



## **PAST PERFORMANCE**

### **SOW Paragraph 3.7 Reliability, Maintainability, and Availability (RM&A) Support**

**N00244-00-D0096:** This contract requires application of RM&A engineering, analytical and technical disciplines to NAVAIR activities to ensure detection, and correction of design deficiencies, identification of weak parts and workmanship are accomplished on aircraft carriers and shore stations covering a broad spectrum of systems, including munitions and aircraft. The data obtained during other tasks on this contract, such as provisioning and systems status, are used as input to RM&A tasks to ensure that life cycle sustainment is provided and the warfighting capabilities are properly supported. This task includes detection and identification of hardware and software design deficiencies.

### **SOW Paragraph 3.8 Human Factors, Performance, and Usability Engineering Support**

**N00244-00-D0096:** This contract requires application of HFE engineering, analytical and technical disciplines to NAVAIR activities to validate (identify, document and verify) that aircraft carrier operational concepts, such as food services, have the optimum combination of number, type, mix, knowledge skills, abilities and physical characteristics of operators, maintainers and support personnel. A specific result of the analysis identified changes that were implemented on three of the Pacific Fleet carriers and are planned for implementation in the other three. Savings from this effort are measured in the millions of dollars.

### **SOW Paragraph 3.9 System Safety Engineering Support**

**N00244-00-D0096:** This contract requires application of engineering, analytical and technical disciplines to NAVAIR activities to ensure systems safety is applied in aircraft carrier and shore station systems and platforms. These tasks were performed in all aspects of design, development, operation, maintenance, and modification of systems and platforms. The most critical safety analyses were those analyses are performed on ordnance handling, fuel systems and food service. Food service becomes a safety issue if food borne diseases are not eliminated.

### **SOW Paragraph 3.10 Configuration Management (CM) Support**

**N00244-00-D0096:** This contract requires application of CM engineering, analytical and technical disciplines to NAVAIR activities to validate (identify, document and verify) that aircraft systems and support elements provide the proper functional, performance and physical capabilities and are properly installed on ship and shore systems

CM of applicable systems is performed prior to implementation, during installation and after installation of aircraft systems and support elements. CM is implemented on aviation weapons and ordnance systems, associated armament support equipment, fueling systems, and such diverse applications as food management, ship's store and laundry equipment. The CM process is based on verifying compatibility with the approved and established implementation plan. Physical audits are performed to verify that hardware and software updates have the



proper configuration or release. Testing is performed with system modules to validate functional and performance capabilities are satisfied. Physical inspections verify that installations are as planned. Knowledge is maintained of pending releases, of initial installations and updated versions. Full knowledgeable of these updates is passed along to the end user. A side benefit of this effort is the information that can be provided to related training programs. A record of systems and support elements releases and updates on the carriers is maintained.

**N00244-02-F-0258**: This contract for NAVSEA required application of engineering, analytical and technical disciplines to provide CM for the Automated Information Systems (AIS) applications used on Shipboard Non-Tactical Automated Data Processing (SNAP) systems on US Navy surface ships, including validating that the proper functional, performance and physical capabilities were attained. Automated CM was performed on the SNAP systems using US Navy provided software. In addition, hardware and software CM was applied to the Continuity of Operation (COOP) vans used to support ships and tenant activities by provided a backup site of computer hardware and software systems. The COOP vans were designed and integrated in San Diego and rigorous hardware and software CM was implemented to maintain compatibility with surface ship systems. The COOP vans were shipped to other sites to minimize travel costs.

### **SOW Paragraph 3.11 Quality Assurance (QA) Support**

**N00244-00-D0096**: This contract for NAVAIR requires the performance of Quality Assurance on several software suites used on aircraft carriers. Task includes analyzing and documenting software problems and shortfalls (applying engineering and analytical disciplines) to ensure that the requirements used in the software development process were met and provided a quality product. The task included: identifying problem areas and providing written instructions to operators; proving technical expertise in reimplementing of systems; performing pre-deployment checks of equipment and software being used by shipboard personnel; and evaluating, analyzing and inspecting the software at sea to ensure compliance with applicable directives, publications and instructions.

### **SOW Paragraph 3.13 Ship Inactivation and Disposal Support**

**N00244-00-D0096**: This contract required developing Ship's Coordinated Offload and Outfitting Plan (SCOOP) for removal of applicable material, assigning the appropriate disposition of materials removed (disposal, reuse, storage), obtaining and integrating Storeroom issues material removal and restoration processes with compartment restoration. Additional tasks included preparing plans for homeport changes, inactivation, decommissioning, and vessels undergoing Refueling and Complex Overhaul (RCOH). Technical support is provided to the demilitarization process for shipboard equipment using the Expanded Work Breakdown Structure (EWBS), Trade Security Controls (TSC), and Munitions List Items (MLI). The staff ensures that critical equipment is safeguarded and prepared for destruction in accordance with the appropriate Navy instructions and directives. They ensured proper documentation exists for the sale of excess materials from inactivated platforms prior to sale by the Defense Reutilization and Marketing Service (DRMS). Provided direct liaison with the Shipyard or depot and the Navy to insure that critical



technology is not inadvertently transferred to foreign nationals or governments. Support was provided to the security classification requirements and implementing guidelines for data and equipment necessary to assist in making decisions on sales issues.

### **SOW Paragraph 3.17 Supply and Provisioning Support**

**N00244-00-D0096:** This contract requires **application of engineering, analytical and technical disciplines to NAVAIR activities to validate that aircraft systems and support elements are properly provisioned and the supplies are stored and transported to ensure warfighter readiness at sea and ashore (materially sustained).** Methodical engineering and analytical studies were performed and are continuing to identify not only the required supplies and provisions but also to **evaluate established processes and procedures to identify changes which could minimize the cost and time expended to satisfy the requirements.** As an example, a technical analysis substantiated that by decreasing the provisioning requirements for JP-5 fuel; over \$3,000,000 per year could be saved.

Typical tasks performed are as follows: 1) Critical Not Ready For Use (NRFU) assets are evaluated to determine best course of repair, 2) expediting services are provided to ensure prompt material delivery, 3) DLA's National Inventory management Strategy (NIMS) and other programs affecting supply support are used to monitor and provide trend analysis of supply measurements of effectiveness, 4) **material requests are reviewed for accuracy and completeness, and to ensure that adequate supplies are on hand to meet demand and ensure material is properly stored and not subject to damage,** 5) analyses are performed to provide necessary supplies minimizing supply costs, 6) inventory range and depth are analyzed to reduce overall support costs, 7) the Ship's Equipment Configuration Accounting System (SECAS) is used as a baseline for inventory, 8) expendable material is analyzed to identify specific utilization rates as opposed to the existing allocations. The analysis disclosed that the inventories were not based on current utilization requirements. The inventory requirement was changed accordingly.

In addition, our staff participates in Supply Management Inspections (SMIs) working in teams with the Government personnel.

The allowance lists, COSAL, and its nuclear version QCOSAL, are used as tools to make sure the ship has proper parts. The inventory of parts ranges from galley support equipment to catapult requirements. **The allowance lists for each shipboard system are reviewed to identify required parts so the ship has full awareness of the status of authorized on-board allowance.** Support was provided to Refueling Complex Overhaul (RCOH) tasks for nuclear carrier refueling.

Briefings, point papers and Memoranda of Agreement are prepared and delivered to the customer to provide detailed documentation of the activities.

**N00244-02-F-0258:** This contract required **application of engineering, analytical and technical disciplines to ensure adequate supplies are available for Automated Information**



**Systems applications used on Shipboard** Non-Tactical Automated Data Processing (SNAP) systems on navy surface ships.

Continuity of Operation (COOP) vans, in effect spare systems, were used to support ships and tenant activities by provided a backup site of computer hardware and software systems.

### **SOW Paragraph 3.18 Training Support**

**N00244-00-D0096**: This contract requires **application of engineering, analytical and technical disciplines to identify training requirements, develop the related curriculums and adequate instructions and provide formal and informal training to NAVAIR personnel. This effort included applied exercises to demonstrate the training courses met their objective(s).** Training support was also provided on aircraft carriers dockside and at sea. The community that was trained included warfighters on the aircraft carriers and the technical support community at the naval shore facilities. Specific attention was paid to scheduling and performing the training so it did not impact the ship or shore facilities operational requirements. At sea schedules were met in some conditions by scheduling training sessions 24 hours a day to accommodate the trainees.

**Methodical engineering and analytical studies were performed and are continuing to identify any shortfalls relating to the attainment and retention of knowledge, skills and attitudes and to ensure operational knowledge of new systems being installed on the ships.** Formal and informal NTSPs and Navy NTPs were developed. Specific tailoring of the plans was made for the applicable platforms and systems and training was provided to both the warfighters and the technical support community.

**Existing NTSPs, NTPs, and applicable Maintenance Training Unit course material were reviewed to determine their effect on attainment and retention of knowledge, skills and attitudes. Hands-on training course requirements were developed for technical assistance visits to fleet units to improve operational and logistics support of aviation weapons and ordnance systems, associated armament support equipment, fueling systems, and such diverse applications as food management, ship's store and laundry equipment.** Naval personnel were trained in a variety of disciplines including weapons handling, operations, maintenance and logistics support. Changes, additions, and updates to existing programs were recommended including navy training and maintenance training requirements review.

Training aids/material, slides, handouts, and curricula were prepared and used. Training material/guides to support tasking were designed and developed. Design and development of formal courses was accomplished.

**N00244-02-F-0258**: This contract required **application of engineering, analytical and technical disciplines to identify training requirements, develop the related curriculums and provide formal and informal training for NAVSEA personnel operating shipboard Information Technology (IT) systems.**



**Methodical engineering and analytical studies were performed to identify any shortfalls relating to the attainment and retention of knowledge, skills and attitudes.**

Training aids/material, slides, study guides, and curricula were prepared and used. Training material/guides to support tasking were designed and developed. Design, development of formal courses included the use of Computer Aided Instruction (CAI) and/or Interactive Video Display (IVD) media.

NTPs were developed for “Windows” based Pc applications. **Formal classroom training to the warfighters and the technical support community was provided at San Diego and Bremerton for Automated Information Systems applications** used on Shipboard Non-Tactical Automated Data Processing Hardware and software. Continuity of Operation (COOP) vans used to support ships and tenant activities by provided a backup site of computer hardware and software systems were designed and integrated in San Diego and shipped to other sites to minimize travel

### **SOW Paragraph 3.20 Program Support**

The HEI team has experience in this Program Support area **applying the business, financial management and technical disciplines required to support the program office.** Tasks included reviewing Fleet Inventory Management and Financial Report and Aviation Supply Management Reports for compliance and accuracy; providing statistical and trend analysis, maintaining and updating OFC20 OPTAR database, reviewing Fleet Inventory Management and financial Reports, and Aviation Supply Management Reports (AMR); preparing internal, STARS and TYCOM SAMMA/Sal reports; maintaining records of allocations, withdrawals and funding to CV/N’s COMCARGRU ONE and CNAP/CNAF Staff Flag mess; analyzing monthly financial reports, chart spending patterns, and chart percentage of funds spent by fund code/unit; and inspecting, assessing, and providing written evaluation of findings on the performance of financial operations and GCPC program during on-site SMI’s and SMAs of CNAP/CNAF CV/Ms and shore commands.

**N00244-00-D0096:** This contract requires application of engineering, analytical and technical disciplines to NAVAIR program office in financial, data collection, analysis and management. **Organizing, staffing, controlling, and leading team members from two contractors is used to ensure that systems on aircraft carriers and shore stations are cost effective, capable, and supportable and perform to specifications when used by the warfighter. The complexity of the systems ranged from fuel handling to ordnance maintenance and handling. The support to the Program Office resulted in commendations for team personnel for meeting overall NAVAIR performance and cost goals. The scope of the tasks ranged from supporting the outfitting of the USS Ronald Reagan (CVN-76) to decommissioning of the USS Constellation (CV-64).**



**SOW Paragraph 3.21 Administrative Support**

**N00244-00-D0096**: This contract requires application of clerical and administrative disciplines to NAVAIR program offices, including the Comptroller, in financial, data collection, analysis and management. The task also includes administration of an office-supply warehousing function and operation of a technical library. The tasks were performed in a fashion that was transparent to the supported customers and allowed a seamless operation of the administrative function.