# COMMUNICATIONS OPERATIONS LEADWORKER

## **CLASS DESCRIPTION**

## General Responsibilities:

This is highly skilled lead and advanced technical maintenance, installation, and repair work in the Communications Section of the Traffic Engineering Division. The work involves coordinating and overseeing the planning, installation, maintenance and repair of communication systems and other electronic equipment. The work is performed under the general supervision of the Communications Operation Supervisor and involves leading, training and scheduling lower level staff, assisting in the design of new and modified communication systems, and performing base system maintenance on a regular and standby/emergency basis.

## Examples of Duties and Responsibilities:

Install, maintain, repair and program two-way radio base and trunked stations, microprocessor-based dispatch equipment, point-to-point microwave systems, audio systems, security systems, voting systems, paging terminals and other communication system oriented equipment.

Repair, install, program and maintain video equipment and other individual communication components and equipment such as conventional and trunked mobile, marine and portable two-way radios, pages, radar and other communications related equipment (including antennas, speakers, microphones, control heads, cables, etc.) in public safety and maintenance equipment. Repair on-board microcomputer-based radio controller/operating circuitry.

Assist the Communications Operations Supervisor in the development of communication equipment specifications for bidding purposes. Assist in the design of new communication systems or the modification of existing ones.

Oversee and maintain MCM database and create specialized reports. Verify quarterly and special MCM billings are correct.

Review the daily work of the Communications Section. Schedule, prioritize and evaluate work. Coordinate the scheduling of stand-by duty, overtime and vacations. Monitor progress of projects and priorities and report status to supervisor. Assist in the hiring, evaluation and training of lower level staff. Effectively recommend the prioritization of resources within policy parameters. Refer performance and/or other employee relations problems to supervisor for resolution.

Review section operating procedures and recommend changes to the supervisor. Maintain shop records.

Maintain and repair or oversee the maintenance of shop and on-site test equipment.

Provide technical repair and periodic system checks on miscellaneous electronic equipment, communications towers, transmitter facilities, antennas, emergency generators, microwave system power packs, etc.

Work with Dane County Public Safety agencies and State and Federal agencies in the setup and maintenance of their systems.

Perform scheduled stand-by duty to keep all public safety radio systems in service. Locate problem areas and perform necessary emergency repairs.

Perform related work as required.

#### QUALIFICATIONS

#### Knowledge, Skills and Abilities:

Thorough knowledge of radio-transmitting and receiving equipment. Thorough knowledge of the methods, practices, tools, and materials used in the installation, repair, construction, testing and maintenance of communication equipment. Thorough knowledge of radio, electronics and electrical theory as it pertains to the installation, repair and maintenance of conventional and trunked communication systems and equipment and mobile data transfer equipment. Thorough knowledge of the methods and practices used in the programming and maintenance of both conventional and trunked microcomputer-based mobile and two-way radios. Thorough knowledge of the operating principles of computer-controlled trunked base radio backbone systems. Thorough knowledge of modern vehicle wiring systems including microprocessor controlled accessories, wiring inter-connection, airbags, airbag deployment circuitry and vehicle safety standards. Thorough knowledge of safe vehicle wiring practices and wiring for high current, sophisticated emergency vehicle wiring systems. Thorough technical and operating knowledge of mobile data equipment, mobile data base controllers, and computer interfaces. Thorough knowledge of computer systems and basic programming as they relate to communication systems and equipment, including mobile data transfer and related processes and equipment. Thorough knowledge of the Federal Communications Commission rules and regulations pertaining to transmitting and receiving equipment. Ability to detect and repair various types of complex electronic equipment problems and to make difficult technical decisions. Ability to read and interpret detailed electrical/electronic schematics and to understand the composition of communication systems. Ability to use all types of calibrating, testing and troubleshooting electronic test equipment. Ability to plan and oversee the work of lower level staff. Ability to oversee the operations of a work section and the work of multiple crews involved in the repair and maintenance of communications equipment. Ability to keep records and prepare reports. Ability to establish and maintain effective working relationships with the public, staff of other departments, and co-workers. Ability to operate a motor vehicle. Ability to communicate effectively both orally and in writing. Ability to maintain adequate attendance.

### Training and Experience:

Generally, positions in this classification will require:

Two years of experience installing, maintaining, repairing, and programming radio communication, emergency, and related electronic and electrical equipment equivalent to that gained as a Communications Technician 3 or 4 years experience installing, maintaining, repairing, and programming radio communication, emergency, and related electronic and electrical equipment equivalent to that gained as a Communications Technician 2 with the City of Madison. Such experience would normally be gained after graduation from a high school or equivalent, and completion of a radio communications/electronics program. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

Specific training and experience requirements will be established at the time of recruitment.

#### Necessary Special Qualifications:

Possession of FCC operator's license or equivalent upon appointment.

Possession of a valid Wisconsin Driver's License.

**Physical Requirements:** 

Ability to operate at various heights and to work from a ladder. Ability to perform heavy lifting and to occasionally lift up to 50 pounds. Incumbents will be expected to respond to emergency situations on a 24/7 basis according to a standby schedule.

Department/Division	Comp. Group	Range
Traffic Engineering	16	20

Approved:

Brad Wirtz Human Resources Director

Date