

CLASS SPECIFICATION
Telecommunications Technician

GENERAL PURPOSE

Under general supervision, performs a variety of skilled, technical duties involved in the installation, troubleshooting, maintenance, testing and repair of radio and other telecommunications systems and equipment to ensure effective, reliable and customer-focused service; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Telecommunications Technician is the entry- to journey-level class in the telecommunication class series. Initially under direct supervision, an incumbent performs a variety of telecommunications installation, troubleshooting and maintenance duties while learning the City's technology environment. As experience is gained, incumbents work under general supervision and perform the full range of assigned telecommunications duties. Assignments vary, seldom require detailed instructions, and require sound judgment and initiative.

Telecommunications Technician is distinguished from Senior Telecommunications Technician in that an incumbent in the latter class performs more complex and varied telecommunications maintenance and administration duties.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Installs, repairs and programs two-way (LF, HF, VHF and UHF) mobile and base station radios, scanners, repeater systems, microwave radio, laser optics and video systems; installs antennas, strobe lights and light bars; installs RF amplifiers, splitters and tune duplexers; installs line and network cards, circuit packs and related PBX equipment; assists with changes in network trunking, switch configuration, PBX upgrades and other system installations; installs single line telephones, facsimile machines, digital phone sets, conference speaker telephones, paging systems and associated equipment and hardware.
2. Installs and tests a variety of telecommunications network cabling infrastructure, including hybrid, fiber optic, copper, horizontal and coaxial cable; reviews blueprints and as-builts; using appropriate industry standards, constructs and installs indoor and outdoor telecommunications cable plant facilities, riser and horizontal wiring and cabling systems, including wire, cable, fiber optics, terminal blocks, patch panels, jacks, MDFs and IDFs; conducts testing of installed and terminated wire to ensure proper connectivity and transmission in accordance with applicable standards; ensures all required labeling and documentation is accurate and complete.

3. Prepares and maintains documentation and records of work requested and performed; updates as-built drawings, facilities management documents and cable plant records to reflect installations, changes or deletions.

OTHER DUTIES

1. May provide help desk support as needed.

QUALIFICATIONS

Knowledge of:

1. Basic principles and theories of electricity, electronics and computer hardware/software design as they relate to installation and maintenance of telecommunication systems and equipment.
2. Test equipment, tools and materials used in construction, installation, troubleshooting, maintenance and repair of radio and other telecommunications systems and equipment.
3. Common sources of trouble in and methods of servicing and repairing all types of telecommunications equipment and systems, including radio-telephone equipment.
4. Federal, state and local rules, regulations and guidelines applicable to telecommunications systems.
5. Current radio communication technologies including repeater systems, microwave, laser optics and associated equipment and facilities.
6. Safe work methods and practices.

Ability to:

1. Use equipment, tools, media and other materials in constructing, servicing, installing and repairing telecommunications systems, facilities and equipment.
2. Locate and trace trouble in all types of telecommunications systems and equipment.
3. Adapt established practices, procedures and principles of electrical and electronic circuitry to particular problems, conditions and service needs.
4. Understand and work from communications plans, blueprints, schematic diagrams, sketches, drawings and oral and written instructions.
5. Prepare diagrams and sketches.
6. Communicate clearly and effectively, both orally and in writing.
7. Prepare clear, concise and accurate records and reports.
8. Maintain effective working relationships with City management, staff, vendors and others encountered in the course of work.

Education, Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school or G.E.D. equivalent; and two years of experience in the installation, maintenance and repair of telecommunications systems and equipment; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

Current, valid certification in Tower Climbing Safety, RF-Safety Awareness, CPR and BICSI.

Current, valid certification or licensing in limited energy or low voltage and working in confined spaces.

Advanced trainings from one or more of the following manufacturers: NEC, Adtran, Harris, Kentrox, Motorola, Kenwood, Cisco, Avaya, Lucent or a related manufacturer.

A valid California driver's license and the ability to maintain insurability under the City's vehicle insurance policy.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is regularly required to sit; talk or hear, both in person and by telephone; use hands to finger, handle and feel computers and standard business equipment; and reach with hands and arms. The employee is frequently required to stand and walk; stoop, kneel, crouch and crawl; and climb and balance in high precarious places.

Specific vision abilities required by this job include close vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; use math/mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions, and interact with City management, staff, vendors and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee regularly works in confined workspaces and outside weather conditions. The employee frequently works near moving mechanical parts, is exposed to wet and/or humid conditions and vibration, and works in high, precarious places. The employee is regularly exposed to fumes or airborne particles, toxic or caustic chemicals, radiation and risk of electrical shock. The noise level in the work environment is frequently loud.