years in each of the following areas: Examining mechanical systems or equipment to diagnose source of trouble; dismantling equipment and performing repairs that mainly involve the use of hand tools in installing parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines and making all necessary adjustments for operation.
- (c) **SPECIALIZED EXPERIENCE:** A minimum of two (2) years specialized experience within last 5 years that demonstrates the ability to interpret blueprint layouts, mechanical drawings, or diagrams while assisting in the development of parts or structures to be utilized in the installation of engineering changes and/or SHIPALTS.

C.10.18 PAINTER, MAINTENANCE:

- (a) **EDUCATION:** None specified.
- (b) **GENERAL EXPERIENCE:** A minimum of three (3) years experience within the last 10 years in military and/or commercial painting requirements for both internal and external applications. Experience should include a working knowledge of surface peculiarities and types of paint required for various applications as well basic paint mixing procedures.
- (c) **SPECIALIZED EXPERIENCE:** A minimum of two (2) years full time experience within last 5 years at the journeyman level as a painter. Must possess knowledge of toxic and non—toxic painting materials and the protection required when applying hazardous materials.

C.10.19 PIPEFITTER, MAINTENANCE:

- (a) **EDUCATION:** None specified.
- (b) **GENERAL EXPERIENCE:** A minimum of three (3) years experience within the last 10 years as a pipe fitter in performing such duties as: layout, fabricate and assemble various metal structural parts and piping systems on ships and other vessels (e.g. bulkhead plates; I—beams, channel bar, angle bar, all piping etc.); apply and interpret blueprints and mold templates required to layout and fabricate structural parts floor construction; operate shop machinery to construct the necessary structural parts; and, drill, saw and bolt.
- (c) **SPECIALIZED EXPERIENCE:** A minimum of two (2) years full time experience within last 10 years at the journeyman level as a pipe fitter.

C.10.20 SHEET METAL WORKER:

- (a) **EDUCATION:** None specified.
- (b) **GENERAL EXPERIENCE:** A minimum of three (3) years experience within last 10 years as a sheet metal worker. Ability to fabricate, install and maintain sheet-metal equipment and fixtures (such as machine guards, shelves, lockers, tanks, ventilators, chutes, ducts, housings). Ability to plan and lay out all types of sheet—metal maintenance work from blueprints, models, or other specifications; set up and operate all available types of sheet—metal working machines; using a variety of hand tools in cutting, bending, forming, shaping, fitting and assembling; and installing, sheet-metal articles as required.
- (c) **SPECIALIZED EXPERIENCE:** A minimum of two (2) years full time experience within last 5 years at the journeyman level as a sheet metal worker.

C.10.21 SUPPLY TECHNICIAN:

- (a) EDUCATION: None specified.
- (b) GENERAL EXPERIENCE: A minimum of five (5) years full-time experience within last 10 years in Navy Integrated Logistics Support and System Life Cycle Support areas of the DOD/Navy Integrated Logistics Support System. Shall have a working knowledge of DOD/Navy Supply Support systems, supply support directives, policies, standards and documentation, afloat supply procedures, and the Navy Supply System organization as defined in MIL-STD138 8—1A/2A. This experience shall include each of the following Navy ILS components listed below in support of a major system:
 - (1) Maintenance Planning
 - (2) Manpower, personnel, and training support
 - (3) Supply support
 - (4) Test equipment support
 - (5) Technical logistical data
 - (6) Packaging, handling, storage, and transportation
 - (7) Design and installation
- (c) SPECIALIZED EXPERIENCE: A minimum of three (3) years full-time experience within last 10 years in logistics engineering development including experience in the development, fleet introduction, installation, test, operation, and life cycle support of major Naval ship Combat Systems.

C.10.22 WAREHOUSE SPECIALIST:

- (a) EDUCATION: None specified.
- (b) GENERAL EXPERIENCE: Minimum of three (3) years experience within the past five (5) years in material warehousing procedures and practices pertaining to receiving, shipping, and inventory management.
- (c) SPECIALIZED EXPERIENCE: Desired minimum of one (1) year experience within last 5 years of familiarity with U.S. Navy Supply System procedures.

C.10.23 WELDER, COMBINATION MAINTENANCE:

- (a) EDUCATION: Current Welding Certification for shipboard cutting, horizontal, flat, overhead, and vertical welding of mild steel, and aluminum in accordance with MIL-STD 168 9A. Must be certified, IAW MIL—STD-248 for welding high strength steel, TIG, MIG, P1 and bimetal.
- (b) GENERAL EXPERIENCE: A minimum of five (5) years full time experience within last 10 years as a welder. Knowledge of a variety of manual welding processes, gas torch processes, and electric arc processes including inert gas shielded ones. Shall be able to weld in all positions including flat, horizontal, vertical and overhead. Must be knowledgeable of welding standards and how various metals and alloys such as different kinds of steel, aluminum, cast iron, nickel, monel metal, brass, copper, bronze, magnesium, beryllium, and titanium react to different welding processes. Ability to weld from light gage metals to heavy plate requiring multiple welding passes and weld dissimilar metals such as copper to steel. The Welder must have the skills to make complete penetration and complete fusion welds.
- (c) SPECIALIZED EXPERIENCE: A minimum total of five (5) years experience with the last 10 years as follows: minimum of two (2) years full time experience at the journeyman level as a welder; ; minimum of three (3) years of specialized experience in the following areas is required: performing welding work internally and externally in structural and marine welding techniques and procedures on Navy or similar surface ship hulls utilizing MIG and TIG welding; and welding metal components together aiding in the fabrication or repair of such items as electronic equipment cabinets or racks; and, constructing respective foundations in a shipboard environment.

C.10.24 LOGISTICS SPECIALIST:

- (a) EDUCATION: No requirement specified.
- (b) SPECIALIZED EXPERIENCE: Two (2) years full-time experience in US Naval Ship fleet logistic support including experience in the fleet introduction, installation, test, operation, and life cycle support of the installed HM&E systems onboard Naval ships.
- (c) GENERAL EXPERIENCE: Four (4) years full-time experience in Navy Integrated Logistic Support and System Life Cycle Support areas. This experience shall include each of the following Navy ILS of a major and minor HM&E systems.
 - (1) Maintenance Planning
 - (2) Manpower, personnel, and training support
 - (3) Supply support
 - (4) Test Equipment support
 - (5) Technical logistic data
 - (6) Packaging, handling, storage, and transportation

C.10.25 DRIVER

- (a) EDUCATION: No requirement specified
- (b) GENERAL EXPERIENCE: Two (2) years of experience working with operation and operational maintenance of self-propelled transportation and other mobile equipment used to move materials or passengers, including motor vehicles, forklifts and stake body trucks.
- (c) SPECIALIZED EXPERIENCE: Two Years of experience working with a Commercial Driver's License (CDL).

C.10.26 RIGGER

- (a) EDUCATION: No requirement specified
- (b) GENERAL EXPERIENCE: Three (3) years of experience working with of rigging gear such as block and tackle, chain falls, slings, come alongs and hand signals for cranes.
- (c) SPECIALIZED EXPERIENCE: 1St Class Riggers must have a minimum of 5 years of recent navy shipyard experience and have Knowledge of the proper use of wire rope lashing to rig where lifting pads are not available. Knowledge of weight calculations, center of gravity, and how to apply rigging gear, hoist, and shackles. Knowledge of rigging knots, splicing, reeving and seizing of wire rope and be familiar with OSHA regulations in the marine industry. The Rigger will need to use proper use and care of chain hoists (1 to 40 tons) to rig steel piping and machinery where cranes are not available. The Rigger will safely rig and move loads. The Riggers will also rig loads from a crane hook to other rigging points inside structures or buildings.

C.10.27 LABORER: GENERAL MAINTENANCE

- (a) EDUCATION: None specified.
- (b) GENERAL EXPERIENCE: A minimum of six (6) months experience within last 5 years in assisting one (1) or more workers in the skilled maintenance trades by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning work area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman.
- (c) Specialized Experience: None required.

C.11 KEY PERSONNEL REQUIREMENTS

- (a) Certain experienced personnel are essential for successful contractor accomplishments of the work to be performed under this contract. The categories listed below are those defined as "Key Personnel":

TECHNICAL PROGRAM MANAGER
SYSTEMS ANALYST
SENIOR DATA ANALYST
SENIOR ENGINEER
ENGINEERING TECHNICIAN IV

- (b) The Contractor agrees that key personnel designated in the contract proposal will be available for contract performance and shall not be replaced during the first 120 days of the contract, unless such substitutions are necessitated by an individual's sudden illness, death or termination of employment. All proposed substitutes (no matter when they are proposed during the performance period) shall have qualifications that are equal to or higher than the minimum qualifications for the position, as listed herein. If the Contracting Officer determines that suitable and timely replacement of personnel who have been reassigned, terminated or have otherwise become unavailable to perform under the contract is not reasonably forthcoming or that the resultant reduction of productive effort would impair the successful completion of the contract or the PWS, the contract may be terminated by the Contracting Officer for default.

C.12 DEPARTMENT OF LABOR (DOL) DETERMINATION OF MINIMUM WAGES AND FRINGE BENEFITS

The U. S. Department of Labor Wage Determination No. 94-2543, Rev. Compliance with this determination is mandatory.

C.13 PAYMENT OF DIRECT SUPPORT COSTS (i.e., TRAVEL, PER DIEM, RELATED SUPPORT AND OTHER DIRECT COSTS)

C.13.1 Reimbursable Travel Costs (Travel and Per Diem): Except as otherwise provided below under non-reimbursable travel costs, the contractor will be reimbursed for authorized travel costs in accordance with the Joint Travel Regulations in effect at the time of the travel, plus applicable DCAA approved burden rate(s). No fee will be allowed on travel and per diem costs.

C.13.2 Non-reimbursable Travel Costs

C.13.2.1 Travel performed for personal convenience, daily travel to and from the contractor's facility will not be reimbursed as a direct charge.

C.13.2.2 Travel costs incurred in the replacement of personnel will not be reimbursed by the Government to the contractor when such replacement is accomplished at the contractor or employee's convenience.

C.13.2.3 No travel or subsistence costs will be reimbursed for work performed within a 50-mile radius of the contractor's office. The contractor will not be paid for travel or subsistence for contractor personnel who reside in the metropolitan area in which the tasks are being performed.

C.13.2.4 Relocation costs and travel costs incident to relocation are not allowed.

C.13.3 Related Support Costs

C.13.3.1 The cost of related support furnished pursuant to specific authorization by the Ordering Officer shall be reimbursed at the Contractor's invoice cost, less any discounts to be taken plus applicable DCAA approved burden rate(s). No fee shall be allowed on related support costs. Estimated related support line may be used for, but not limited to, sub-contracting, material, transportation, facilities and warehousing specific to tasks set forth in individual PWS. Expendable related support costs for items such as office supplies: report paper, diskettes, printer

ribbons, printer wheels/thimbles, drafting equipment and tools of the trade items, such as word processing and reproduction equipment or any equipment that is normally found in an office shall be absorbed by the contractor in his applicable burden rate. The Contractor shall support related support invoice with copies of paid invoices or store room requisitions to support all related support costs claimed.

C.13.4 Other Direct Costs

C.13.4.1 The cost of other direct costs authorized under each individual PWS shall be reimbursed at cost plus the Contractor's applicable DCAA approved burden rate(s).

C.13.4.2 FEE WILL NOT BE ALLOWED ON ANY OTHER DIRECT COSTS.

C.14 DEFINITION OF STRAIGHT TIME, OVERTIME

C.14.1 STRAIGHT TIME is defined as a workweek of 40 hours (in accordance with FAR 22.103-1).

C.14.2 OVERTIME is defined as any time worked by a Contractor's employee in excess of the employee's normal workweek and in excess of 40 hour: per week (in accordance with FAR 22.103-1). Overtime shall be used only upon prior approval by the Contracting/Ordering Officer, which includes approval within a task order.

C.15 MANDATORY NUCLEAR AND SAFETY TRAINING.

During the performance of this contract, all contractor personnel that perform non-nuclear work on nuclear powered vessels must receive training (at no cost to the government) in the areas delineated below prior to commencing work:

- (a) For work exclusive of the propulsion plant and exclusive of nuclear spaces and systems defined in NAVSEAINST C9210.4 series, training is required, at no cost to the government, in the following:
 - (1) U. S. citizenship and security requirements
 - (2) Mercury exclusion
 - (3) General ship safety and drill requirements
 - (4) Basic radiation awareness, control areas, and signs
- (b) For work that may be near or bordering secondary containment boundaries or bordering spaces and systems defined in NAVSEAINST C9210.4 series, training is required in the following:
 - (1) Training listed in paragraph a. above
 - (2) Requirements for working on secondary containment boundaries
- (c) For (non-nuclear system) work in or affecting propulsion system spaces or systems including those listed in NAVSEAINST C9210.4 series, training is required in the following:
 - (1) Training listed in paragraph b. above
 - (2) Security requirements or NNPI IAW NAVSEAINST 5511.32B
 - (3) Maintenance cleanliness requirements within propulsion spaces
 - (4) Spaces access, requirements, including dosimeter
- (d) Refresher training is required at least annually (and semi-annually for personnel requiring paragraph c. training)
- (e) Simple training records including lesson plan, brief outline of class content and attendance records will be maintained and made available to MARMC on request.

- (f) Liaison with ship's reactor department is required to determine if any additional ship/work special training is required prior to start of work requiring training of paragraph b. or c. above. Any additional training will be completed prior to commencing work.

C.16 REIMBURSEMENT OF OTHER DIRECT COST

FEE WILL NOT BE ALLOWED ON ANY OTHER DIRECT COSTS.

- (a) Reimbursable travel costs (travel and per diem): Except as otherwise provided below under non-reimbursable travel costs, the Contractor will be reimbursed for authorized travel in accordance with the Joint Travel Regulations in effect at the time of the travel. Travel in excess of the Contractor's employees normal commuting distance incurred in support of direct task requirements such as the pickup or delivery of task related materials, attendance at task related meetings, or the delivery of task deliverables shall require a travel voucher. The voucher shall show the names of the traveling parties, mileage determined from odometer readings and purpose and point of travel. Receipts and/or proof of cost are required, except when specifically not required by the JTR, when regulation does not required for OCONUS, when not practical, or when waived by the Contracting Officer.
- (b) Non-reimbursable travel cost: Travel performed for personal convenience such as daily travel to and from work at the Contractor's facility will not be reimbursed. Travel costs incurred in the replacement of personnel will not be reimbursed by the Government to the Contractor when such replacement is accomplished at the Contractor or employee's convenience.
- (c) Shipboard Stay: Whenever work assignments require temporary duty aboard a Government ship, the Contractor will be reimbursed at the per diem rates identified in the DOD Joint Travel Regulations, Volume 2. In accordance with FMP Supplement 990-2, Subchapter S9, "Pay for Irregular or Intermittent Duty involving Physical Hardship or Hazard", for the periods when hazardous boarding/leaving, captive status, or high/catapult pay apply, employees shall be entitled to a pay differential equal to 25% of the rate of basic pay applicable to the employee.

C.17 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA)

The contractor shall report contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract via a secure data collection site. Contracted services excluded from reporting are based on Product Service Codes (PSCs). The excluded PSCs are:

- (1) W, Lease/Rental of Equipment;
- (2) X, Lease/Rental of Facilities;
- (3) Y, Construction of Structures and Facilities;
- (4) S, Utilities ONLY;
- (5) V, Freight and Shipping ONLY.

The contractor is required to completely fill in all required data fields using the following web address
<https://doncmra.nmci.navy.mil>.

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at <https://doncmra.nmci.navy.mil>.

(End of Summary of Changes)