



# CLASS TITLE | SENIOR MOBILE RADIO SYSTEM TECHNICIAN

PAY GRADE: IT-28 | [www.cityoftulsa.org/pay](http://www.cityoftulsa.org/pay)

Class Code: 3571

Effective Date : 07/13/2022

**PURPOSE OF THE CLASSIFICATION:** Under general supervision this position performs installation, maintenance, design, modification, programming and highly skilled technical repair work on land mobiles radio (LMR) systems and other electronic systems and equipment; provides training and lead direction to subordinate employees as requested by supervisor and other related assigned duties.

## ESSENTIAL TASKS:

- Performs installation, preventative maintenance, design, modification, programming, and highly skilled technical repair work, involving Very High Frequency (VHF), Ultra High Frequency (UHF), 700/800/900 MHz analog and digital systems, mobile and portable subscriber equipment, simulcast, conventional, trunked radio systems, dispatch consoles, radio recording equipment, and microwave systems
- Maintains test equipment, tools, communication towers and facilities associated with operational concerns of the City departments
- Install, diagnose, repair and return to service various electronic equipment, two-way radio repeater systems and associated subscribers and applications
- Diagnose, troubleshoot, discuss, and resolve wireless communication equipment questions and problems with customers in a positive and efficient manner
- Analyze and comprehend diagnostic test results in order to repair and program radios and wireless equipment.
- Assists other department's support personnel in trouble shooting and resolving problems
- Trains other technicians
- Maintains and updates work records and provides detailed work reports, schematics, and block diagrams
- Maintains critical database record information required for Telecommunications systems management
- Technicians will be required to be on call, which includes overtime with little or no notice.
- Reports to work on a regular and timely basis

**Reasonable accommodations may be made to enable individuals with disabilities to perform the essential tasks.**

## QUALIFICATIONS:

Training and Experience: Must meet one of the following options or an equivalent combination of training and experience per Personnel Policies and Procedures, Section 128:

1. (a) Graduation from high school or possession of a General Education Development Certificate (GED); **and**,  
(b) Four (4) years of experience relevant to the essential tasks listed in this job description; **or**
2. (a) Completion of thirty (30) hours from an accredited college or university; **or**  
(b) Completion of an approved two (2) year technical program in electronics, telecommunications technology, computer science, or a related field; **and**  
(c) Five (5) years' experience relevant to the essential tasks listed in this job description

## Knowledge, Abilities and Skills:

Knowledge of:

- Considerable knowledge of the operating principles of various types of telecommunications electronic and microprocessor-based equipment
- Considerable knowledge of testing, maintenance, installation, and repair practices of such equipment
- Considerable knowledge and understanding of two-way radio theory and communications systems



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- Considerable knowledge of radio transmitting and receiving devices, microwave, antenna systems, combiners, and ancillary equipment; experience in the support of conventional, trunking, analog, digital, and simulcast systems
- Considerable knowledge of fleet mapping strategies; ability to program, troubleshoot and perform system diagnostics on complex radio systems
- Considerable knowledge of industry standard practices with the installation, maintenance, and repair of specialized digital and analog electronic equipment; knowledge of battery backup systems, base stations, repeaters, multicouplers and duplexers
- Knowledge of both subscriber and infrastructure RF safety; ability to identify and troubleshoot problems and issues regarding radio and microwave systems

Ability to:

- Ability to apply aspects of network design
- Ability to identify and troubleshoot problems and issues regarding radio and microwave systems
- Ability to use a PC and various specialized software applications to accomplish needed tasks
- Ability to understand and influence the behavior of others within the organization, customers, or the public in order to achieve job objectives and cause action or understanding

Skill in:

- Skill in the use of complex electronic analyzing equipment such as, spectrum analyzer/service monitor to conduct Distance To Fault (DTF) sweeps, Voltage Standing Wave Ratio (VSWR) fault isolation, power (forward and reflected), and radio tuning
- Skill in networking with peers and professional organizations to ensure up-to-date information regarding advancements and best practices

Physical Requirements: Physical requirements include arm and hand steadiness and finger dexterity enough to use a keyboard and telephone; frequent lifting up to 20 pounds; occasional carrying, pushing, and pulling up to 30 pounds; may be subject to walking, standing, sitting, reaching, balancing, bending, kneeling, crawling, handling, feeling, climbing, smelling and twisting; and vision, speech and hearing sufficient to perform the essential tasks.

Licenses and Certificates: Possession of the following:

1. A valid Class "D" Oklahoma Driver license; **and**,
2. Possession of a Federal Communications Commission (FCC) General Radio-Telephone License or certification from an accredited testing agency within one (1) year from date of hire; **and**
3. Possession of an APCO (Association Public-Safety Communications Officials) technician certification within one (1) year of hire date; or
4. Possession of a Building Industry Consulting Service International (BICSI) Technician Certification within one (1) year of hire date

**WORKING ENVIRONMENT:** Working environment is primarily indoors and occasionally outdoors and in inclement weather; and requires travel to all City locations to perform installation and maintenance work.

**EEO Code: E-02**

**Group: Engineering, Planning, and Technical**

**Series: Communications Operations and Maintenance**