

## COMMUNICATIONS TECHNICIAN II

### JOB DESCRIPTION

**Classification Responsibilities:** A Communications Technician II performs skilled technical work in the installation, maintenance, repair, modification, and testing of wireless electronic and digital communications equipment, and related accessories. Incumbents install and maintain base and mobile communications units such as: mobile computer terminals, two-way voice and data radios, fire station signaling devices, handheld radios, electronic sirens, light bars, vehicle mounted Closed Circuit Television (CCTV) systems, and vehicle mounted Global Positioning System (GPS) receivers for Automatic Vehicle Location (AVL) purposes. Additional duties include personal computer (PC) data entry. Work is performed in accordance with departmental rules and regulations. Some positions require employees to climb radio towers as high as 250 feet, and to install, maintain, and remove tower subassemblies and antenna components. This class is also responsible for performing related duties as required.

**Distinguishing Features:** This class differs from the Communications Technician I class by the requirement of professional technical certification within six months of hire or promotion date, the more skilled level of technical work involved, and the more general level of supervision received. This class differs from the Communications Technician III class by the level of knowledge and experience in radio communication systems and by the level of independence in performing job duties. Employees in this class may progress through noncompetitive promotion to the Communications Technician III class by successfully meeting the specific, criteria-based promotional requirements of performance, proficiency, and certification, as well as meeting the minimum requirements of the class. This class may receive lead supervision from Communications Technician III's and receives general supervision from the Communications Services Foreman or the Communications Systems Coordinator who review work through meetings, reports, and observations of work in progress or upon completion of work. Employees of this classification may perform duties of a Communications Technician III or their supervisor due to absence. Employees in this class are required to carry a pager, respond to a pager and/or phone inquiries, and are subject to rotational stand-by and call-out duty 24-hours a day, 7 days a week (by assignment). This class is FLSA nonexempt.

### QUALIFICATIONS

**Employee Values:** All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect and Integrity.

**Minimum Qualifications Required.** Graduation from high school or GED. Any combination of training, education, and experience equivalent to a two-year course of study in electronics or electronics technology. Considerable (3 - 5 years) experience in the installation and/or maintenance of land mobile frequency modulation (FM) two-way radio and/or electronic communications systems.

**Special Requirements.** Must possess a valid Arizona Driver's License by hire or promotion date. Must possess a Federal Communications Commission (FCC) General Radiotelephone Operator License (GROL) within six months of hire or promotion date.

**Substance Abuse Testing.** Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

**Preferred/Desirable Qualifications.** College coursework, military, or other post secondary education in wireless, radio communication equipment and systems is highly desirable. Experience with PC software applications is desirable.

### **ESSENTIAL FUNCTIONS:**

**Communication:** Communicates with management, vendors, contractors, City employees and other customers to establish and maintain effective working relationships. Effectively determines what the problem is from a dialog with the person seeking service or from analysis of a written work order. Communicates actions taken to supervisor and in accordance with established procedures and expectations.

**Manual/Physical:** Performs a variety of communications installation, maintenance, modification, and repair work. Repairs electronic and microprocessor equipment, communications equipment, and electromechanical devices to maintain the City's wireless communications systems. Tests electronic components using special testing equipment. Corrects malfunctions to restore the conformance of equipment to established standards and federal regulations. Implements corrective action in mounting and installing attached equipment in vehicles. Uses a PC to manage assets, account for resources used, and control, modify, and evaluate performance of radio equipment. Enters data into a PC to prepare schematic diagrams and drawings. Performs physical inventories of electronic equipment. Distinguishes colors to identify color-specific indicator lights, wiring, and electronic components that use standard industry color codes. Performs routine maintenance and troubleshooting work on field communications equipment (varies by assignment). Operates welding equipment to fabricate custom metal brackets. Makes emergency repairs. Operates a vehicle requiring a standard Arizona Driver's License to travel to work sites in order to accomplish tasks and may operate a four-wheel drive vehicle on mountain roads. Operates various handheld power equipment and uses soldering equipment and hand tools to install and repair electronic equipment. Moves electronic equipment weighing up to 70 pounds for distances of up to 100 feet with an aid to assist to transport equipment to and from radio sites. Works at elevated levels (on antenna support structures as high as 250 feet), and in small, cramped areas. Cleans electronic equipment and work areas. Meets scheduling and attendance requirements.

**Mental:** Diagnoses various equipment malfunctions. Develops specialized testing solutions. Conducts research and analyzes test measurements and other data. Resolves a variety of installation problems. Learns job-related material through on-the-job training, self-study, and in classroom settings. Performs mathematical calculations from electronic formulas. Comprehends and makes inferences from blue-prints, equipment specifications, schematic drawings, and technical instructions regarding electronic equipment and systems.

**Knowledge/Skills/Abilities:**

Knowledge of:

commercial two-way FM and digital radio testing, repair, and maintenance procedures;  
principles of electrical, electronic, digital, and radio theory;  
the technical and operating methods, tools, equipment, and materials used in radio testing, repair, construction, and maintenance work;  
the procedures used for installing and maintaining base and mobile equipment;  
PCs for programming radios; and  
FCC rules and regulations concerning public safety radio systems.

Skill in:

the care and use of the tools and diagnostic equipment involved in installing and maintaining electronic and digital communications equipment and accessories; and  
welding custom bracket fabrication.

Ability to:

repair electronic, microprocessor, and communications equipment, and electromechanical devices;  
test electronic components with the use of special testing equipment;  
diagnose and correct communications equipment malfunctions;  
maintain and troubleshoot mobile communications equipment;  
install and relocate accessories, base radio units, and other equipment;  
develop interfaces between equipment;  
fabricate brackets for safely installing vehicle-mounted equipment;  
install and maintain vehicular mounted CCTV systems; and  
maintain and troubleshoot vehicular mounted PCs, wireless data systems, and GPS/AVL systems.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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INCREMENTS 62-200

PAY GRADE: 46

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