INFORMATION TECHNOLOGY (IT) TECHNICIAN II - RADIO

JOB DESCRIPTION

Classification Responsibilities: An Information Technology (IT) Technician II - Radio performs skilled technical work in the installation, maintenance, repair, modification, and support of communications and telecommunications equipment as well as other systems. Incumbents work on land mobile communication units such as mobile computer terminals, Automatic Vehicle Location (AVL), base stations, recorders, P25 digital trunked systems, and radio programming development; and related systems and equipment. Incumbents assist users with the evaluation, selection, acquisition, and installation of hardware, software, and communications packages, advise users in related technical areas leading to improved productivity, and assist in problem analysis and support. Incumbents circuit test, install, and maintain data communications carrier systems; set up, install, test and modify and maintain digital microwave and fiber-optic carrier equipment and systems. This class performs related duties as required.

Distinguishing Features: This class is distinguished from the IT Technician I classification by the greater level of knowledge and experience in radio communication systems, and by the higher level of independence in performing job duties. Employees may progress to this class from the IT Technician I class by meeting the specific, criteria-based promotional requirements of performance and proficiency, as well as meeting the minimum requirements of the class. This class is distinguished from the IT Technician III classification by the lesser level of knowledge in communications systems, and the lesser level of independence in performing job duties. Employees may progress to the IT Technician III class by meeting the specific, criteria-based promotional requirements of performance, and proficiency, as well as meeting the minimum requirements of the class. Work is performed in accordance with departmental rules, regulations, and unit practices. This class is supervised by a Communications Systems Coordinator, who reviews work through meetings, reports, and observations of work in progress or upon completion. Employees in this class are subject to stand-by duty and may perform the duties of a IT Technician III in their absence. Employees in this class are required to carry a cell phone, respond to phone inquiries, and are subject to rotational stand-by and call-out duty 24-hours a day, 7 days a week. 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 education, training, and experience equivalent to graduation from an accredited college or university with an Associate's Degree in a Technology field such as Electronics, Communications, Information, or related Technology field, and 3+ years of experience in the installation and/or maintenance in at least one of the following: network management, server options, routing protocols, microwave, fiber-optic, and/or electronic communications systems.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire or promotion date. For this position, an individual receiving a conditional offer of employment from the City of Mesa

must pass a background investigation through the City of Mesa Police Department, the Arizona Department of Public Safety, and Federal Bureau of Investigation prior to commencing employment with the City of Mesa.

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. Additional experience providing technical hardware and software support to local area network (LAN), wide area network (WAN), servers, and/or personal computers in a professional work environment. Possession of a Federal Communications Commission (FCC) General Radiotelephone Operator License (GROL).

ESSENTIAL FUNCTIONS

Communication: Communicates with management, vendors, contractors, and City employees to establish and maintain effective working relationships. Revises service manual diagrams and drawings to reflect changes and modifications. Prepares written documents such as installation plans, status reports, and product evaluations. May aid and instruct other IT Technicians in special maintenance procedures, the use of specialized test equipment, and any applicable policies and procedures.

Manual/Physical: Performs a variety of communications installation, maintenance, modification, and repair work. Repairs: electronic and microprocessor equipment, communications equipment, data communications, and electromechanical devices to maintain the City's radio communications, wired and wireless networks, and data carrier communications systems. Tests electronic equipment and components using special testing equipment. Corrects malfunctions to restore the conformance of equipment and systems to established specifications, standards, and federal regulations. Installs and maintains wireless equipment, and fixed, portable, or mobile end-user devices. Performs routine maintenance and troubleshooting work on field communications equipment. Makes emergency repairs, installs, and relocates accessories, base radio units, and other related equipment. Maintains records. Assists in ordering, stocking, and logging service parts. Operates a vehicle requiring a standard Class D Arizona Driver's License to travel to work sites in order to accomplish tasks and operates a four-wheel drive vehicle on mountain roads. Operates a power drill, soldering equipment, and hand tools to install and repair electronic equipment. Enters data into a personal computer (PC) to prepare schematic diagrams, tables, and drawings. Uses a PC to manage assets, account for resources used, and control and evaluate performance of various complex systems. Performs physical inventories of electronic equipment. Distinguishes colors to identify color-specific indicator lights, wiring, and electronic components that use standard industry color codes. May move electronic equipment weighing up to several hundred pounds for distances of up to hundreds of feet to transport equipment to and from radio sites with a cart or other aid to assist. Work at elevated heights on building rooftops, or antenna support structures as high as 60 feet from a bucket truck. May work in confined space areas and in a variety of weather conditions. Cleans electronic equipment and work areas. Troubleshoots, maintains, and repairs electronic reporting systems such as fire station alerting and microwave alarm systems. Meets scheduling and attendance requirements.

Mental: Diagnoses various equipment malfunctions and assists in equipment analyses including, but not limited to, LAN, WAN, server, workstation computer hardware, software-controlled systems, and telecommunications systems. Develops specialized testing solutions. Assists with the evaluation of functional capabilities of proposed new public safety systems or equipment. Assists in developing technical procedures and processes. Assists in creating and conducting technical training. Conducts research and analyzes test measurements and other data. Resolves a variety of installation problems. Troubleshoots and provides end-user support for telecommunications, information technology, wireless equipment, and fixed, portable, or mobile end-user devices. Learns job-related material through on-the-job training, self-study, and in classroom settings. Performs mathematical calculations using electronic formulas. Comprehends and makes inferences from blueprints, equipment specifications, schematic drawings, and technical instructions regarding electronic equipment and systems. Makes program modifications to CTI, computer controlled console, and other PC controlled systems in problem resolution and feature enhancement.

Knowledge/Skills/Abilities:

Knowledge of:

PCs, information technology protocols, systems, and operating systems;
cable distribution and basic principles of electricity;
telecommunications wiring standards, cable splicing, systems and equipment;
fiber optic testing and termination;
land mobile two-way radio and Internet Protocol testing, repair, and maintenance procedures;
principles of electrical, electronic, digital, radio, and information technology theory;
technical and operating methods, tools, equipment, and materials used in communications equipment testing, repair, construction, and maintenance work;
procedures used for installing and maintaining end user equipment;
use, calibration, and care of electronic test equipment;
FCC rules and regulations;
microwave theory and practices;
public address systems;
digital signal distribution architecture, practices, and protocols, including Internet Protocol;
Closed Circuit Television (CCTV) systems; and
Fire Station Alerting systems and peripheral equipment.

Skill in the care and use of the tools and diagnostic equipment involved in installing and maintaining electronic and digital communications equipment and accessories.

Ability to:

determine customer requirements, develop solutions, and order, install, and maintain systems or parts of systems which may include CCTV, Supervisory Control and Data Acquisition (SCADA), and special signaling systems involving Dual Tone Multi-Frequency (DTMF) and digital signaling techniques;
troubleshoot and repair computers, peripheral equipment, network communications equipment and electromechanical devices;
test electronic component system and equipment with the use of special testing equipment;
diagnose and correct network and communications equipment malfunctions;

maintain and troubleshoot field communications equipment;
install and align microwave and fiber-optic transmission equipment ranging from simple DS1 to complex, multiple DS3 loop systems and Internet Protocol (Ethernet) based microwave and fiber equipment and systems;
integrate off the shelf equipment for special applications;
develop interfaces between network equipment;
utilize software programs to update and create prints and drawings;
diagnose digital communications systems;
prepare and present documentation and technical training on digital and analog communications systems and associated peripheral equipment;
install and maintain telecommunications circuits and trunks;
install and maintain radio dispatch systems; and
install and maintain video surveillance 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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CLP/dv

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EEO-Tech	IND-9516
JOB FCTN-TEC	SWORN- N
Non-DOT Safety and Security-Y	Non-DOT Random/N
CDL-N	DOT-N
RESP-N	INCREMENTS 64-200