

**MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION**

ELECTRONICS TECHNICIAN SUPERVISOR

JOB DESCRIPTION

Employees in this job supervise technicians in a specific area of specialized work. The employee works within general methods and procedures, exercises considerable, independent judgment to select the proper course of action, and is required to review the work to ensure conformance with established guidelines, methods, procedures, and policies.

There are two classifications in this job.

Position Code Title - Electronics Technician Spv-1

Electronics Technician Supervisor 12

The employee serves as a first-line supervisor with responsibility for directing the work of specialized, lower-level, paraprofessional employees.

Position Code Title - Electronics Technician Spv-2

Electronics Technician Supervisor 13

The employee serves as a second-line supervisor directing subordinate staff through first-line supervisors, or as a first-line supervisor directing subordinate staff in a complex work area.

JOB DUTIES

NOTE: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Selects and assigns staff, ensuring equal employment opportunity in hiring and promotion.

Coordinates activities by scheduling work assignments, setting priorities, and directing the work of subordinate employees.

Evaluates and verifies employee performance through the review of completed work assignments and work techniques.

Identifies staff development and training needs and ensures that training is obtained.

Ensures proper labor relations and conditions of employment are maintained.

Maintains records, prepares reports, and composes correspondence relative to the work.

Installs, maintains, inspects, and/or repairs communication or electronic equipment.

Repairs portable, mobile, and/or fixed station communication systems.

Repairs or replaces defective parts to maintain equipment reliability.

Calibrates, maintains, and repairs test instruments/equipment in order to assure accurate diagnosis of problems.

Periodically tests equipment, measures frequencies, and solves interference problems.

Monitors performance and locates malfunctions in equipment and selects methods and tools for repair.

Participates in planning and inspecting new installations in accordance with any state or federal regulations or guidelines.

Participates in designing communication equipment, accessories, and systems.

Conducts inspections of the condition of tower radio equipment.

Conducts and participates in inspections and maintenance of navigational and weather stations, and documents completed work as required by FAA.

Maintains logs of units services and an inventory of parts.

Designs and builds equipment for the measurement of physical and chemical changes.

Designs jigs, fixtures, and tools for manufacturing of equipment.

Establishes specifications and makes computations for the manufacturing process.

Makes design sketches from which equipment is fabricated.

Confers with engineering and scientific personnel on the design and construction of new equipment.

Constructs specialized equipment designed by engineers and scientists.

Repairs and maintains electronic and electromechanical equipment.

Determines the materials to be used in the construction of electronic and electro-mechanical equipment.

Estimates costs of labor and material for contemplated equipment.

Conducts tests on completed equipment of original design or commercial make.

Makes on-site inspections and measurements when problems arise and recommends solutions.

Conducts studies on efficiency of personnel, hand tools, mechanized equipment, pumping methods, and chemical control.

Prepares technical reports and articles related to the work.

May occasionally perform any task assigned to subordinate staff, consistent with any licensing or certification requirements.

Performs related work as assigned.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Considerable knowledge is required at the 12 level and thorough knowledge is required at the 13 level.

Knowledge of the principles of communication, electronics or related field.

Knowledge of electronics theory and practical application of Radio Frequency, AC/DC, analog and digital signal processing, optoelectronics, electromechanical motors, and telecommunications.

Knowledge of solid state electronics and electronics testing equipment or electronic equipment design.

Knowledge of two-way radio equipment.

Knowledge of federal and state communication or electronics regulations or guidelines.

Knowledge of the installation, inspection, maintenance, and theory of operation of radio transmitting and receiving equipment, avionics and/or related equipment.

Knowledge of current developments in the field of communications, avionics, electronic, or related equipment.

Knowledge of common causes of failure occurring in radio transmitting and receiving equipment.

Knowledge of electrical control and related systems.

Knowledge of the theory and characteristics of solid state devices and electron tubes.

Knowledge of mechanical maintenance methods.

Knowledge of mathematics as required in the work.

Knowledge of the hazards involved and safety practices required in working with electricity and electronics.

Knowledge of the principles of electronics radio communication.

Knowledge of the basic principles of designing of radio equipment.

Knowledge of maintenance procedures for onboard aircraft electronics.

Knowledge of automated weather observation systems (AWOS) operation, inspections, maintenance, and long-line data dissemination.

Knowledge of airport procedures, including proper methods of moving on airport taxiways, runways, and other areas.

Knowledge of labor relations.

Knowledge of training and supervisory techniques.

Knowledge of employee policies and procedures.

Ability to instruct, direct, and evaluate employees.

Ability to apply basic electronic concepts and the properties and usage of electronic components.

Ability to design or adapt and modify equipment for specialized use.

Ability to prepare specifications for equipment.

Ability to read and use schematic diagrams, construction plans, and mechanical drawings in installation and repair work.

Ability to troubleshoot, identify, and correct causes of electronic failure and to make repairs or adjustments.

Ability to use, repair, and maintain electrical and electronic measuring equipment.

Ability to construct electrical instruments.

Ability to participate in research studies and projects.

Ability to direct radio communications systems in an area.

Ability to determine the correct locations for radio equipment and to direct installation.

Ability to maintain records, prepare standard or technical reports and articles, as well as compose correspondence related to the work.

Ability to drive vehicle statewide to conduct installation, inspection, equipment testing and maintenance activities.

Ability to communicate with others and to maintain favorable public relations.

Working Conditions

None

Physical Requirements

None

Education

Possession of an associate's degree in Avionics, Electrical, Electro-Mechanical, or Electronics Engineering or Technology.

Experience

Electronics Technician Supervisor 12

Four years of experience in the installation, maintenance, troubleshooting and repair of electrical and electronic equipment, including two years of experience equivalent to an Equipment Technician E10, Radio/Communications Technician E10, or Aviation Electronics Technician E11; or one year equivalent to an Equipment Technician 11, Radio/Communications Technician 11, or Aviation Electronics Technician 12.

Electronics Technician Supervisor 13

Five years of experience in the installation, maintenance, troubleshooting and repair of electrical and electronic equipment, including three years equivalent to an Equipment Technician E10, Radio/Communications Technician E10, or Aviation Electronics Technician E11; or two years equivalent to an Equipment Technician 11, Radio/Communications Technician 11 or Aviation Electronics Technician 12; or one year equivalent to an Equipment Technician 12, Radio/Communications Technician 12, or Electronics Technician Supervisor 12.

Special Requirements, Licenses, and Certifications

Certain positions may be assigned subclass codes and individuals appointed must possess the required specialized experience.

Employees with the Michigan Department of Transportation (MDOT), within six months from the date of appointment, possession of a General Radiotelephone Operator License (PG) issued by the Federal Communications Commission, possession of FAA letter of verification for Automated Weather Observation Systems (AWOS), and possession of a FAA Part 107 Remote Pilot Certificate.

NOTE: Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job Code

ELECHSPV

Job Code Description

ELECTRONICS TECHNICIAN SUPERVISOR

Position Title

Electronics Technician Spv-1

Electronics Technician Spv-2

Position Code

ELETSPV1

ELETSPV2

Pay Schedule

NERE-098

NERE-102

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06/03/2018