

Statement of Work (SOW)

Ellsworth AFB, South Dakota

8 June 2023

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## **1. DESCRIPTION OF SERVICES**

**1.0 DESCRIPTION OF REQUIREMENTS.** This Installation Specification outlines the Government's objective for a requirement from the 28 Maintenance Group Additive Manufacturing Flight to furnish, install and test. This Statement of Work (SOW) defines the efforts required to provide air compressor equipment and installation to Ellsworth Air Force Base necessary for maintaining the form fit and function of the 3D printing Process and commercial warranty.

1.1 General Requirements. The Contractor shall provide all personnel, equipment, tools, materials, management, operations, supervision, other items and logistic support as defined in this SOW. The Contractor technical personnel shall be certified to perform all deliveries of the air compressor equipment.

## **2.0 REQUIREMENTS**

2.1 Supply. Contractor shall supply air compressor model ENVSQ5-10A or Equal, 200 gallon tank model XGTK200-VB200 or Equal, 120 gallon tank model XGTK120-VB200 or Equal, heatless desiccant dryer model XGHL121HEOAH or Equal, oil vapor filter element model F1L18GE or Equal and installation for all provided equipment, to Building 7520 (North Bay), Ellsworth AFB, South Dakota, 57706. The specifications are listed in Section 3.0 Design Criteria.. The proposed location of the air compressor is denoted in the diagram, Attachment 3 labeled "B7520 Air Compressor Location".

**3.0 DESIGN CRITERIA** Contractor shall meet technical and operational requirements as stated in this section. Air Compression Group shall be utilized throughout the contract and this SOW to account for all the equipment required to resolve the oil coming through the lines and entering the 3D printer unit. The Air Compression Group must be equipped with the following Brand Name or Equal To:

### **3.1.1 Air Compressor Model (ENVSQ5-10A):**

- ES40 Q / EnviroAire ES Series Oil-Less Rotary Scroll Air Compressor  
Quadraplex 10HP (7kW) / 116 PSIG /  
124 CFM 460V/3PH/ 60Hz  
w/Enclosure Base Mount /  
BENVS40Q-Q/ NEMA 4 / Deluxe HMI  
Controller

### **Compressed air Quality Specification:**

- Quality of the compressed air in accordance with ISO 8573  
Solids: Class 1 --- (Particle Size:  $\leq$  100 micron), (Particle

Concentration:  $\leq 0.1 \text{ mg/m}^3$  (.0843 ppm))  
Water content: Class 4 --- (Pressure Dew Point:  $\leq 3 \text{ }^\circ\text{C}$ )  
Oil content: Class 1 --- (Oil Concentration:  $\leq 0.1 \text{ mg/m}^3$   
(.0843 ppm))

**3.1.2 200 Gallon Tank Model (XGTK200-VB200):**

- TANK, 200 GAL, PRM, VRT, BS, 200 PSIG

**3.1.3 120 Gallon Tank Model (XGTK120-VB200):**

- TANK, 120 GAL, PRM, VRT, BS, 200 PSIG

**3.1.4 Desiccant Dryer Model (XGHL121HEOAH):**

- XGHL120 Heatless Desiccant Dryer  
120 CFM | 115V/1PH/60Hz / NEMA 4  
Mounted Filtration Package.

**3.1.5 Oil Vapor Filter Element Model (F1L18GE):**

- ELEMENT, OIL VAPOR FILTER,  
GRADE G, #18

**3.2 Installation Requirements** The Contractor shall provide all labor required for installation of supplied equipment.

3.2.1 The Government shall provide electrical power to the air compressor installation location but the Contractor shall make the final equipment power connection (hard wired to disconnect).

3.2.2 The Contractor shall conduct on-site inspection of the newly installed equipment to ensure proper operation immediately upon completed installation and correct any issues.

3.2.3 Contractor shall provide complete installation, commissioning and startup of compressor, dryer, wet tank, dry tank. All interconnecting piping, piping and supports to 3D printer areas and drops for 4 printers.

**3.3 Training.** Upon completion of the installation process, the contractor shall provide user training to the designated site staff in accordance with the customer requirements. User training shall include step-by-step instructions on the utilization of all features of the Air Compressor Group as well as basic system troubleshooting. The contractor shall provide operational training to the users and system training to the operations/maintainers as needed. Any applicable training material shall be provided to the Government in both paper and digital copy. The Government shall retain the right to duplicate and distribute the training material for future training purposes.

**3.4 Testing.** The contractor shall Engineer, Furnish, Install and Test (EFI&T) and perform all necessary efforts to ensure successful completion of this project and ensure the Air Compressor

Group meets the form fit and function of the requirement. The contractor shall submit industry standard and site specific test and acceptance procedures for Government review and approval.

3.5 Deliverables. The contractor shall provide configuration diagrams. Continuity book to include: configuration diagrams/equipment diagrams, equipment lists and training must be provided in both hard and digital copies. The contractor shall provide documentation and plan to test the system and demonstrate to the Government complete functionality of all component and capabilities of the integrated system.

Document Required: 1. Installation drawings, schematics, wiring diagrams  
2. All Warranty Information  
3. Manufacture References/User Documents

#### **4.0 CONTRACT MANAGEMENT**

4.1 Project Manager (PM). The Contractor shall provide a PM and alternate(s) responsible for contract performance and continuity. The Contractor shall identify the PM's/alternate's range of authority to act for the Contractor relating to daily contract operations.

4.2 Project Site Point of Contact (POC). The Site POC shall be the interface with the Government for all delivery communications pertaining to contract performance. The PM and Site POC may be the same person.

4.3 Transportation. Contractor shall provide company-owned, privately owned, or rental vehicles for transportation. Contractor vehicles must be properly insured to be driven on the installation.

4.4 Hazardous Material Identification. The Contractor shall submit Material Safety Data Sheets (MSDS) IAW FAR Clause 52.457-3 for any hazardous materials (paints, solvents, cleaners, encapsulating compound, etc.) to be used in performance of the contract. The Contractor shall file the MSDS(s) with the Base Environmental Management Office (BEMO) prior to using hazardous material.

4.5 Project Residue. The contractor shall not place trash or debris in base roll-out containers. The Contractor shall comply with local procedures concerning the use, disposal, or reporting of hazardous materials. All excess materials and residues from this project (any excess or contaminated soil, asphalt, or concrete, etc.) shall be disposed of off base and IAW Federal, State, Local environmental laws and regulations.

4.6 Hours of Work. The Contractor shall deliver and install equipment during normal operating hours of the site, Monday through Friday, excluding federal holidays. Work hours are normally 0730 to 1630, Monday through Friday. However, differing schedules may be coordinated/approved with the 28 MXG Project Manager with at least three work days advance notice, provided it results in no change in contract price or contract period of performance.

4.7 Regulatory Guidance, Policy, Etc. The Contractor shall comply with all federal laws, codes, regulations, and statutes applicable to performance of this contract. It is the Contractor's responsibility to obtain and adhere to all applicable federal standards.

## **5.0 BASE SECURITY REQUIREMENTS**

5.1 Contractor Consent to Background Checks: The Contractor and, as applicable, subcontractor shall not employ persons for work on this contract if such employee is identified as a potential threat to the health, safety, security, general well-being or operational mission of the installation and its population, nor shall the Contractor or subcontractor employ persons under this contract who have an outstanding criminal warrant as identified by Law Enforcement Agency Data System (LEADS) through the National Crime Information Center. LEADS checks shall verify if a person is wanted by local, state, and federal agencies. All Contractor and subcontractor personnel who do not consent to a LEADS check shall be denied access to the installation. Information required to conduct a LEADS check includes: full name, driver's License number, and/or social security number, date of birth of the person entering the installation, and completion of a background check questionnaire. The Contractor shall provide this information, Contractors Consent for Background Check, and shall submit it in conjunction with the Contractor's request for either base or vehicle passes. Completion of a successful LEADS check does not invalidate the requirement for an escort when Contractor or subcontractor personnel are working within controlled or restricted areas. Contractors shall ensure their employees and those of their subcontracts have the proper credentials allowing them to work in the United States.

5.2 Safety. The Contractor shall be responsible for complying with all local, state and federal safety guidelines.

5.3 Accident/Incident Reporting and Investigation. The Contractor shall record and report all available facts relating to each instance of accidental damage to Government property or injury to either Contractor or Government personnel to the Base Safety Office. The Contractor shall secure the scene of any accident and wreckage until released by the accident investigative authority through the Contracting Officer. If the Government elects to conduct an investigation of the incident, the Contractor shall cooperate fully and assist the Government personnel until the investigation is completed.

**6.0 GOVERNMENT FURNISHED MATERIALS.** The Government shall provide water, sewage service, and electricity at no cost to the contractor.