CLASS SPECIFICATION

6/28/07 SENIOR COMMUNICATIONS ELECTRICIAN, 3638

**Summary of Duties:** Performs skilled work in the installation, construction, repair, maintenance and modification of electronic monitoring and control system, video systems, medical equipment, avionics systems, communications systems including radio, SCADA, radar, signal, telephone, telemetering, microwave, fiber optic, local/wide area networks, data transmission, and associated systems and equipment; or supervises a small group of employees engaged in such work; and does related work.

**Distinguishing Features:** Employees in this class are concerned with the electronic, electrical and mechanical phases of a variety of monitoring, control and communications facilities such as fire dispatch and signal systems; fire, police, and other private City telephone systems; radio television, radar, paramedic, avionics, SCADA, fiber optic, telemetering, microwave, data transmission and control systems, local/wide area networks, and associated equipment. Much of the work is performed in the field and in proximity to energized equipment and may occasionally involve the hazard of climbing poles and working from ladders or aerial lift trucks. Incumbents may be required to work on a 24-hour rotating shift basis and in areas outside of the City.

A Senior Communications Electrician, in addition to performing the above work, supervises a small group of Communications Electricians.

**Example of Duties:**

- Supervises and works with a small group of Communications Electricians and helpers;
- Assigns and schedules maintenance and construction work;
- Reviews work orders, layout, and wiring diagrams to determine the need for equipment and materials and to become aware of potential problems;
- Prepares requisitions and initiates orders for materials and supplies not normally carried in stock;
- Determines that tools, supplies, and equipment are available as needed on work assignment;
- Coordinates the work of Communications Electrician crews when such work involves other communications crews, other City departments, the telephone company, and other jurisdictions, contractors, and vendors;
- Tests and inspects equipment and lines for proper installation and conformance to specifications and instructions;
- Makes field maintenance checks to determine system performance;
- Prepares sketches and diagrams of installation layouts;
- Makes special tests to determine response and delay characteristics of data transmission channels and adapts equipment and lines to meet emergency conditions;
• Recommends system and service improvements;
• Prepares work and supplies records;
• May drive automotive equipment to transport tools, supplies, and employees to job locations; and
• May occasionally be assigned to other duties for training purposes or to meet technological changes or unexpected emergencies.

Qualifications:

Knowledge of:
• Principles of electricity and electronic theory relating to signal, control, telephone, telephone carrier, radio, video, teletype, noise monitoring, public address, telemetering, microwave, radar, avionics, paramedic, and data transmission systems and electronic test equipment;
• Common sources of trouble in, and the methods of servicing and repairing all types of control, signal, public address, telemetering, teletype, telephone, noise monitoring, microfilm, microwave and other data transmission, radar, radio, video, avionics and medical systems and equipment;
• Test equipment, tools, and materials employed in the construction, servicing, installation, and repair of such systems and equipment;
• Tools and equipment employed by line workers;
• Safety precautions and hazards involved in working on or installing energized lines and equipment;
• Federal Communications Commission regulations pertaining to the operation and maintenance of public safety and industrial radio services communications systems;
• Laws and regulations relating to equal employment opportunity and affirmative action;
• Principles of supervision;
• Memoranda of Understanding as they apply to subordinate personnel; and
• City personnel rules, policies and procedures.

Ability to:
• Locate and trace trouble in all types of electronic control, signal, public address, radio, video, telephone, telephone carrier, teletype, microwave, noise monitoring, microfilm, telemetering, and data transmission systems, radar, avionics, paramedic equipment, electronic test equipment and related equipment;
• Use electronic test equipment, tools, and materials, employed in constructing, servicing, installing, and repairing such systems and equipment;
• Adapt established practices, procedures, and principles of electrical and electronic circuitry to particular problems, conditions, and service needs of such systems and equipment;
• Deal tactfully and effectively with officials and the public;
• Keep records and make reports;
• Understand and work from communications plans, schematic diagrams, and other sketches and drawings, and oral and written instructions;
• Prepare diagrams and sketches;
• Climb poles and antenna towers; and
• Supervise subordinates.

**Requirements:** Two years of full-time paid experience in a class at least at the level of a Communications Electrician engaged in the construction, installation, operation, repair, maintenance or modification of electronic communication systems.

**License:** A valid California driver's license may be required.

A valid General Radiotelephone Operator’s License issued by the Federal Communications Commission is required for most of the positions in the class of Senior Communications Electrician.

**Physical Requirements:** Strength to perform lifting up to 25 pounds and occasionally over 50 pounds; hand and finger dexterity with both hands; and good eyesight and hearing.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonably accommodate the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties and responsibilities, and required qualifications of any position shall be.