# **TELECOMMUNICATIONS TECHNICIAN**

#### DEFINITION

Under direction, to perform a variety of skilled installation, maintenance and repair, of the City's two-way radio, mobile data, microwave, telecommunications, and other electronic equipment and devices; and to perform related work as required.

#### **EXAMPLES OF DUTIES**

Performs a variety of skilled work in the installation, maintenance, and repair of the City's two-way radio, microwave, telecommunications, mobile data, mobile data terminals, and related electronic equipment and devices including close circuit camera, monitor, alarm, public address, light bar, and siren systems; performs systems analysis, testing, and troubleshooting utilizing electronic and computer diagnostics; performs site maintenance of 18 Ghz Digital Microwave, Multiplexer's, Channel Bank Systems; maintains power systems including back-up emergency generators, battery, and UPS devices; maintains radio systems including voted repeater and repeated base stations, simplex and direct base stations, auxiliary receiving systems, duplexer, combiner, and antenna systems; maintains and repairs Motorola CentraCom II consoles and work stations and their support systems; maintains data systems including digital base stations and terminals, modems, message switches and network control processors; (MCS), routers, switchers, and hubs; maintains LAN/WAN networking over microwave, ethernet and fiber systems; assists with ordering and maintaining a full inventory of parts required for needed repairs; fabricates electronic devices for special applications; maintains records on all radio and related equipment used throughout the City in addition to maintenance and repairs performed; assists with the design, installation, and repair of new communication and control systems; maintains the shop and work areas in a clean, orderly, and neat condition; participates in the City's Disaster Preparedness Program; may be required to work after hours and weekends.

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### SPECIAL REQUIREMENTS

Possession of an appropriate California driver's license.

Possession of requisite F.C.C. General Class License and APCO or NABER Technician Certificate.

Motorola-In-Resident Certificate or National Training School Amateur License desirable.

### **EMPLOYMENT STANDARDS**

Knowledge of:

- Principles, practices, requirements, and techniques of a wide variety of microwave and other communication equipment and electronics maintenance, installation, and repair.
- Telephone and Data Services as it relates to radio, data, and microwave systems.
- Basic theories in electronic and digital concepts.
- Basic knowledge of LAN/WAN networking over microwave, ethernet and fiber systems.
- Basic computer operations and programming.
- Tools and equipment in communication and electronic maintenance, installation, and repair.
- Applicable laws and regulations related to installation and use of radio and telecommunications equipment.
- Vehicle electrical systems.
- Proper work safety methods and procedures.

and

Ability to:

- Perform a variety of skilled installation, maintenance, and repair work on two-way radio, telecommunication, and electronic equipment.
- Perform diagnostic testing using a variety of electrical and electronic testing devices.
- Program changes utilizing DOS and windows software.

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#### EMPLOYMENT STANDARDS (cont.)

- Read and understand technical schematics, manuals, and drawings.
- Work unusual hours or shifts as necessary.
- Maintain records and prepare reports.
- Effectively represent the City's communication functions with concerned individuals, community organizations, and other governmental agencies.
- Establish and maintain cooperative working relationships.
- Communicate effectively orally and in writing.

#### and

Training and Experience: Any combination of training and experience which would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Graduation from a two year certificate program from an accredited college, trade school, or military technical and electronics school or communication in two-way radio, telecommunication, and/or electronics.

Work Background: Five years of responsible skilled work in two-way radio, telecommunication, and electronic equipment installation, maintenance, and repair work.

August 1992 September 1997 (Res. 97-105) March 2000 (Res. 00-18)