

# **PERFORMANCE WORK STATEMENT**

## **FOR**

### **EXPLOSIVE ORDNANCE DISPOSAL EXPEDITIONARY SUPPORT UNIT ONE**

#### **(EODESU-1) DIVE LOCKER**

##### **Divers Life Support System (DLSS) Routine Maintenance Service**

### **1.0 BACKGROUND**

This requirement is for routine depot level maintenance of Explosive Ordnance Disposal Expeditionary Support Unit One (EODESU One) Life Support System.

### **2.0 OBJECTIVE**

The objective of the Performance Work Statement (PWS) is to acquire Divers Life Support System (DLSS) Routine Maintenance Services. These services include fabrication, maintenance, hydro testing, re-filling, and cleaning of high and low pressure piping, valves, flexible hoses, filters, moisture separators, volume tanks, compressed gas cylinders (Air, O<sub>2</sub>, and Mixed Gas), compressed gas flasks (Air, O<sub>2</sub>, and Mixed Gas); maintenance of Haskell oxygen booster pumps; maintenance of oxygen transfer pump assembly; maintenance of all compressors (Bauer models MVT-26, O-26 and C-D/DV/NAVY); and maintenance of Transportable Recompression Chamber to ensure that EODESU diver life support equipment is safe and operational to support EODESU One and Navy Expeditionary Combat Command (NECC) missions.

### **3.0 SPECIFIC REQUIREMENTS**

The following are the tasks that the Contractor is directly responsible to fully complete. Any maintenance (excluding work on non-transportable compressors and air systems) shall be completed at a NAVSEA certified facility and all work must be accomplished in accordance with the instructions and directives listed in Section 4 of this PWS. Any equipment that fails testing must be returned to the customer with documentation stating all reasons for failure. Any equipment that fails testing or is otherwise unable to be repaired will be replaced by EODESU One.

3.1 Hydrostatic testing shall be accomplished by D.O.T. certified technicians capable of testing all types and sizes of cylinders using the water jacket method. EODESU One will need 132 hydrostatic tests during the period of performance.

3.1.2 All hydrostatic testing will have a 25 day turnaround time upon contractors receipt of gas flask or bottle.

3.1.3 Scheduled maintenance of Bauer compressors shall be accomplished by a certified Bauer technician qualified on Bauer models MVT-26, O-26 and C-D/DV/NAVY.

3.1.4 Scheduled maintenance of the Haskel oxygen booster pumps manifold and the oxygen transfer pump assemblies shall be accomplished by a certified Haskel technician qualified on the MK-23 MOD-0 and MOD-1 models.

3.1.5 Scheduled maintenance of the Transportable Recompression Chamber shall be accomplished by a certified technician knowledgeable of Navy Divers Life Support and ASME Pressure Vessels for Human Occupancy requirements.

The below table provides a breakdown of the total estimated quantities to be utilized per year for the base year and each of the four successive option years.

Qty	Description
410	Hydro compressed gas cylinders (air, O2, and mixed gas) (60M)
410	Refill compressed gas cylinders (air, O2, and mixed gas)
40	Fabricate and test flexible hoses
40	Overhaul air/oxygen valves (A-1)
60	Install high and low pressure piping
20	Overhaul of Gas Transfer Pump Assemblies (MK-23 Mod 0 and Mod 1) (A-1,18M, 60M)
4	<p>Services to be provided for the MVT-26 and O-26 Compressors are as follows IAW the Navy's Planned Maintenance System:</p> <p>18M-1R - Clean and inspect interstage filters.</p> <p>18M-3 - Clean and inspect air pre-filter and intake filter.</p> <p>18M-4 - Perform internal and external visual inspection of moisture separator.</p> <p>18M-5 - Perform internal and external visual inspection of filter housings.</p> <p>18M-6 Clean oil and water separator sintered filter.</p> <p>18M-8 - Clean Bauer oil and water separator</p> <p>18M-9 - Replace air purifier and drying filter</p> <p>36M-4 – Test relief valves removed from system.</p> <p>R-1 - Clean and inspect suction and discharge valves.</p> <p>R-2 - Change oil and replace oil tube/filter.</p> <p>U-1 - Obtain air sample analysis after major repair/maintenance.</p>
60	<p>Services to be provided for the Bauer C-D/DV/NAVY are as follows IAW the Navy's Planned Maintenance System:</p> <p>A-1R - Change engine oil and clean lube oil filter.</p> <p>A-2R - Change Engine air filter element.</p> <p>A-4R - Clean and inspect fuel filter element.</p> <p>A-5R - Change compressor oil.</p>

	<p>A-8R - Clean and inspect compressor air intake filter element.</p> <p>A-9 - Clean Bauer oil and water separator.</p> <p>36M-4- Test relief valves removed from system.</p> <p>R-3 - Change purification filter and CO/Moisture indicator element.</p> <p>R-6 - Clean compressor intermediate filter.</p> <p>U-2 - Perform internal and external visual inspection of purification filter housing.</p> <p>U-3 - Perform internal and external visual inspection of moisture separator housing.</p> <p>U-1 - Obtain air sample analysis after major repair/maintenance.</p>
20	<p>Services to be provided for the Haskel Gas Transfer Pumps are as follows IAW the Navy's Planned Maintenance System:</p> <p>18M-1R – Inspect Air Cycling Valves</p> <p>A-1 - Replace Air drive filter and seal/clean and inspect filter assembly.</p> <p>18M-3 - Replace pump assembly Air cycling valve O-rings and bumper.</p> <p>36M-1 - Test OTPA relief valves.</p> <p>60M-1 - Send Booster System to authorized repair facility for overhaul.</p> <p>U-1 - Pressure test piping system.</p> <p>U-2 - Clean components for oxygen service IAW MIL-STD-1330D</p>
1	<p>Services to be provided for the Transportable Recompression Chamber are as follows IAW the Navy's Planned Maintenance System:</p> <p>A-4 - Clean, inspect and lubricate LP/HP Air and Oxygen Valves.</p> <p>24M-5 - Calibrate mixed gas and oxygen diving equipment life support gages.</p> <p>24M-6 - Calibrate air diving equipment life support gages.</p> <p>24M-7 - Conduct comparative accuracy check on Roylyn and 3D gages.</p> <p>36M-1 - Inspect internal surfaces of composite air flasks.</p> <p>36M-2 - Inspect internal surfaces of composite oxygen flasks.</p> <p>36M-4 - Test relief valves removed from system.</p> <p>36M-4 - Test ASME relief valves removed from system.</p> <p>36M-5 - Visually inspect acrylic viewports.</p> <p>36M-6 - Inspect TRC air filter elements.</p> <p>36M-7 - Inspect TL air filter elements.</p>

36M-8 - Inspect TRC mixed gas/oxygen filter elements.
36M-9 - Inspect TL oxygen filter elements.
36M-10 – Clean and inspect TRC supply and exhaust silencers.
36M-11 – Clean and inspect TL supply and exhaust silencers.
R-7 - Calibrate and inspect O2/CO2 Analyzers

#### **4.0 GOVERNMENT FURNISHED EQUIPMENT**

The Government will provide the equipment listed in the table above for the contractor to perform its maintenance services upon at its own facilities and return to EODESU One's facility.

#### **5.0 REFERENCES**

During performance, the Contractor shall comply with or exceed all applicable Navy, NAVSEA, and EOD certifications, Instruction Manuals, and other industry standards to ensure proper safety and operational maintenance is performed. Contractor must have copies of and comply with all applicable instructions. These publications include, but are not limited to, those as follows:

- a. EODESU-1 Re-Entry Control Instruction 10560-1B
- b. OPNAVINST 4790.8B Ships Maintenance and Material Management (3M) Manual
- c. DOD MIL-STD-1330D Standard Practice for Precision Cleaning and Testing of Shipboard Oxygen, Helium, Helium-Oxygen, Nitrogen, and Hydrogen Systems
- d. DOD MIL-STD-1622B Standard Practice Cleaning of Shipboard Compressed Air Systems
- e. NAVSEAINST SS521-AA-MAN-010 U.S Navy Diving and Manned Hyperbaric System Safety Manual
- f. NAVSEA Topside Tech Notes
- g. Bauer Compressor Technical Documentation
- h. U.S. Navy Diving Manual Chapter 4-3.1 (Table 4-1)
- i. ASME SAFETY STANDARD FOR PRESSURE VESSELS FOR HUMAN OCCUPANCY

#### **6.0 QUALIFICATIONS**

- a. The Contractor shall have NAVSEA approved process control procedures for cleaning and testing of divers breathing air and oxygen DLSS systems.
- b. The Contractor shall have technicians certified by NAVSEA on divers breathing air and oxygen cleaning DLSS systems.

- c. The Contractor shall have personnel factory trained and certified by the OEM on cleaning, operation, maintenance and repair of Haskel oxygen booster pumps.
- d. The Contractor shall have a NAVSEA certified class 100,000 and class “B” clean room on site with all required equipment.
- e. The Contractor shall be qualified to perform depot level repair on US Navy air and oxygen DLSS systems and meet all standards for cleaning, testing, and documentation IAW References A,C,D,E,F, and J.
- f. The Contractor shall have all applicable certifications and permits required to handle Freon for gage cleaning affluent sampling.
- g. The Contractor shall have certified grade “B” water for cleaning and sampling.
- h. The Contractor shall have an onsite NAVSEA certified precision oxygen cleaning instructor.
- i. The Contractor shall have all required documentation of certifications at proposal submission.
- j. The Contractor shall have personnel qualified as Bauer Compressor Service Technicians for work performed on Bauer HP Air Compressors .
- k. The Contractor must provide evidence of NAVSEA QA Audit relative to US Navy Diving Systems.
- l. The Contractor shall ensure that all certifications are current throughout the period of performance.

## **7.0 OTHER PERFORMANCE REQUIREMENTS**

7.1 SAFETY REQUIREMENTS: The Contractor shall comply with applicable OPNAV, NETC, OSHA and command safety instructions and standards governing these requirements. The Contractor shall maintain all employee qualification and certification records as required by these instructions. Copies of these qualification and certification records shall be submitted to the COR.

7.1.1 MEDICAL Care Requirement: Emergency medical care is available in Government facilities to Contractor employees who suffer on-the-job injury or illness. The Contractor shall make care reimbursement to the appropriate Navy collection agent upon receipt of statement(s).

7.2 Security Requirements.

7.2.1 Contractor shall conform to the provisions of OPNAVINST 5510.60M (series) and Department of the Navy Information and Personnel Security Program regulations.

7.3 Unauthorized Work: Only a duly appointed Contracting Officer, and no other Government personnel, is authorized to change the specifications, terms, and conditions under this effort.

7.4 PLACE(S) OF PERFORMANCE: Contractor’s facility and/or on-base EODESU One work site.

7.5 PERIOD OF PERFORMANCE: The period of performance for this PWS is 18 Oct 2013 to 30 September 2014 followed by four one-year options ending on 30 September 2018.

7.6 DELIVERABLES/DELIVERABLE SCHEDULE: In fulfillment of this effort, the Contractor shall provide the following deliverables. All deliverables shall be submitted to the COR, unless otherwise agreed upon, in an accurate and timely manner.

7.6.1 Monthly Status Report: The Contractor shall document the efforts performed in the completion of each task in a detailed Monthly Status Report, due on or before the 15<sup>th</sup> of each month, submitted via email. The report format may be at the Contractor's discretion, but the report may be modified at the COR's request. At a minimum, the monthly status report shall include:

- Progress for the Period: The Contractor shall provide a summary of work, and activities, accomplished during the reporting period.
- Problems Encountered: The Contractor shall provide a brief summary of any problems, issues or delays identified/encountered and recommendations as to their resolution, or any corrective action that was taken to correct identified problems.

7.6.2 Monthly Labor Hours Report: The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the EXPLOSIVE ORDNANCE DISPOSAL EXPEDITIONARY SUPPORT UNIT ONE via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address <https://doncmra.nmci.navy.mil>.

- Enter Order data, Contact data, and Location data for each Order in CMRA.

7.6.3 Final Report: The Contractor shall provide a final report, to the COR, at the conclusion of contract performance. The report shall summarize all monthly reports addressing: complete summary of work completed and activities accomplished during the performance period, significant issues, problems and recommendations to improve the process in the future.

7.6.4 Deliverable Table.

Reference	Milestone/Deliverable	Responsibility	Date
10.1	Monthly Status Report	Contractor	15th of each month
10.2	Final Report	Contractor	No later than 1 October 2015
10.3	Monthly Labor Hours Report	Contractor	15th of each month

7.6.5 Inspection and Acceptance Criteria: Final inspection and acceptance of all work performed, reports and other deliverables will be performed at the place of delivery by the COR, and in accordance with the Quality Assurance Surveillance Plan (QASP).

7.6.6 Transport and Delivery: Contractor shall be able to transport and deliver equipment within two hours of being informed by EODESU One to facilitate emergent repairs and meet operational requirements.

## **8.0 QUALITY ASSURANCE**

The COR will review all documentation submitted by the Contractor for completeness, and, if necessary, will return it to the Contractor for correction. Absence of any comments by the COR will not relieve the Contractor of the responsibility for complying with the requirements of this PWS. Objective Quality Evidence (OQE) documentation will be provided by the Contractor to include quantitative and qualitative information of parts and materials used and services performed. Final approval and acceptance of documentation required herein shall be by letter of approval and acceptance by COR. The Contractor shall not construe any letter of acknowledgment of receipt material as a waiver of review, or as an acknowledgment that the material is in conformance with this PWS.