PERFORMANCE WORK STATEMENT (PWS)

A Schedule 871
Professional Engineering Services (PES)

Aircraft Modification Engineering and Technical Support

1.0 SCOPE

1.1 GENERAL

The contractor shall provide electrical/avionics and structural/mechanical design engineering, systems integration engineering and aircraft installation support services necessary to satisfy the rapid development and/or modification of aircraft systems for Department of Defense (DoD), Foreign Military Sales (FMS), and Home Land Defense (HD) via the United States Coast Guard (USCG) rotary wing aircraft.

The contractor must also have the capability to produce in limited quantity (variable by effort but not to exceed 140 units for any particular effort), assemble, procure, and/or otherwise provide aircraft avionics, air vehicle structural systems, and aircraft fixed provisions necessary to satisfy aggressive system development schedule/requirements.

This program is designed to enhance aircraft mission capabilities and increase aircraft readiness by designing, documenting, analyzing, prototype manufacturing, testing, and installing avionics and structural system modifications/upgrades to DoD, HD and FMS aircraft platforms. The contractor shall provide rapid turn around capabilities for the following:

- Engineering and Technical support for the development of Class I Engineering Change Proposals (ECPs), Airframe Changes (AFCs), Avionics Changes (AVC), Installation Data Packages (IDPs), and all supporting logistics documentation including Maintenance Plans (MP), Technical Manual Source Data (TMSD), Design Change Notices (DCNs) and Parts Provisioning.
- Design, development, analysis and fabrication of avionics system racks, shelves and mounting structures. Typically 4 units for a prototype effort and up to 140 units for a retrofit effort, varying by project.
- Design, development and fabrication of aircraft lighting systems, instrument panels, avionics, and weapon systems.
- Integration and installation of aircraft avionics systems racks, shelves, mounting structures, weapon systems, lighting systems, and instrument panels.
- Pro Engineering design modeling and analysis.
- Avionics and weapon systems logistics and configuration management support.
- Depot level aircraft field modification support

1.2 APPLICABILITY

Special Item Numbers	Primary Engineering Disciplines

	Electrical	Mechanical
871-1 Strategic Planning for Technology Programs/ Activities	X	X
871-2 Concept Development and Requirements Analysis	X	X
871-3 System Design, Engineering and Integration	X	X
871-4 Test and Evaluation	X	X
871-5 Integrated Logistics Support	X	X
871-6 Acquisition and Life Cycle Management	X	X

1.3 TASK EXECUTION PLAN (TEP)

The contractor shall provide a Task Execution Plan (TEP) in response to this PWS. The effort shall be proposed on a Time-and-Material basis.

1.4 PERIOD OF PERFORMANCE / PLACE OF PERFORMANCE

The period of performance shall be 60 months from date of award, with 5-12-month options.

Performance shall take place at contractor's facility.

Places of travel during the course of the order are:

- Jacksonville, FL
- Elizabeth City, NC
- Patuxent River, MD
- Owego, NY
- Norfolk, VA
- San Diego, CA
- Kaneohe-Bay, HI
- Atsugi, Japan
- Anderson AFB, Guam
- Fallon, NV
- New Bern, NC

Japan
The Status of Forces Agreement (SOFA) between the United States and Japan governs the rights and obligations of the United States armed forces in Japan. Only those individual Contractors who are United States nationals; not ordinarily a resident in Japan; present in Japan at the invitation of and solely for the purpose of executing contracts with the United States for the benefit of the United States armed forces; and, not present in Japan under any other SOFA status may be issued a Letter of Identification only by the Contracting Officer so that their status may be verified by Japanese authorities upon their entry into and/or departure in Japan.

1.5 GOVERNMENT FURNISHED EQUIPMENT/MATERIALS/FACILITIES

All aircraft system installations shall be conducted by Depot Level Contractor Field Modification Teams at government facilities identified in paragraph 1.4 above. The contractor will follow Tool, FOD and Safety Control as defined by Local Squadron procedures.

The contractor shall define all Government Furnished Equipment (GFE), Government Furnished Material (GFM) and Government Furnished Facilities (GFF) that its proposal is based on to satisfy the requirements defined herein. This information shall be detailed in the Task Work Plan.

1.6 INSPECTION AND ACCEPTANCE/FOB

Inspection and acceptance shall be at destination, FOB shall be N/A.

1.7 SECURITY

The contractor will not be required to store or maintain classified documentation. The contractor's employees may be required to work with classified material as part of an aircraft installation activity, and thus should have clearances at the SECRET level.

2.0 APPLICABLE DOCUMENTS

DOD (D) 5000.1	Defense Acquisition
DOD (I) 5000.0	Defense Acquisition Management Policies and Procedures
MIL-HDBK-59B	DOD CALS Program Implementation Guide, 10 June 1994
NAVAIRISNT 134034.1	Flight Clearance Policies
NAVAIRINST 4130.1	NAVAIRSYSCOM Configuration Management Manual
NAVAIRINST 4720.1	Procedures for Management of Cognizant Naval Air Modification Material
NAVAIRINST 5600.23	Policy, Procedures, and Responsibilities for Technical Manual Rapid Action Changes
NAVAIR 00-25-300	NAVAIRSYSCOM Technical Directives System; Management and Procedures Manual
AR-56	Structural Design Requirements (Helicopters)

3.0 REQUIREMENTS

3.1 System Design, Development, Installation, and Support for USCG and NAVAIR.

The contractor shall provide engineering and technical support in the areas of systems and integration engineering at the direction of the Government. Activities to be performed include:

- Assist technical publications and technical directives manager with source data collection, development, simulation, and review.
- Develop, monitor, evaluate, and review program maintenance plans.
- Assist in software system testing by developing test plans, test description, and test cases. Assist in the actual execution of test plans.
- Provide technical support for system requirements, design, integration, testing and documentation processes.

- Provide technical support for the integration of aircraft electrical and mechanical systems hardware.
- Assist in the development of hardware and cable design, documentation and manufacturing.

3.2 Avionics and weapon systems model shop manufacturing:

The Contractor shall order and/or manufacture equipment, hardware and software necessary to support engineering design, test, development, and integration of aircraft avionics and weapon systems. This includes the following:

- Consumable Installation Materials (washers, rivets, clamps, tie straps, cold work tooling, wiring...)
- Model shop fabrication materials (enclosure material, printed circuit boards, other prototyping material, test bench test equipment).
- Design software (PCB layout, CAD, PGA).

Any Software Licensing Agreements shall be sent to the Contracting Officer prior to award of this effort for review and approval.

Only Material/Hardware that is incidental to this effort shall be procured.

3.3 Logistics, Data Management, and Documentation Support

The Contractor shall have the capability to rapidly initiate and execute the following logistics and data management support at the direction of the Government:

- Develop and maintain ILS Work Breakdown Structure (WBS) and develop, review, and update ILS plans and documentation.
- Monitor and assist Navy Inventory Control Point (NAVICP) Philadelphia by providing technical support for spares and repair parts provisioning data and the digital transfer of this data.
- Monitor and assist NAVICP with interim and post Material Support Date (MSD) depot level maintenance funding and management.
- Monitor and assist NAVICP with management, procurement, and requisitioning of Packaging, Handling, Storage and Transportation (PHS&T) items.
- Monitor and assist with support equipment requirement definitions and acquisition.
- Monitor and manage the configuration management program and develop and maintain the Configuration Status Accounting and Reporting (CSAR) program.
- Assist with Physical Configuration Audits (PCA).
- Conduct physical configuration audits on H-60 aircraft and trainers at NAS Jacksonville, NAS Mayport, NAS North Island and NAS Norfolk.
- Prepare the Physical Configuration Audit Report to assist in the configuration management program.
- Provide technical support for Reliability, Maintainability, System Safety and documenting results. Research system failure modes and evaluate criticality of system failures.
- Conduct investigations and technical studies at NAS Mayport, NAS Jacksonville, NAS North Island and NAS Norfolk to identify H-60 ILS deficiencies affecting fleet operations and provide recommended solutions. Pay particular attention to

deficiencies, which require the Aircraft Intermediate Maintenance Department (AIMD), to designate subsystems/components as Beyond Capability of Maintenance (BCM).

- Participate in System Safety Working Group (SSWG) meetings, monitor SSWG status, and publish SSWG meeting minutes.

3.4 Administrative Support

The contractor shall provide administrative support in the following capacity, at the direction of the Government:

- Provide and update program information and status for presentations and meeting support.
- Participate in and support System Safety Working Group (SSWG), Test and Evaluation Working Group (TEWG), Interface Control Working Group (ICWG), Crew Station Working Group (CSWG), and Integrated Logistics Support Management Team (lLSMT) functions.

3.5 Training

The Contractor shall monitor and assist with aircrew operator, avionics maintenance, and ordinance maintenance training curriculum development, curriculum review, and training course instruction for DT&E, OT&E, and fleet introduction with consideration of a paperless classroom at the direction of the Government.

4.0 TRAVEL

Travel is necessary in performing this task order. Locations are stated in paragraph 1.4 above.

Costs for transportation may be based upon mileage rates, actual costs incurred, or a combination thereof, provided the method used results in a reasonable charge. Travel costs will be considered reasonable and allowable only to the extent that they do not exceed on a daily basis, the maximum per diem rates in effect at the time of the travel. The Joint Travel Regulations (JTR), while not wholly applicable to contractors shall provide the basis for the determination as to reasonable and allowable. Maximum use is to be made of the lowest available customary standard coach or equivalent airfare accommodations available during normal business hours. All necessary travel meeting the above criteria shall be approved in advance by the Government. Exceptions to these guidelines shall be approved in advance by the Contracting Officer.