STATEMENT OF WORK
Inspect, Maintain, and Repair Aircraft Fire Training Pit
Fairchild Air Force Base, Washington

1.0 Description of Services: The Contractor shall maintain and repair the Aircraft Fire Rescue Training Facility (AFRTF), structural trainer, and conservation pond at Fairchild Air Force Base, WA in a manner that will ensure serviceability and prevent deterioration in operational effectiveness. These components hereafter referred to in summary as "Training Grounds." The Contractor shall comply with current manufacturer recommendations, assessments, and procedures, Air Force Technical Order (TO) 35E1-2-13-1, 25 June 2013, Change 2 – 6 February 2015 https://www.robins.af.mil/Portals/59/documents/technicalorders/AFD-100607-009.pdf?ver=2016-06-28-120714-900 local, state, federal regulations, commercial standards, National Fire Protection Association, and this Statement of Work (SOW). It is the Contractor's responsibility to be aware of and follow the most recent version of all referenced publications.

1.1. Scope of Work: All work shall be performed by qualified personnel with expertise as they relate to Air Force Aircraft Crash Fire Trainers. The contractor shall provide all supplies, materials, tools, equipment, and qualified labor necessary to inspect, test, maintain, and perform preventative maintenance. This includes executing a spring startup (on or about 15 April), summer inspection (approximately 90 days after de-winterization activities), and winter shutdown (on or about 15 October) for both the Structural Fire Training Facility (SFTF) and Aircraft Fire Training Facility (AFTF).

1.2. Scheduled Maintenance: Scheduled maintenance includes routine inspections, seasonal procedures, and specific system checks conducted at regular intervals.

1.2.1 Routine Inspection Maintenance and Repair: The Contractor shall maintain the Training Grounds by conducting inspections, maintenance, and repairs as required.

- Routine Costs: Costs for materials, supplies, and parts for routine services shall be included in the Winterization/De-Winterization Contract Line-Item Numbers (CLINs).
- Logistics: The Contractor is responsible for transporting all required materials to the job site to complete work within the specified timeframes.
- Scheduling: The Contractor shall monitor weather and reschedule work, if necessary, due to inclement weather at their own expense. The government will only bear costs for initial site mobilization.
- System Checks: Routine inspection and repair shall be performed on all igniters, air systems, electrical and propane components. Propane systems (tank, gauges, piping, air system, manual safety system, and regulators) will be inspected for corrosion, wear, limits, and operability. The valve intake and outlets on the air system collector tank will be disconnected and cleaned.

- Igniter Replacement: Igniters shall be inspected during routine inspections and repaired/replaced as needed. The Contractor must have all igniters available on-site for immediate replacement. Labor is part of routine services, while parts will be reimbursed under the Parts CLIN.

1.2.2 Seasonal Maintenance

1.2.2.1 Winterization (Complete by 31 Oct)

- Work shall not begin before October 1st without government consent.
- Each igniter must be cleaned with compressed air, have non-freezing liquid applied, and be covered and sealed.
- Test all igniters and verify proper operation, identifying any repairs needed for spring startup.
- Verify that the rectifier for the impressed current cathodic protection system is operational.
- Lubricate and service all switches, cabinet hinges, latches, etc.
- Remove and store the water pond aerator as directed by the Government POC.
- Verify the water conservation pond pump has at least three feet of water cover or remove and store it as directed by Government POC.
- Disconnect and store the water-cooling pump in the burn area, if applicable.
- Introduce a minimum of 90 CFM of compressed air into the water system to blow out all lines and prevent freezing.
- Exercise, service, and lubricating all water system valves.
- Drain the burn area to a minimum and install a temporary sump pump to prevent freezing of systems.
- Verify that all automatic pumping systems are functional for winter.
- Check all burner locations for performance and emergency shutdown, identifying repairs needed for spring startup.
- Exercise thermal cycles on the propane system and perform a soap test at all connections, identifying necessary repairs.
- Introduce a minimum of 90 CFM of compressed air into the propane system to remove all water from lines and co-ax valves.
- Pressurize the nitrogen/air system and perform a leak test on all connections, identifying necessary repairs.
- Drain all moisture from the nitrogen/air accumulator tank.
- Service all nitrogen/air pilot valves.
- Provide a complete semi-annual inspection report IAW TO 35E1-2-13-1.
- Pumps shall be stored according to government requirements.
- Provide a complete report of all work performed and minor repairs made.

- Brief the fire chief on all minor and major repairs needed for spring startup and provide a written report with a cost estimate.

1.2.2.2 De-winterization (Complete by 30 April)

- Work shall not start before April 1st without government consent.
- The conservation pond and debris from the suction line shall be cleaned.
- Verify the rectifier is in service for the cathodic protection service.
- Lubricate all electrical panel hinges, switches, etc.
- De-winterize all igniters and ensure solid, functional ignition.
- Check that any applicable pumps and/or lift stations are fully operational.
- Verify all identification and warning labels are installed, clear, and legible.
- Exercise the water system and adjust to ensure all functions operate at proper pressures.
- Fill the burn pit to the operating level and ensure igniter coolers are adjusted properly.
- Install the water aerator in the pond (if applicable).
- Treat the water in the conservation pond to prevent algae growth if necessary.
- Verify that the mechanical emergency shutdown valves for filling the propane tank are functioning and serviced.
- Check that the propane tank float gauge, roto-gauge, and pressure gauge are all operational.
- Perform maintenance per manufacturer's recommendations on all propane valves and equipment.
- Operate the entire propane system, ensuring all burners function properly and emergency shutdown times are achieved.
- Cycle all propane system valves and perform a leak test at all connections.
- Perform a pressure test on the nitrogen/air system and service/cycle all pilot valves.
- Have a fire truck and crew on standby while testing live fire scenarios and making adjustments.
- Provide a complete semi-annual inspection report IAW TO 35E1-2-13-1.
- Generate and provide a complete written report of all work performed, findings, and minor repairs to the fire chief.

1.2.2.3 Summer Inspection (Complete approximately 90 days after de-winterization activities)

- Test all igniters and verify proper operation.
- Verify that the rectifier for the impressed current cathodic protection system is operational.
- Lubricate and service all switches, cabinet hinges, latches, etc.
- Verify the water conservation pond pump has a minimum of three feet of water cover.
- Exercise, service, and lubricate all valves for the water system.

- Check all burner locations for performance and emergency shutdown.
- Exercise thermal cycles on the propane system and perform a soap test at all propane connections.
- Check that any applicable pumps and/or lift stations are fully operational.
- Check and verify that all identification and warning labels are installed, clear, and legible.
- Exercise the water system and adjust pressures.
- Fill burn pit to operating level and ensure igniter coolers are adjusted properly.
- Treat the water in the water conservation pond to help prevent algae growth if necessary.
- Verify that the mechanical emergency shutdown valves for the propane tank are functioning properly and serviced.
- Check that the propane tank float gauge, roto-gauge, and pressure gauge are operational.
- Perform maintenance per manufacturer's recommendations on all propane valves and equipment.
- Operate the entire propane system to ensure proper function and shutdown times.
- Cycle all propane system valves and perform a leak test.
- Perform a pressure test on the nitrogen/air system and service/cycle all pilot valves.
- Have a fire truck and crew stand by while testing live fire scenarios.
- Provide a complete semi-annual inspection report IAW TO 35E1-2-13-1.
- Generate and provide a complete written report of all work performed and findings to the fire chief.

1.3. Specific Facility and System Requirements:

1.3.1. Aircraft Fire Training Facility (AFTF) Inspection

The Contractor shall conduct three inspections winterization/de-winterization and summer (approximately 90 days after de-winterization activities).

- Standards: Inspections, testing, and maintenance shall be performed IAW TO 35E1-2-13-1, Table 1 WP 006, and Table 3 WP 007.
- Cathodic Protection: Impressed current system inspections shall be conducted during spring startup and winter shutdown. Results will be documented on AF IMT 491 and annually on AF IMT 1688.
- Reporting: A written summary of conditions and a cost estimate for any discrepancies shall be provided.

1.3.2. Gas Fired Structural Fire Training Facility (SFTF) Inspection

The Contractor shall provide all labor and materials to test, maintain, and perform scheduled inspections.

- Standards: Annual inspections shall be conducted and documented IAW NFPA 1403.
- Structural Evaluation: The structural integrity of the live fire training structure shall be evaluated by a licensed professional engineer with relevant expertise, or IAW NFPA 1403. This includes a site visit, a full evaluation, a debriefing to the user, and a comprehensive report.
- Anchor Point and Rappelling System Inspection: Anchorages shall be inspected annually by a qualified person. Anchors shall be load tested and re-certified at periods not to exceed five years, or whenever re-roofing or renovating occurs.
- Usage and Safety Requirements:

    1. A plan of service shall be developed prior to any work.
    2. Users are responsible for accessing, rigging, and utilizing the system in accordance with all applicable OSHA and IWCA I-14.1 standards.
    3. All work must be performed in accordance with manufacturer's instructions and applicable regulations.
    4. Workers must use a shock-absorbing lanyard rated for 900 lbs. maximum arrest force.
    5. Workers shall be secured to a safety line attached to a certified anchor before approaching within 6 feet of an unprotected edge.
    6. All components shall be visually inspected by a competent person before each use.
    7. Any signs of excessive wear, cracks, bending, rust, or corrosion shall be cause for more extensive inspection before continued use.
    8. Only one line shall be attached to any given anchor.
    9. All rigging is the responsibility of the user.

- Scheduling: SFTF maintenance/inspection shall be conducted with winterization/de-winterization of the AFTF.

1.3.3 High-Density Polyethylene (HDPE) Line Maintenance (AFTF)

This applies to the 80-mil thick HDPE liners in the water conservation pond, burn area, and trench.

- Inspection and Repair: Leaks shall be located and repaired per the extrusion welder manufacturer's instructions. Inspections occur with Winterization, De-Winterization, and Summer Inspections. Repairs must be made within 120 business days of detection unless deemed an emergency.
- Warning Tape: Yellow plastic warning tape indicating underground utilities must be properly replaced and verified with the Government POC after any excavation.
- Geo-membrane Examination: All seams and non-seam areas must be examined for defects, and corrective actions must be recorded.

- Welding Conditions: Geo-membrane shall not be welded or replaced during precipitation, or in the presence of excessive moisture, dust, high winds, or standing water.
- Approvals and Reporting: Repair procedures, materials, and techniques require prior approval. All coordination and reporting shall be done through the CO and the Government POC.

1.4. Non-Routine and Unscheduled Repairs

1.4.1 Non-Routine Requirements

The following are considered non-routine requirements

- Replacement of water pump
- Drive area rut and burn pit leveling
- Air compressor replacement
- Air system collection tank replacement
- Major polyethylene liner repairs

1.4.2 Unscheduled Repairs

This section applies to repairs identified during inspections or emergencies that are not part of periodic maintenance.

- All work for unscheduled repairs requires prior approval before commencement. Repairs Under $2,500: May be approved directly by the Government POC. Repairs Over $2,500: Must be approved by the CO via a bilateral contract modification. Exception: In emergencies, verbal authority from the CO is sufficient.
- Cost Estimates: An itemized quote shall be provided within 10 business days of a government request.
    - Labor: The hourly labor rate will be negotiated at time of award.
    - Parts/Materials: The parts mark up percentage will be negotiated at time of award.
- Completion Timeline: Work shall be completed within 120 days of contract modification, barring excusable delays.
- Parts Procurement: Competitive Pricing: The contractor must provide competitive pricing (e.g., quotes from multiple vendors) for any individual parts/materials exceeding $2,500. Receipts are required for reimbursement.
- Reporting: A written report with findings and cost estimates is required within 10 calendar days of inspection. All modifications must be documented.
- Response Times:
    - Propane Leaks: Immediate verbal assistance, with physical assistance as soon as practical.
    - Liner Maintenance: Response time is based on the severity of the damage.
    - All Other Repairs: Respond within 5 workdays.

1.5. Environmental Considerations

1.5.1 Hazardous Materials

- The contractor shall be responsible for the proper storage, management, and disposal of any hazardous material brought on base for contractor use. The contractor shall submit a list of all hazardous materials intended for use during the performance of the contract, along with corresponding Safety Data Sheets (SDS) using the Contractor Hazardous Material Authorization and Use (CHMAU) Form fourteen days prior to bringing the hazardous materials onto base. If during the course of the contract, items not previously identified are to be brought on base, the Contractor shall submit an updated CHMAU form and SDS for approval prior to bringing the HAZMAT onto the base. The contractor shall report the quantity of each hazardous material used on the base by submitting a CHMAU Form by 1 December of that calendar year, or prior to project closeout, whichever is earlier. Forms turned in by 1 December may estimate December usage.

- For any project generating hazardous or universal waste, the contractor is responsible for identification, proper storage, management, and disposal of said waste. All Hazardous Waste manifests shall be submitted and approved prior to any waste leaving the site. 92 CES/CEIE will sign all manifests for waste leaving site.

1.5.2 Soil Excavation or Pond Dewatering

- 92 CES/CEIE must be contacted if any maintenance requires soil excavation or dewatering from the water conservation pond. 92 CES/CEIE will provide guidance regarding soil and/or water management and/or disposal.

1.6. Quality Control:

The Contractor shall develop and maintain an internal quality control process, available to the government upon request.

1.7 Hours of Operation

The contractor shall perform all services during normal duty hours, which are 0730-1630, Mondays through Fridays, excluding federal holidays, unless otherwise required in the contract or approved by the CO. The contractor is not required to provide service on federal holidays except in emergency situations. Federal holidays are as follows:

New Year's Day	1 January
Martin Luther King Day	3rd Monday in January
Washington's Birthday	3rd Monday in February
Memorial Day	last Monday in May
Juneteenth	19 June

Independence Day	4 July
Labor Day	1st Monday in September
Columbus Day	2nd Monday in October
Veteran's Day	11 November
Thanksgiving Day	4th Thursday in November
Christmas Day	25 December

1.8 Security Requirements

All contractor or contractor employees' vehicles used for the performance of this contract shall comply with all local, state and federal regulations. In addition, all vehicles described above must be registered through the Security Forces Squadron, Pass and Registration and will comply with Fairchild AFB directives. After award of contract, the contractor shall request through the Government POC, CO and Security Forces be issued base passes and identification badges for employees and work vehicles.

1.9 Continuation of Mission Essential Functions

R-DFARS 252.237-7023, Continuation of Mission Essential Functions (Oct 2010), and any aforementioned Air Force implementation, unless otherwise directed by an authorized Government representative, it is determined that the requirements under this SOW are considered ***non-essential*** during a crisis.