

CITY OF BELLINGHAM

JOB DESCRIPTION

JOB TITLE: Communications & Electronics Manager

UNION: 231

SG: 8

DEPARTMENT: Public Works, Operations

CS: N

FLSA: N

EEO4CODE: PR

JOB SUMMARY:

Manages, directs, supervises, and coordinates County wide Public Safety Communications infrastructure including enhanced 911 capabilities, two-way radio systems, Prospect Fire/EMS Communications Center, WhatComm Law Enforcement Communications center, Western Washington University Communications Center, Whatcom Transportation Authority and all peripheral electronic and telecommunications equipment related to First Responder safety and deployment. Supervises shop and field electronics technicians and specialists in all aspects of work, including recommending hiring and disciplinary actions. Advises and assists Transportation/Facilities Superintendent and other Communications Center Directors in the analysis, planning, development and implementation of telephonic and radio communications for the purpose of providing rapid and appropriate law enforcement, fire, transit and municipal services and information to the public. Coordinates the diagnosis, repair and installation of fixed and mobile communications equipment for outside agencies such as the Cities of Blaine, Lynden and Sumas, Saint Joseph's Hospital, Whatcom County Public Works and Sheriff's Office, Washington State Patrol and various fire districts throughout Whatcom County.

SUPERVISORY RELATIONSHIP:

Reports to the Public Works Superintendent of Transportation/Facilities. Works under general supervision in carrying out assignments under City, department and division policies and procedures, and applicable federal, state and local regulations. Supervises Communications Electronics Specialists and Technicians. May supervise temporary workers, consultants and maintenance mechanics as assigned.

ESSENTIAL FUNCTIONS OF THE JOB:

1. Plans, organizes, assigns work, supervises and reviews the performance of subordinates in the installation, modification, testing, repair and maintenance of all mobile, portable, and fixed communications equipment utilized by various municipal, police, fire, university, health care and transit agencies throughout Whatcom County.
2. Directs, coordinates and reviews work plans for public safety communications providers, monitors work flow, reviews and evaluates work products and performance, identifies and resolves deficiencies.
3. Participates in the development and implementation of goals, objectives, policies and priorities to identify opportunities for improving public safety communication services; identifies resource needs; reviews with appropriate management staff and implements improvements.

4. Oversees, directs and participates in the development and administration of the assigned annual budget; participates in the forecast of funds needed for adequate staffing, equipment, materials and supplies; monitors expenditures and implements adjustments.
5. Works closely with Communications Center Directors and end users to identify deficiencies or desired upgrades; then researches, analyzes and evaluates complex and technical telecommunication, radio and electronics equipment to make recommendations for the equipment and implementation that will best resolve their issues.
6. Recommends hire, trains, motivates and evaluates assigned personnel; provides and coordinates staff training; works with employees to correct deficiencies; initiates disciplinary and termination procedures in conjunction with management.
7. Serves as a liaison to various City and external agency boards, commissions and committees; helps negotiate and mitigate sensitive interoperability communication requirements of the various entities providing public safety and emergency services throughout the county. In the event Public Works staff are subpoenaed, may testify as an expert in court.
8. Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of public safety communications, two-way radio, cellular and wireless data communications.
9. Provides advice and technical assistance for emergency communication needs to the City and County Departments on the special conditions and operating requirements that would be imposed in the event of a catastrophic disaster.
10. Interfaces with vendors selected by outside agencies that may be incorporating new equipment and technologies into the County Wide communications network in order to interface those capabilities with the Dispatch Centers; all in an effort to coordinate and improve service delivery to public safety responders.
11. Develops and researches programs for the integration of diverse existing wireless, microwave and fiber optic systems throughout the City of Bellingham and Whatcom County to support First Responders throughout the region.
12. Performs telecommunication designs and layouts, prepares technical reports, prepares and maintains parts and equipment inventories and keeps appropriate records.

ADDITIONAL WORK PERFORMED:

1. Works with Fire and Police Departments to coordinate and manage emergency operations through the Emergency Operations Center to ensure that the Center is organized for maximum communications interoperability.
2. Coordinates with the Federal Communications Commission (FCC) to ensure compliance with all assigned frequencies and regulations.
3. Performs highly technical skilled duties for on-call assistance or declared emergencies.
4. Performs other related work of a similar nature or level.

PERFORMANCE REQUIREMENTS (Knowledge Skills and Abilities):

Knowledge of:

- Advanced knowledge of radio system operations, including repeater and microwave functions, as well as computerized trunked systems.
- Principles, applications and physics of analog and digital electronics, microprocessors, amplifiers, antennas, copper and fiber transmission lines, land mobile radio frequencies, microwave, multiplexing, data circuits and systems.
- Federal Communications Commission (FCC) regulations pertaining to land mobile radio systems, licensing, transmission power, radiated power, modulation limits and spurious radiation.
- Installation and removal of emergency public safety equipment such as mobile data terminals, power supplies, radios, lights, sirens and antennae in all types of fleet vehicles including land, air and water.

Skill in:

- Using electronic test equipment (e.g. spectrum analyzer, service monitors, time domain reflectometers, field strength meters, digital and analog meter displays, etc.) to diagnose telecommunications equipment problems and effect repairs, or to ensure proper performance.
- Reading and comprehending technical shop manuals, manufacturer's specifications, and troubleshooting guides used in the installation and repair of mobile communication equipment.

Ability to:

- Communicate effectively and establish positive and productive relationships with co-workers, managers, customers, contractors and suppliers.
- Apply technical solutions to day-to-day problems in an emergency management-focused environment with a thorough understanding of both customer and technical issues to promote cooperation in a stressful environment. Includes ability to research, understand and interpret to others information in complex technical manuals, blueprints, legal codes, drawing, schematics, etc.
- Demonstrated ability to identify and serve customers through excellent written and oral communication skills to interact effectively with diverse groups of people.
- Exercise strong management skills including planning and organizing, problem analysis and decision-making, management control, time management, leadership, interpersonal sensitivity and relationship building to provide for enhanced levels of excellence.
- Accept "on-call" status and respond to off-hours situations and perform weekend and evening assignments in critical or emergency situations.
- Lead and respond effectively in emergency, hazardous, or other high stress circumstances.
- Maintain consistent and punctual attendance.
- Ability and willingness to demonstrate the Public Service competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Physically perform the essential functions of the position, including but not limited to:
 - Perceive the full range of vision color spectrum;
 - Operate hand tools in inclement weather;
 - Transport tools and equipment in excess of 50 pounds over uneven terrain.

WORKING ENVIRONMENT:

Work is performed primarily indoors in an office and shop environment but also includes outdoor work and visits to tower site locations to inspect and review work performed by City personnel, contractors, and other persons. Hazards are infrequent but may include extreme temperatures, heights and exposure to electric voltage. Minimal business travel is required.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Bachelor's degree in electrical engineering, information technology/telecommunications, or similar, and;
- Four (4) years work experience in telecommunications or electronics technology, two (2) of which must be in a lead or supervisory role in the component level repair and maintenance of two-way radio systems.

Or

- Successful completion of post secondary vocational or occupational training from a recognized public or private school or Armed Forces Service school, and;
- Eight (8) years work experience in telecommunications or electronics technology, two (2) of which must be in a lead or supervisory role in the component level repair and maintenance of two-way radio systems.
- An equivalent combination of education and experience sufficient to provide the applicant with the knowledge, skills and ability to successfully perform the essential functions of the job will be considered.

NECESSARY SPECIAL REQUIREMENT:

- Valid Washington State driver's license and good driving record. A three-year driving abstract must be submitted at time of hire.
- Must be able to respond to after hours emergency call-out within thirty (30) minutes time by phone, and be able to respond in person if necessary within two (2) hours time.
- National Crime Information Center (NCIC), Federal Communications Commission (FCC) General Class License, Personal Communications Industry Association (PCIA) or Association of Public-Safety Communications Officials (APCO) certifications required within three (3) years of hire.
- Employment contingent upon passing a criminal conviction and local background check.

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