

## DEPARTMENT OF THE AIR FORCE AIR FORCE RESEARCH LABORATORY EGLIN AIR FORCE BASE FLORIDA



5 July 2022

### MEMORANDUM FOR AFTC/PZIO

FROM: AFRL/RWMR

SUBJECT: Statement of Work (SOW) for service contract covering the ProX DMP 300

## 1. SCOPE OF WORK:

The Air Force Research Laboratory, Munitions Directorate (AFRL/RW) owns and operates a 3D metal printer – model ProX DMP 300 manufactured by 3D Systems Inc. The 3D printer is regularly used and must be maintained in full operating condition and to the manufacturer's specifications at all times to ensure accurate function. This maintenance includes *preventative* services such as filter changes, machinery lubrication, software and firmware updates, and seal replacement. Maintenance also includes *diagnostic* services such as alignment of optical/laser and kinematic/mechanical systems; calibration; troubleshooting of mechanical, electrical, hydraulic, and pneumatic systems; and hardware repair and/or replacement. The specialized nature of the work requires highly trained service technicians to perform. Therefore, AFRL/RW requires a service plan covering preventive and diagnostic maintenance on the ProX DMP 300 printer. Based on market research and available funding, the plan should cover all preventative maintenance and provide a discount on diagnostic services.

#### 2. LOCATION OF WORK:

The original location of work will be the Rapid Prototype Fabrication Facility, Bldg 614, Eglin AFB, since this is the current location of AFRL/RW's ProX DMP 300 printer. Around 4QFY22, the printer will be relocated to the Advanced Munitions Technology Complex (AMTC) at the High Explosive Research and Development (HERD) Facility, Eglin AFB. Therefore, the second location of work is at the AMTC in the Revolutionary Ordnance Characterization Center (ROCC) building – building number TBD as this is new construction.

## 3. PERIOD OF PERFORMANCE:

AFRL/RW expects to continue use of the ProX DMP 300 printer for at least five years. Therefore, the period of performance will start at contract award and end five years from contract award. Working hours are to be during normal business hours (0800 – 1600) of weekdays (Monday - Friday). A typical preventative maintenance visit for the ProX DMP 300 printer is expected to take 3-4 business days at 6-7 hours per day.

## 4. DELIVERABLE SCHEDULE:

The deliverables of this work are at least two preventative maintenance visits per year for the ProX DMP 300 printer. The maintenance will include all travel, labor, and parts (filters, seals and gaskets, tubing, fasteners, etc.) associated with the visit.

#### 5. APPLICABLE STANDARDS:

Applicable standards to this work include the Occupational Health and Safety Administration (OSHA) standard 29 CFR 1910.134 for *Respiratory Protection* applied to general industry, the Air Force Instruction (AFI) 48-137, *Respiratory Protection Program*, and the Munitions Directorate Workplace Specific Respiratory Protection Plan (WSP) *AWEF 443A*.

## 6. ACCEPTANCE CRITERIA:

Annually, AFRL/RW will review the acceptability of the work with regard to whether all service calls were answered promptly and whether all scheduled preventative maintenance visits were performed correctly and in a timely and professional manner.

# 7. SPECIAL REQUIREMENTS:

Trained service technicians must perform all preventative maintenance due to the specialized nature of the equipment.

Please contact Philip Flater, AFRL/RWMR, at 882-6836 if further information is needed.

PHILIP J. FLATER, DR-03, DAF Senior Mechanical Engineer