

SENIOR COMMUNICATIONS TECHNICIAN

DEFINITION

Under general supervision, to evaluate, recommend, install, maintain, repair, modify, and monitor a variety of complex electronic equipment and to do other work as required. May assign work, train and give lead supervision to communications technicians, specialists, installers and others.

Work assignments will typically be in one of four major areas.

Radio Equipment - Fixed and mobile radio transmitters and receivers, pagers, portable radios, radar and mobile data equipment.

Microwave Equipment - Microwave RF and multiplex equipment.

Sound and Video Equipment- Sound reinforcement equipment, intercommunications, security alarms, recording and dictating equipment, video cameras and monitors, and public address equipment.

Computer Equipment - Computers, monitors, printers, modems, multiplexors and other peripheral devices.

CLASS CHARACTERISTICS

This is a working lead class in the communications technician series. Incumbents frequently are assigned as leadworkers over communications technical staff in a shop or on a project basis.

Incumbents work with a minimum of supervision on complex and sophisticated equipment and are expected to resolve extraordinary technical problems.

EXAMPLES OF DUTIES

1. Reviews work priorities, assigns, trains and give lead supervision to communications technical staff; makes recommendations on performance evaluation and disciplinary actions; keeps supervisor informed of work status and problems.
2. Individually and as a team leader, installs, maintains, repairs and adjusts electronic equipment including AM and FM mobile and fixed radio transmitters, repeaters and receivers, video equipment, digital equipment, intercoms, alarm systems, sound systems, microwave equipment, control consoles, mini/microcomputers, computer peripheral devices and other electronic equipment.
3. Meets and works with representatives of County and city departments/ agencies, equipment vendors and contractors.
4. Prepares records, logs and reports on work performed by section; maintains technical information files on existing equipment and new systems installed.

5. Analyzes complex electronic equipment problems using test equipment such as multimeters, wattmeters, oscilloscopes, radio service monitors, spectrum analyzers, audio signal generators and a variety of hand tools. Recommends equipment be repaired in-house, by outside vendor or replaced.
6. Assists communications technical staff in analyzing and resolving complex electrical, electronic and structural communications equipment problems.
7. Designs, builds or modifies electronic circuitry and equipment used in County communications systems; assists in the development, planning and construction of new communications systems.
8. Drives vehicles to various shop or field locations to install, service and repair communications equipment.

MINIMUM QUALIFICATIONS

Thorough Knowledge of

Principles, techniques, methods, test equipment and tools used in the installation, maintenance, repair, modification and fabrication of communications and other related electronic equipment and Systems.

General Knowledge of

Training and supervising technical staff.

Digital and logic circuitry used in computers and other equipment.

Principals of electronic systems design and operation.

FCC regulations applicable to governmental communications (radio or microwave assignment).

Ability to

Supervise, train and evaluate the work of communications technical staff.

Instruct subordinates on work methods, departmental policies and procedures and safe work practices.

Establish and maintain effective working relationships with other County and city staff, electronic contractors, vendors, and members of the general public.

Install, maintain, troubleshoot, repair, modify a variety of communications and electronic equipment and Systems.

Estimate labor and materials costs and make decisions relating repair or replacement.

Read and interpret instructions in technical manuals, and specifications including circuitries, schematics and symbols; read blueprints.

Initiate, plan and complete work assignments with a minimum of direction and control.

Prepare records, logs and reports on work performed.

Education/Experience

Completion of a training course in electronic theory and practice including Ohms Law, AC and DC theory, audio and radio frequency circuits, electronic measurements, semiconductor fundamentals and mathematics for electronic technology.

AND

Three years of experience in the maintenance and repair of electronic communication equipment that developed the knowledges and abilities listed above.

License Required

Possession of a valid general radio telephone operator license, issued by the FCC (for radio and microwave assignments).

Possession of a valid California Driver License, Class 3 or higher, by date of appointment.

Physical Qualifications

Some work assignments may require climbing 100 foot towers; other assignments may require lifting and moving of heavy equipment and components.

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