County of El Dorado May 2012

TELECOMMUNICATIONS TECHNICIAN I/II

DEFINITION

Under general supervision, install, maintain, modify and repair telecommunications equipment and systems including radio or telephone equipment and systems depending upon assignment, as well as related microwave, voice and data terminals, switching and control systems, and audio and video equipment.

DISTINGUISHING CHARACTERISTICS

The Telecommunications Technician I is the entry-level class in the Telecommunications Technician series. This class is distinguished from the journey level by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters allocated to the journey level. Employees work under immediate supervision while learning job tasks.

The Telecommunications Technician II is the full journey level class within the Telecommunications Technician series. This class is distinguished from the Telecommunications Technician I by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the entry level.

EXAMPLES OF DUTIES (Illustrative Only)

- Install, maintain, modify and repair telephone or radio communications equipment and systems, as well as related peripheral equipment.
- Respond to service/repair calls or maintenance alarms; investigate, analyze and diagnose the
 operation and performance of electronic, radio and wire systems and equipment; and initiate action to
 optimize system/circuit effectiveness.
- Monitor the installation and servicing of equipment provided by contractors; provide coordination between County departments or agencies and the local telephone company for activation and restoration of services.
- Provide training to personnel of customer departments on the use and features of telecommunications equipment and systems.
- Assist in the preparation and maintenance of specifications for telecommunications equipment and systems.
- Perform record keeping and reporting for maintenance administration.
- Perform research on diagnostic and traffic data as well as equipment.
- Assist customer department personnel by responding to telephone inquiries.
- Clean switch rooms and equipment.
- Assist in the maintenance of the parts/equipment inventory.
- Build and maintain positive working relationships with co-workers, other County employees and the public using principles of good customer service.
- Follow County policies and procedures.
- Attend meetings and training, as directed.
- Work in a safe manner at all times.
- Perform related duties as assigned.
- Perform PBX backups, alarms checks and daylight savings time change functions.

- Maintain tele-management and voice management system including daily, monthly and quarterly preventative maintenance.
- Work with vendors on new PBX installations.
- Perform moves, additions, and changes.

QUALIFICATIONS

Knowledge Of:

Telecommunications Technician I

- Telecommunications systems, PBX and key telephone systems and basic telephony, as well as voice and data processing.
- Public address systems, closed circuit television and the theory and operation of a 911 emergency telephone and dispatch system.
- Principles and practices of installing, maintaining and repairing digital and analog telecommunications equipment and systems.
- Equipment, tools, instruments and materials used in the installation, maintenance and repair of telephone equipment.
- Use of operation, configuration and set up communications equipment and of diagnostic equipment.
- The construction, repair and operation of electronic telephone equipment, depending upon assigned area of responsibility.
- Networks, test equipment, computerized tele-management systems.
- Principles and practices of work safety.

Telecommunications Technician II

- The proper use of precision electronic and electrical measuring instruments and devices used in the diagnosis and servicing of radio and wire telecommunications systems and equipment.
- PBX networking.
- Rules and regulations of the Federal Communications Commission (FCC) pertaining to County telecommunications systems and equipment.
- Depending upon assignment, the theories of digital electronics and radio frequencies.
- Personal computer based hardware and software used in maintenance and repair of the telephone equipment.

Skill In:

- Identify and locate equipment; interpret work orders; remember equipment operation and location; and explain jobs to others.
- Intermittently, sit at a desk or while driving; stand and walk while performing installation and
 maintenance activities; bend, kneel, squat and twist to adjust equipment; climb ladders or towers; or
 climb up on to heavy equipment to inspect and conduct installation, maintenance and repair
 operations; perform simple and power grasping, pushing, pulling and fine manipulation; and lift heavy
 weight.
- Learn rules and regulations of the Federal Communications Commission (FCC) pertaining to County telecommunications systems and equipment.
- Learn to organize and manage multiple projects and develop monitoring, back up and re-start procedures.
- Read and comprehend technical reports and diagrams.
- Differentiate various colors of wires and diagrams and use a variety of tools.
- Prepare and maintain technical records and reports.

- Read and interpret electrical and electronic schematic and wiring diagrams and service manuals.
- Concentrate, analyze and diagnose technical problems and provide effective, reliable solutions.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Work with various cultural and ethnic groups, customers, co-workers and supervisors in a respectful, tactful and effective manner.
- Understand and follow written and oral instructions and effectively communicate orally and in writing.
- Maintain and repair a wide variety of equipment brands, including both new and old technologies.
- Program and maintain a variety of brands of PBX and electronic key systems.

Other Requirements:

Must possess a valid driver's license. Individuals who do not meet this requirement due to physical disability will be reviewed on a case by case basis. May be required to work on-call, weekends and irregular hours. Applicants must pass a criminal history and background check which may include contact of prior employers and personal references, and fingerprinting for purposes of searching local, state and national fingerprint files through the Department of Justice and Federal Bureau of Investigations to disclose any criminal record.

Education and Experience:

Where college degrees and/or college course credits are required, degrees and college units must be obtained from an accredited college or university. Courses from non-accredited institutions will not be evaluated for this requirement

Telecommunications Technician I: Equivalent to an Associate's degree from an accredited college with major course work in telecommunications systems, electronics technology, electrical engineering, communications technology or a related field, <u>AND</u>: one year of experience working with telecommunications equipment and systems, including the installation, maintenance and repair of telephone, audio, video or radio communications equipment and systems.

Telecommunications Technician II: In addition to above, two years of increasingly responsible experience working with telecommunications equipment and systems, including the installation, maintenance and repair of telephone, audio, video or radio communications equipment and systems similar to the Telecommunications Technician I with El Dorado County.

NOTE: The above qualifications are a typically accepted way of obtaining the required knowledge and skills.