STATEMENT OF WORK (SOW)
FOR
Replacement of Dynamic Positioning System (DPS) Computer for USCGC ELM (WLB 204)

The primary place of performance will be the USCGC ELM located at 37573 Highway 30 Astoria Oregon 97103

1.0 GENERAL

1.1 BACKGROUND
The USCGC ELM (WLB 204) is equipped with a Wartsila/NACOS NMS6000 Dynamic Positioning (DP) System. This system is essential for precise vessel control, station keeping, and track-keeping. The DP workstation computer, a critical component of this system, has reached the end of its life and requires replacement. The NMS6000 platform is a legacy system, and this project is to replace the obsolete DP workstation computer to ensure the continued operational readiness and safety of the vessel.

1.2 SCOPE
This Statement of Work covers the procurement of a replacement DP workstation computer (Part No. XAAC091826) and the associated engineering services required to install, configure, and verify the new system aboard the USCGC ELM. The work includes the removal of the old computer, installation of the new unit, connection of all required cabling, and system verification to ensure full functionality. All work shall be performed by NACOS Marine certified service engineers.

1.3 OBJECTIVE
The objective of this project is to successfully replace the legacy DP workstation computer on the USCGC ELM with a new, fully compatible, and licensed unit. This will restore the NMS6000 DP system to full operational capability, mitigate risks associated with hardware obsolescence, and ensure the vessel's DP certification and operational safety are maintained.

1.4 APPLICABLE DOCUMENTS
The following documents are relevant to this Statement of Work:

- NACOS USA, LLC Quotation No. 260616-CH1, Revision B

1.4.1 Compliance Documents
The following documents provide specifications, standards, or guidelines that must be complied with in order to meet the requirements of this contract:

Not Applicable

1.4.2 Reference Documents
The following documents may be helpful to the Contractor in performing the work described in this document:

Not Applicable

2.0 SPECIFIC REQUIREMENTS/TASKS

The contractor shall provide all labor, equipment, and certified expertise necessary to successfully replace the legacy NACOS Marine NMS6000 Dynamic Positioning (DP) computer aboard the USCGC ELM. The work is categorized into the following distinct tasks:

2.1 TASK ONE. Pre-Installation Setup and Configuration (In-House)

Before arriving at the vessel, the contractor shall prepare the new hardware at their facility to minimize vessel downtime.

- Procure the replacement DP workstation computer (Part No. XAAC091826).
- Perform initial bench-testing, software loading, and system configuration.
- Pre-load the proprietary NMS6000 system software and ensure all licenses are active and configured for the USCGC ELM's specific vessel parameters.

2.2 TASK TWO. Onboard Installation and Integration

The contractor shall deploy certified NACOS Marine service engineers to the USCGC ELM to perform the physical replacement and integration of the system.

2.2.1 Removal of Existing Hardware: Safely power down the NMS6000 system, disconnect all existing wiring, and physically remove the obsolete legacy DP workstation computer from the console.

2.2.2 Installation of New Computer: Physically mount and secure the new, pre-configured DP workstation computer in the designated console space, ensuring proper fit, ventilation, and shock-mounting as required by marine standards.

2.2.3 Serial Cabling and Interfacing: Re-route and connect all necessary serial cabling, data interfaces, and power lines between the new computer and the existing DP sensor suite, position references, and network infrastructure.

2.3 TASK THREE. System Verification and Operational Testing

Following physical installation, the contractor must validate that the system provides the precise, automated vessel control expected of the NACOS Platinum ecosystem.

2.3.1 Serial Data Verification: Verify the integrity and accuracy of incoming serial data from all advanced sensors and position reference systems (PRS).

2.3.2 Thruster Data Verification: Validate that the DP computer is properly calculating environmental forces and accurately transmitting automated commands to the vessel's thrusters and rudders.

2.3.3 Final System Checkout: Conduct a comprehensive operational test of the station-keeping and track-keeping capabilities in coordination with the USCGC ELM crew to ensure full system restoration and safety compliance.

3.0 CONTRACTOR PERSONNEL

3.1 QUALIFIED PERSONNEL
Because NACOS Marine is the sole authorized manufacturer of the NMS6000 system, the Contractor must provide qualified, NACOS Marine-certified service engineers to perform all physical installations, software configurations, and system verifications specified in this SOW.

3.2 CONTINUITY OF SUPPORT
During the removal of the legacy equipment and the installation of the new DP workstation computer, the Contractor shall ensure continuity of technical support to the USCGC ELM. Because the NMS6000 Dynamic Positioning system will be offline during the hardware transition, the Contractor must actively coordinate the installation schedule with the vessel's Command to minimize operational disruption.
Furthermore, the Contractor shall provide continuous, dedicated on-site technical support for the duration of the onboard installation process. This includes:

- Maintaining active communication with the vessel's engineering department regarding the status of the system.
- Providing immediate troubleshooting and resolution for any interfacing, power, or serial cabling anomalies discovered during the hardware swap.
- Ensuring that contractor personnel remain on-site and engaged until the new DP computer is fully installed, data connections are verified, and the system is safely restored to an operational status.

3.3 KEY PERSONNEL
Not Applicable

3.4 PROJECT MANAGER
Not Applicable

3.5 EMPLOYEE IDENTIFICATION

3.5.1 Contractor employees visiting the ***USCG ELM*** must wear an identification badge that, at a minimum, displays the Contractor name, the employee's photo, name, clearance-level and badge expiration date. Visiting Contractor employees must comply with all Government escort rules and requirements. All Contractor employees must identify themselves as Contractors when their status is not readily apparent and display all identification and visitor badges in plain view above the waist at all times.

3.6 EMPLOYEE CONDUCT
Contractor's employees must comply with all applicable Government regulations, policies and procedures (e.g., fire, safety, sanitation, environmental protection, security, "off limits" areas, wearing of parts of DHS uniforms, and possession of weapons) when visiting or working at Government facilities.

4.2 PERIOD OF PERFORMANCE
The period of performance for this work is 5 days from award.

4.3 PLACE OF PERFORMANCE

The primary place of performance will be the USCGC ELM located at 37573 Highway 30 Astoria Oregon 97103

4.11 GENERAL REPORT REQUIREMENTS
The Contractor must provide all written reports in electronic format with read/write capability using applications that are compatible with DHS workstations (Microsoft Office Applications).