



Title:	Radio Communications Technician
Division:	Technical Support
Reports To:	Radio Systems Technical Manager
Status:	Fulltime, Non-Exempt
Date:	January 2023
Salary:	\$5,855.48 – \$6,778.45/ monthly

JOB SUMMARY:

RiverCom is a multi-jurisdictional designated Public Safety Answering Point (PSAP) that provides emergency call-taking and dispatch services for law enforcement, fire districts and departments, and public and private ambulance services in Chelan and Douglas counties.

The position of Radio Service Technician is a full-time, non-exempt position that reports to the Radio Systems Technical Manager. The Radio Service Technician ensures the availability of two-way communications to all RiverCom user agencies, which may involve origination, design, fabrication, adjustment, repair, and/or replacement of systems, circuits, and components as directed. The Radio Service Technician is generally responsible for the maintenance of RiverCom's user communications systems hardware. Responsibilities include, but are not limited to, the repair of existing radio transmitting and receiving equipment, maintenance of backup power systems, console equipment, and other electronic devices. Assist with gathering documentation and management of capital facilities, and associated assets, resources, and related information.

KEY AREAS OF RESPONSIBILITY AND ESSENTIAL JOB FUNCTIONS:

The key areas of responsibility and essential job functions of the Radio Communication Technician includes, but is not limited to, effective and successful work performance in the following areas:

- Assists with the installation of two-way mobile, base station, repeater control, and repeater site radio communications equipment at fixed sites throughout the region.
- Assists with the installation of radio site antenna systems, wireline carrier equipment, emergency power generators, coaxial cable, and ancillary equipment.
- Performs frequency and audio-level tests on radio equipment. Troubleshoots problems and develops solutions.
- Performs routine maintenance, modifications, troubleshooting, alignments, and repair of highly integrated microprocessor-controlled analog conventional radio systems with digital encryption and digital radio systems with digital encryption, base stations, repeater controls, repeaters, two-way mobile and portable radios.
- Locates, diagnoses, and corrects malfunctions occurring in base stations, portables, mobiles, multiplex equipment, auxiliary power equipment, microprocessor-based radio dispatch consoles, pagers, amplifiers, antennas, cables, and electrical systems.
- Maintain and troubleshoot mobile communication systems in vehicles used by the user agencies including police pursuit vehicles, SUVs, light trucks, motorcycles, and various specialty vehicles used for ADAT, K-9, SWAT, Bomb Unit, Executive Protection Unit, and other specialized units.
- Uses conventional and specialized test equipment, hand tools, schematic diagrams, design drawings, manuals, and personal knowledge to modify, troubleshoot, align, and repair electronic equipment.

- Perform critical alignment, complete operational testing, programming, and initial troubleshooting of malfunctioning VHF two-way radio communication systems, antennas, coaxial cables, microprocessor-controlled siren, and emergency lighting systems using electronic test equipment including portable and desktop personal computers, digital multi-meters, and standing wave ratio meters.
- Acts in a quality control capacity to ensure outfitted vehicles comply with Federal Communications Commission regulations and RiverCom 911 standards.
- Makes recommendations as directed to member agencies for improving and maintaining their radios and radio systems in keeping with the goals and objectives of RiverCom.
- Documents and maintains appropriate records for preventative maintenance programs. Updates and maintain inventory systems and necessary databases.
- Creates and updates technical reports, vehicle assignment records, and inventory forms. Opens and closes work orders. Prepares and maintains work records and estimates for materials.
- Provide assistance to the Radio Systems Technical Manager for procurement, improvement, and upgrade of equipment, replacement of repair parts, and cost estimates for associated systems.
- Maintains service parts listing and inventory, radio equipment inventory, and capital inventory related to RiverCom radio systems.
- Prepares and maintains various computer and paper records for radio licensing, systems maintenance and operations, work logs, and programming history.
- Provide ground-level assistance to tower technicians to install, troubleshoot, and repair base stations, repeaters, controls, and microwave antennas and transmission lines.
- Drive vehicles as assigned to perform installations, troubleshoot, and repair equipment at locations throughout the state as needed.
- Effectively plans and organizes work, meets deadlines, and completes tasks within prescribed timeframes.
- Conducts work in accordance with RiverCom Administrative Policy and Procedure.
- Adheres to high-level and strict confidentiality standards while maintaining the security of equipment, programs, data, and information, including when dealing with sensitive or protected information.
- Interact with supervisors, customers, and vendors to schedule and perform work. Provide technical guidance and instruction to other agencies, technicians, or vendors. Provide technical instruction in the use and function of all installed equipment issued to user agency personnel and other groups. Clean and prepare turned-in vehicles for reissue.
- Provides leadership and works constructively in group problem-solving situations and as a representative of RiverCom.
- Effectively communicates technical information in both technical and non-technical ways during formal and informal meetings.
- Works a regularly scheduled 40-hour per week schedule, with the ability to extend or adjust work hours on short notice as needed.

- Respond on short notice to RiverCom, user agencies, or other sites to assist with emergent technical problems.
- Works evenings and weekends as may be required for meetings, cut-overs, and emergency recall for essential system problems, failures, significant events, or training.
- At the discretion of the Radio Systems Technical Manager, provides 24/7 callout in response to emergency repair of essential telecommunications and/or electronic communication.
- Attends training, conferences, workshops, seminars, and manufacturers' schools regarding specific equipment as assigned.
- Adheres to and applies all health and safety requirements as outlined in RiverCom's Policy and Procedures, and in compliance with State and Federal Laws.
- Performs other duties as assigned.

TYPICAL WORK ENVIRONMENT:

Approximately fifty percent (50%) of work will be performed at user agency locations in a window-less office environment under artificial lighting, and sometimes reduced lighting. Other work is performed in alternate locations such as at outdoor radio sites which may include working in adverse weather conditions. Other conditions apply as follows:

- Required to follow RiverCom code of conduct and dress code policies.
- RiverCom is a non-smoking workplace; the use of any tobacco products or simulated smoking devices of any type is strictly prohibited in the facility and at work sites.
- Weapons are strictly prohibited within the facility, and on the premises.
- There is no expectation of privacy, the Freedom of Information Act applies to all transactions performed by RiverCom employees, all automated and some verbal transactions are recorded, archived, and available to the public by request. Also, any and all information stored in and/or on RiverCom devices, computers, laptops, cell phones, radios, equipment, etc is subject to periodic unannounced review and inspection at any time by management.

PHYSICAL REQUIREMENTS:

- Must have the ability to lift a minimum of fifty (50) pounds unassisted and the ability to work on hands and knees performing systems wiring routing, connectivity, etc.
- Work may be performed under all types of weather conditions and various types of terrain.
- Must have the ability to work in confined spaces, climb ladders, to access and repair equipment.
- Must have necessary hearing, visual acuity, manual dexterity, and mental disposition to fully and satisfactorily perform the scope of responsibility.

REQUIRED SKILLS AND CHARACTERISTICS:

- Ability to read, understand, and accomplish complex oral and written instructions
- Ability to communicate fluently in English, both verbally and in writing
- High School Diploma or G.E.D

- Good customer service skills
- United States Citizenship or Permanent Resident
- Valid Driver's License issued by current State of residence
- Skilled in using Microsoft Word and Excel, as well as programs related to communications engineering and technical systems programming
- Experience with and proficient in the use of common shop tools such as hand and power tools
- Have the ability to organize multiple assignments, sometimes of a complex nature involving complex priorities to produce quality work products that are accurate, thorough, and timely
- Ability to construct and implement specialized electronic or mechanical equipment, as needed
- Ability to work independently and with limited supervision
- Ability to travel and work under all types of weather conditions including snowmobile operations, as a helicopter passenger, and as a snowcat passenger
- Ability to attend, successfully pass, and apply required, and professional development training as related to the duties and responsibilities of this position
- Must be substance-free, including prescription drugs that impair cognitive skills, driving ability, or ability to safely operate equipment
- No illegal or addictive drug use for at least three (3) years prior to the date of application, nor use after
- Successfully complete and pass pre-employment testing including a thorough background investigation, credit check, drug and alcohol screening

Desired Qualifications

- Five (5) or more years of experience related to technical installation and maintenance is preferred
- Experience with radio site maintenance is preferred
- Technical maintenance experience at a combined police/fire 911 dispatch center is preferred
- Knowledge of the principles, usage, and limitations of electronic testing equipment preferred
- Knowledge and understanding of computer networks, IP/MPLS, wiring standards, and protocols
- Knowledge of current and anticipated trends and advancements in emergency telecommunications preferred
- Knowledge of radio systems including conventional, trunked, simulcast, and microwave systems preferred
- Knowledge of the principles of analog and digital electronics, microprocessor technology and fiber optic networks, hardware and software preferred
- Radio propagation, transmitter/receiver characteristics, transmitter/receiver combining, microwave theory, telephone systems, and radio receiver voting systems preferred
- Analog and digital audio recording devices, including 24-hour logging recorders and console-mounted instant playback recorders preferred
- Fiber Optic and telephone cable installations, diesel and gasoline standby generators, alternative power sites, battery maintenance, site grounding, exothermic welding, AC power distribution systems, alarm systems, telemetry systems, preferred
- Ability to locate, diagnose, and correct system malfunctions and to perform manual operations related to the repair of complex electronic and mechanical systems, preferred

- Knowledge of CAD systems (Computer-Aided Dispatch), phone systems, paging systems, logging recorder systems, preferred

CONTINUED LICENSES, CERTIFICATIONS, AND OTHER REQUIREMENTS:

Continued employment is conditional on meeting the following criteria:

- Maintain a valid Washington State Driver's License and the minimum amount of automobile insurance required by Washington State law
- Maintain a valid Washington State Patrol ACCESS certification and fingerprint card
- Regular, punctual and consistent attendance is a condition of continuing employment.

The statements contained herein reflect general details describing the primary functions of this job, the level of knowledge and skills typically required, and the scope of responsibility required to fulfill the basic functions of the job. This job description is not an all-inclusive list of work requirements. This job description does not constitute a written or implied contract of employment.