## CITY OF CHATTANOOGA

# Classification Specification Title: Radio Network Engineer

Department: Fire Pay Grade: GS.07

**Supervision Received From: Dir. Wireless Communication** FLSA Status: Non-Exempt

Supervisory Responsibility For: None Established: 1/15/21

**Revision Dates: 4/4/25;** 

10/20/23; 1/11/23

#### **CLASSIFICATION SUMMARY:**

Incumbents in this classification are responsible for providing 24/7 technical assistance with the development, maintenance and upkeep of radio network operations including design, implementation, troubleshooting and documentation of multi-protocol networks. Duties include reviewing, planning and evaluation network systems and providing tactical input on overall network planning and related projects. Work is performed with limited supervision.

SERIES LEVEL: The Radio Network Engineer is the second level of a five-level radio network series.

#### **ESSENTIAL FUNCTIONS:**

(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)

Configures network components, peripherals, software and related equipment; configures as necessary to ensure communication between components; evaluates, implements and maintains remote network access; participates in the implementation of data communications system changes and upgrades and documents network configurations.

Monitors network loads and makes adjustments as necessary to eliminate network congestion and optimize operations; troubleshoots and diagnoses malfunctions and problems and repairs as appropriate; performs routine maintenance of network equipment; checks and maintains all connections, switches, routers, hubs and cables and conducts backups and restorations of network data and systems.

Monitors and maintains network security; installs firewalls and other security hardware and software; configures network to ensure integrity and conducts tests to identify and repair potential holes in network security.

Assists in network management and network analysts for short-term planning for network operations.

Troubleshoots, diagnoses and works to resolve malfunctions in a variety of routers, switches, firewalls, access points, telecom circuits, microwave radio networks, land mobile radio devices, conventional and trunked repeater systems, mobile data systems, 911 data systems, automatic

vehicle locations systems, fire automatic dispatching systems, fault management systems and other network and land mobile radio equipment; works with vendor and Technical Assistance Center and requests returned material/merchandise authorization/repairs by vendors as necessary. Review active service requests escalates requests as deemed necessary.

May assign and create service requests; reviews work performed for completeness, accuracy and timeliness and provides technical assistance, guidance and support as needed.

Monitors network traffic via Network Management System and other third party applications; performs routine updates and maintenance on network and land mobile radio equipment.

Maintains and updates network documentation and backs-up critical configuration data.

Builds profiles and performs tasks related to network access for local and remote clients.

Participates in network design sessions and meetings with vendors and other radio network users. Stays current in the latest networking and Land mobile radio technology.

Makes proactive adjustments to network infrastructure and notifies departments of the activities.

Carries, uses, and answers their cell phone for business purposes as determined by the assigned job duties and the department head.

Provides 24/7 response to critical network and infrastructure failures.

Is on call, after hours and on weekends, as required and with minimal supervision.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other related duties as required.

DEPARTMENT SPECIFIC DUTIES (if any):

MINIMUM QUALIFICATIONS: Two (2) year degree in Computer Science, Electrical Engineering, Information systems, Industrial Electronics or Electronics Technology or equivalent military, vocational/technical training; supplemented by three (3) years of experience and/or training involving land mobile radio and/or microwave network operations and maintenance to include experience working with Motorola and Microsoft products or any equivalent combination of education, training and experience which provides the requisite knowledge, skills and abilities for this job; or any combination of equivalent experience and education.

LICENSING AND CERTIFICATIONS: ETAi – Associate Electronics Technician (CETa) (Required at date of hire.) FCC - General Radio Operator's License (GROL) (Required to complete within one year from date of hire)ETAi – Wireless Communications Electronics

Technician (WCM/TRN) (Required to complete within one year.) or equivalent certifications from a similar certifying organization.

Valid Driver's License.

### SUPPLEMENTAL INFORMATION:

KNOWLEDGE AND SKILL: Knowledge of network systems; land mobile radio systems and devices technical support practices and customer service principles.

Skill in using a computer and related software applications; designing, implementing, troubleshooting and documenting multi-protocol networks; reviewing, planning and evaluating network systems; preparing documentation and project tracking reports; monitoring network security; installing applicable hardware and software; planning network layouts; configuring networks; coordinating project activities and communication and interpersonal skills as applied to interaction with coworkers, supervisor, and the general public, sufficient to exchange or convey information and to receive work direction.

PHYSICAL DEMANDS: Positions in this class typically require stooping, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, talking, hearing, seeing, and repetitive motions.

WORK ENVIRONMENT: Medium Work: Exerting up to 150 pounds of force occasionally and/or up to 100 pounds of force frequently and/or up to 50 pounds of force constantly to move objects. Incumbents may be subjected to electrical currents and Radio Frequencies. Incumbents may be required to work on ladders not to exceed 30 feet.

### SPECIAL REQUIREMENTS:

Safety Sensitive: Y

Department of Transportation - CDL: N

Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.