Position Title: Telecommunications/SATCOM Engineer (Senior)

Position Location: Quantico, VA

Employment Status: Full time employee (contingent hire upon contract award)

Start Date: On/about 1 September 2022

Background: The Federal Bureau of Investigation, Critical Incident Response Group, Technical Response Unit (TRU) maintains a Network Operations Center (NOC) and IT infrastructure from its existing Quantico, VA hub necessary to allow deployed FBI personnel access to secure voice, video, and data connectivity during crisis incidents, special events, and major cases. TRU supports field offices and headquarters elements operating worldwide, both CONUS and OCONUS. TRU operates a network with redundancy and failover capabilities which operates using a variety of transports, such as satellite-based, microwave, cellular modems, and terrestrial circuits.

Position Description:

- Coordinate problem resolution procedures with TRU IT support and ET personnel.
- Installation of full satellite systems at various global locations, including both outdoor dish assembly and indoor electronic rack assembly and configuration.
- Will be responsible for activating services, ensuring satellite acquisition from the terminal, verification of signal levels, fault isolation on any performance affecting issues, repair or replacement of satellite components that are deemed faulty, and/or peaking the system to the satellite to ensure that services are providing optimal performance.
- Provide global support for satellite Operations and Maintenance (O&M) activities, i.e., periodic PMI, circuit restorations, circuit activations, circuit troubleshooting, infrastructure repair, system relocations, etc.
- Responsible for the installation, termination, and testing of cable connections that support the satellite system during an installation or O&M project. These connections consist of both fiber and copper cables.
- Responsible for the installation of conduit, ladder racks, demarcation boxes, power runs, breaker panels, breakers, and any other infrastructure needs to support a satellite installation or O&M project.
- Responsible for interpreting and utilizing satellite inter-connect (IC) drawings or wiring schematics to ensure that the system is cabled correctly between the dish and the internal electronics rack, and network management during an installation or O&M project.
- Responsible for providing effective communication of all activities, issues, concerns, and needs on a daily and/or weekly basis during a satellite installation or O&M project using formal and informal channels.
- Ensuring that all project documentation is filled out completely, grammatically correct, factual, and delivered in a timely and professional fashion. Further, the technician is responsible for communicating the details of any satellite installation or O&M activity to on-site customers before commencement and after all project activities.
- Responsible for cleaning and testing fly-away satellite terminal kits used for emergency service needs, temporary building relocation support, and disaster recovery.
- Responsible for providing site surveys that include such tasks as potential pad location, dish location, issues that may prevent proper installation of outdoor equipment, performing horizon profiles, identifying power requirements, cable distances, facility access issues, etc.

Position Qualifications/Experience:

- Minimum of 6 years of related experience.
- TS/SCI Clearance
- Must have the ability to lift, maneuver, and assemble satellite equipment of various weights and sizes.
- Must understand satellite signal flow and RF theory; additionally, the technician is responsible for maintaining satellite skills set and educational levels related to current customer satellite systems and potential emerging satellite technologies.
- General knowledge and experience regarding the X, Ka, C, and Ku-band satellite constellation.
- Working knowledge of RF theory/technology.
- Working knowledge of satellite terminal systems.
- Experience and knowledge of satellite modems, specifically including iDirect modems.
- Experience with fiber-optic transceivers and L-band inter-facility link terminals.
- Familiar with test and inspection equipment and troubleshooting techniques for satellite systems.
- The ability to operate the following types of test equipment: Bit Error Test, Protocol analyzer, Multimeter, Spectrum Analyzer, Signal Generator, and Power Meter.
- General knowledge of basic TCP/IP theory.