



JOB TITLE:	COMMUNICATIONS & ELECTRONICS SUPERVISOR	DIVISION:	BRIDGE
REPORTS TO:	ELECTRICAL SUPERINTENDENT	EEO CATEGORY:	03 - TECHNICIAN
FLSA:	NON-EXEMPT	SAFETY-SENSITIVE:	YES
CLASSIFICATION:	NON-REPRESENTED	LOCATION:	SAN FRANCISCO

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

Position Summary

Under general direction of the Electrical Superintendent, is responsible for the installation, maintenance, testing, repairing, planning, organization, ordering and directing of District electronic, telecommunication, video and communications equipment. Supervises a group of Professional Communication technicians engaged in a wide variety of Communications/Electronic projects. Performs system design and layout, prepares technical reports, exercises work direction over technicians involved in maintaining complex commercial electronic systems, prepares and maintains parts and equipment inventories, keeps appropriate service records and performs related duties as required.

Essential Responsibilities

- Supervises employees and performs installation, maintenance and repair of complex radio communications and electronics equipment, including mobile two-way radios and base stations, radio control consoles, microwave radios, microwave multiplex equipment, electronic traffic controls, remote controls, selective signaling devices, traffic management and security video camera systems, updating communication and video systems software and firmware when applicable, electronic security equipment, fire alarm panels, network equipment, etc.
- Develops and directs preventive maintenance program for District electronics equipment; prepares maintenance schedules; directs activities of subordinate personnel in order to meet schedules.
- Installs, maintains and repairs electronic network equipment, data communications equipment and computer peripheral equipment.
- Designs, installs and maintains the following: District in-house telephone cable system; District in-house fiber optic cable system including terminating and splicing fiber optic cable; and District security equipment including building security alarms, access control and video surveillance.
- Mentors and provides staff development opportunities to assigned personnel.
- Trains, develops, and evaluates technicians.
- Designs and constructs electronic, electro-mechanical and communication equipment for unique applications when commercial, off the shelf solutions may not be available.



- Calibrates and adjusts equipment to industry standards using state of the art test and measuring instruments including, but not limited to, selective voltmeters, transmission test sets, spectrum analyzers, frequency meters, power meters, signal generators, oscilloscopes, communications service monitor, fiber optic test sets, etc.
- Prepares and updates inventory list of all District electronic equipment; prepares inventory of parts needed for preventive maintenance program, replacements and future installation; submits requisitions to order parts and recommends vendors; checks parts received to verify correctness.
- Checks and repairs District microwave equipment.
- Keeps records of all maintenance and repair actions performed; prepares technical reports to meet FCC requirements.
- Acquires and updates manufactures' specifications on all electronics equipment to increase maintenance and repair efficiency.
- Responsible for maintenance and updating of District Satellite Phones.
- Instructs others and provides technical direction in maintenance, repair and installation of equipment.
- Prepares bid specifications for purchase of new equipment, inspects new equipment and installations for conformance to specifications.
- Coordinates maintenance of District-leased lines with third party providers.
- Isolates electronic system malfunctions; repairs electronic systems.
- Stay abreast of new technology in telecommunications, data communications and 2-way and cellular communications.
- Confers with outside agencies, consultants, contractors and the involved community concerning communication activities and video projects.
- Knows and follows the safety and health rules and safe working practices applicable to his or her job.
- Establishes and maintains effective working relationships with District employees, customers, vendors and all others contacted during the course of work using principles of excellent customer service.
- Performs additional related duties as assigned.
- Regular and reliable attendance and performance is required.

Required Knowledge, Skills and Abilities

Working Knowledge of:

- Occupational health and safety rules and working practices applicable to this position.
- Solid state electronic circuits and components.
- Wireless communications technologies including terrestrial microwave, two-way radio and P25 digital trunking radio systems.
- Networking knowledge including familiarity with routers and switches a plus. Programming language is a plus.
- Modern administrative and supervisory principles and techniques.



Skill in or Ability to:

- Using common hand and power tools including drills, hammers, electric saws, etc.
- Operate common test equipment such as analog and digital VOMs, RF and AF frequency counters, volt-ohm meter, ammeter, microwave power meter, calibrators, etc.
- Operate a four-wheel drive vehicle on steep terrain.
- Operate a boom truck, scissor lift and forklift.
- Organize, coordinate and direct installation and maintenance activities.
- Use Autocad Visio software for drawing schematic diagrams and equipment layout, and design review.
- Communicate and get along well with others.
- Use computer with Microsoft Office Suite products (Word, Excel, Outlook, and Powerpoint).
- Use District Maximo application and knowledge in Lenel-S2.
- Enforce District Policies when applicable.

Minimum Qualifications

Education and/or Experience:

- Advanced electronics training from an accredited school or equivalent experience; additional position related experience may be substituted on a year for year basis (a written statement detailing experience must be submitted at time of application).
- Five years of full-time position related electronics experience including two-way radios, microwave equipment, security video and some design experience; or equivalent combination of education and experience.
- Two years of supervisory experience preferred.

Required License:

- Must possess and maintain a current and satisfactory driving record. No reckless driving and DUI within the last 7 years. No more than 2 moving violations within the last 3 years. Operates District vehicles on a regular basis.
- CC General Class Radio Telephone License a plus.

Hours of Operation: Subject to 24-hour call back. Must go to all District locations, including Ferry and Bridge towers, piers, mountain tops, etc.

Physical Requirements: Must be available for emergency repair callbacks. Must be able to work outside in inclement weather. Must be able to bend and crawl in small areas to install security equipment requiring bending and reaching. Lift up to 50 pounds. Climb on bridge main cables, radio antenna towers and structural steel up to 200 feet. Exposure to exhaust fumes, noise and sharp edges. May encounter reptiles and spiders at remote radio sites including some venomous species.