STATEMENT OF WORK

For

Air Traffic Control Equipment De-Installation and Installation

For

Hatch Stagefield

Fort Rucker, Alabama

1. Program Objectives

The contractor shall provide all personnel and supervision required to perform the de-installation of Air Traffic Control (ATC) equipment in the existing Air Traffic Control Tower (ATCT) at Hatch Stagefield, Fort Rucker, Alabama and the installation of the ATC equipment into newly constructed ATCT as per building design. Installation shall include all required cabling and grounding as specified in the appropriate regulations and standards FAA-STD-019e and MIL-STD-188-124(B).

2. Equipment

Equipment to be de-installed and relocated to the new tower will consist of the following:

- One Interim Voice Switch Replacement (IVSR) with three control positions and one maintenance position.
- Two radio racks.
- Four TACO Antennas
- One FM Antenna
- One FM Transceiver
- Two GRT-21 VHF transmitters
- Four GRT-22 UHF transmitters
- Two GRR-23 VHF receivers
- Four GRR-24 UHF transmitters
- One Digital Audio Legal Recorder or NAS Voice Recorder
- FMQ-13 (V) 2 Wind Instrument System with two indicators
- One rack mounted Uninterrupted Power Supply (UPS)

3. Survey

The contractor will require a Site Survey at the start-up of the project in order to identify the materials required and the most feasible course of action required to effectively relocate all equipment necessary to support the new ATCT and to establish an Installation Bill of Materials (IBOM).

4. Applicable Documents

The most current revision at the time of contract award of the following documents listed in the SOW or any superseding document from a part of this SOW to the extent specified herein. In the event of a conflict between the documents referenced herein and this SOW, the requirements of this SOW shall be the superseding requirement.

- FAA-STD-19E; Lightning Protection, Grounding, Bonding, and Shielding Requirements for Facilities
- FAA-STD-020B; Transient Protection, Grounding, Bonding, and Shielding for Equipment
- MIL-STD-188-124B; Grounding, Bonding and Shielding

5. Program Management

The contractor shall designate a single program management point of contact. The contractor shall develop management plans to ensure that all elements of this effort are successfully executed within the program budgets and schedules.

6. Meetings, Reviews and Inspections

An initial site survey will be required to identify the materials necessary to complete the equipment installation. The result of this survey shall be a combined Site Survey Report (SSR) / Project Concurrence Memorandum (PCM). Additional meetings may be required once a week to discuss progress, issues and proposed solutions. These weekly meetings may be telephonic.

7. Program Tracking and Reporting Requirements

The contractor shall maintain a record of the program schedules, action items, problem areas, and problem resolutions. The contractor shall also ensure that complete financial accountability is maintained and that all Contract Deliverable actions are delivered to the Government in accordance with the CDRC requirements. The contractor shall notify the Government of program issues that may impact the execution of this SOW. This will be accomplished through an email to the customer notifying of the project status.

8. Required Tasks

The contractor shall provide the procurement, installation, engineering, and modification services consisting of:

- Installation of the IVSR provided GFE to include all hardware, software and cabling including the installation and cabling for three operator positions within the tower cab and one maintenance position in the equipment room. Movement of the IVSR requires prior coordination with and supervision of Federal Aviation Administration (FAA) personnel.

- Install 12 runs of ½ Inch Heliax Cabling to include connectors and four TACO type antennas for the 12 radios provided GFE with all associated hardware terminating at supplied antenna patch panel. Label all antenna cables (i.e. UHF/VHF and to which antenna the cable is run. Install RG-213 from Antenna Patch Panel to radios.
- Install 1 FM Radio Antenna and run antenna cable to supplied patch panel.
- Install IDF Blocks in Radio Equipment Room. Label all circuits to include the labeling of lightning protection.
- Installation and cabling for two radio racks provided GFE for the mounting of radios within the equipment room.
- Install and cable Digital Audio Legal Recorder or NVR into the equipment room along with all associated hardware and cabling.
- Install and cable FMQ-13 with two indicators in tower cab and on the wind bird.
- Design, engineer, procure and install four (4) communications consoles into new ATCT cab. The contractor shall procure and provide all new hardware and grounding to complete the consoles installation.

9. **Acceptance Testing**

The contractor shall perform operational testing of the systems affected by the newly relocated and installed equipment. The operational testing will be verified and witnessed by a government (NAVAIDS) representative. Based on the successful completion of the operational testing, a Technical Acceptance Recommendation (TAR) report will be signed by the government and the Contractors.

10. **Logistics and Acquisition**

The contractor shall develop and implement material acquisition and subcontracting action plans to ensure that material acquisitions and subcontracts in support of this effort are successfully accomplished within the program budgets and schedule constraints. The contractor shall utilize the Government Supply system as the first option for accomplishing material acquisitions in support of the effort.

11. **Subcontracts**

The prime contractor will be required to pass on to any subcontractors and vendors the same or similar requirements as levied on them by this SOW. These requirements shall flow down to the lowest tier subcontractor or vendor associated with this project as necessary during the execution of this effort.

12. **Quality Assurance**

The contractor shall assure quality through implementation of a quality program that is compliant with ISO 9001.2008. The contractor will provide the government with a Quality Control Plan accepted by the government within 30 days of contract award. Government Quality Assurance personnel will conduct contract quality assurance and surveillance IAW the Quality Assurance Surveillance Plan (QASP).

13. **Security and Safety**

The Standards that apply to contractor operations on U. S. Military Bases are those specified for the operation in question by the Federal Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA) and other Federal Regulatory bodies. The contractor does not have the legal or contractual authority to operate outside of the standards specified by regulatory agencies even if the Facility Operators have waivers approved for military and contract personnel approved by local commanders – even if the companies or other contract personnel recognize such waivers.

14. Travel

Contractor personnel or any representative of the contractor shall be required to travel to Fort Rucker, Alabama. The Joint Travel Regulations (JTR) will guide travel reimbursement.

15. Government Furnished Items (GFE)

In addition to those facilities, data, services, equipment, and materials provided under this SOW, the government shall provide the items listed in the subsections without cost to the contractor. GFE includes:

- Tower Structure
- 2 each VHF/AM transmitters AN/GRT-21
- 2 each VHF/AM receivers AN/GRR-23
- 4 each UHF/AM transmitters AN/GRT-22
- 4 each UHF/AM receivers AN/GRR-24
- 1 each FM Radio Transceiver
- Radio racks
- 1 each Rack Mounted Uninterrupted Power Supply (UPS)
- 1 each antenna patch panel
- 12 each antenna lightning protection
- 1 each AN-FMQ-13 Wind Measuring Set with bracket & two (2) indicators
- 1 each Digital Audio Legal Recorder (DALR) or NAS Voice Recorder (NVR)
- 4 each Taco antennas to accommodate the above transmitters and receivers
- 1 each FM Antenna
- 1 each Interim Voice Switch Replacement (IVSR) with positions
- ½ Inch Heliax Cable with Connectors
- Power
- Communications capability
- Storage for IBOM and tools from receipt through the culmination of the project

16. **Hazardous Materials**

Chemical products used in project performance must not contain certain Class I or Class II Ozone Depleting chemicals prohibited by contract and must not contain elements prohibited for use by the contractor (perchloroethylene and trichloroethylene).