



DATE	APRIL 2021
JOB CODE	
FLSA	NON-EXEMPT
EEO	

JOB TITLE: Communications Technician III
 DEPARTMENT/DIVISION: Information Technology
 REPORTS TO: Communication Manager

SUMMARY: Plans and researches new technical equipment and systems, for purposes of installation, repair and purchase of new equipment. Maintains, configures, installs, and monitors radio and microwave systems. Must be able to design, program, install, optimize, maintain, troubleshoot and repair two-way radio and associated communications equipment & systems including dispatch consoles, PTP, and P25 microwave communication equipment. Oversees. schedules and monitors installation, repair and programming of subscriber units and other technology in fleet vehicles. Oversees, conducts, and monitors installations of other technology, including audio/visual equipment, wiring, security equipment, access control equipment, and other items as necessary.

ESSENTIAL JOB FUNCTIONS:

- May serve as a lead to lower level staff, which includes prioritizing and assigning work; training staff on work methods and procedures; and/or, performing other related activities.
- Keep management abreast of systems operational status and activities through periodic verbal and written status reports.
- Coordinate with customers and Department management in a methodical and professional manner to gather business requirements to enhance existing City systems.
- Provide technical leadership for establishing the best possible options for designing and deriving the best solutions based on sound analytical judgment, team input and the customers' best interest.
- Participates in the management of ongoing projects through business meetings, briefings with Department management, and document creation, maintenance, and preparation.
- Creates radio programs for operations. Maintains and repairs digital radio network. Develops complex programming scripts using L3Harris and Motorola Customer Programming Software for various radio models and features.
- Coordinates, installs, programs, monitors, maintains, upgrades, aligns, and troubleshoots handheld and mobile radios and accessories. Works with vendors and contractors on maintenance and repair of equipment due to warranty and maintenance agreements.
- Schedules and oversees work of contractors working at radio tower sites during the installation of new or upgraded equipment or software.
- Schedules work activities and tracks service calls and installations.
- Assists internal and external subscribers with service needs.
- Verifies and documents voice radio and microwave systems operation and outages.
- Analyzes performance trends in radio networks and develops resolutions to identified problems.

- Maintains active radio database.
- Performs system usage data input.
- Adds, deletes, and modifies subscribers. Sets up talk groups and runs reports.
- Coordinates with external agencies supplying user configuration, ID numbers, talk groups and network access.
- Provides engineering support on all radio system upgrades and changes.
- Ensures technical decisions comply with Federal regulations, State and local ordinances, and City administrative policies; manages, renews, and updates all FCC licenses.
- Coordinates. installs and configures technological equipment, including wiring, harnesses, computers, GPS units, docking stations, lighting, terminals, networking items, and radios in fleet units.
- Schedules, conducts, and monitors installations of other technology, including audio/visual equipment, wiring, security equipment, access control equipment, and other items as necessary.
- Attends various project, department, and City meetings as required.
- Maintain compliance with external regulatory controls, such as the Texas Department of Information Resources.
- Participates in a variety of special projects in support of departmental operations, which may include: analyzing vendor contracts; performing special studies; providing guidance and recommendations to departments to ensure organizational sustainability and maximize organizational efficiency, effectiveness, and performance; recommending cost-conscious decisions and actions; and/or, performing other related activities.
- Performs other duties as assigned, which may involve irregular work hours, including evenings and weekends.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge of Public Safety Communications radio operations and engineering management
- Knowledge of FCC and FAA regulations
- Knowledge of operational characteristics, services, and activities of a radio system program; microwave networks and RF propagation
- Knowledge and hands on experience with trunked systems, system design and hardware and software (Motorola and L3Harris) configuration support
- Knowledge of RF test equipment such as transmission impairment test sets, signal generators, RF service monitors, spectrum analyzers, and master site configurations
- Knowledge of frequency utilization, battery backup systems, base stations, repeaters, radio templates development, flash upgrading, and radio programming
- Knowledge of Public Safety communications requirements such as subscriber radios, needs and desires
- Knowledge of process improvement principles and practices
- Knowledge of disaster and business recovery practices
- Knowledge of government operations and processes
- Skilled in designing secure networks, systems, and applications architecture
- Skilled in evaluating quality and reviewing final work products
- Skilled in analyzing security processes

- Skilled in assessing cost efficiency and effectiveness of municipal operations
- Skilled in tracking service call and installations
- Skilled in identifying and solving problems
- Skilled in documenting service outages and resolutions
- Skilled in working independently or part of a team in delivering excellent customer service
- Skilled in reading and interpreting technical documents
- Skilled in applying independent judgment, personal discretion, and resourcefulness in interpreting and applying guidelines
- Skilled in reading, interpreting, applying, authoring and explaining rules, regulations, policies, and procedures
- Skilled in preparing clear and concise reports
- Skilled in gathering and analyzing information and making recommendations based on findings and in support of organizational goals
- Skilled in operating a computer and related software applications
- Skilled in communicating effectively with a variety of individuals
- Ability to communicate with users to define system requirements and resolve problems
- Ability to analyze technical problems and develop workable solutions

MINIMUM QUALIFICATIONS:

- Associate's Degree in Information Systems, Computer Science, or a related area of study
- 5 years of progressive experience in the field of microwave radio communications with extensive knowledge and hands on experience with trunked systems
- 5 years of progressive experience with digital, P25 microwave radio voice and data services, system design and hardware and software configuration support
- Security+ certification or equivalent upon management approval within 6 months of employment
- Must qualify for and maintain compliance with Criminal Justice Information Systems access requirements
- Must possess or be able to obtain and maintain a valid Texas driver's license

PREFERENCES:

- Bachelor's degree in Electrical Engineering, Information Systems or related area of study
- 5-7 years of experience in the field of microwave radio communications with extensive knowledge and hands on experience with trunked systems
- 5-7 years of experience with digital, P25 microwave radio voice and data services, system design and hardware and software configuration support
- 5 years' experience in supporting and maintaining L3 Harris radio systems
- 5 years' experience in supporting and maintaining Motorola radio systems

WORKING CONDITIONS:

- Frequent reaching, sitting, talking, seeing, hearing, and manual dexterity
- Occasional climbing, balancing, stooping, kneeling, and crouching
- Sedentary office and outdoors work environments

- Occasional lifting and carrying up to 50 pounds
- Work may be performed in a data-center environment, involving loud noise and temperature irregularity
- Work both indoors and outdoors and are exposed to cold and hot temperatures, constant noise, fume/odor hazards, road hazards, heights, and mechanical and electrical hazards.

CONDITIONS OF EMPLOYMENT:

- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.