

**MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION**

AVIATION ELECTRONICS TECHNICIAN

JOB DESCRIPTION

Employees in this job participate in and oversee the performance of a variety of aviation electronics technician activities required to design, install, inspect, repair, and maintain aviation navigation systems, automated weather observation systems, and aircraft avionics.

There are four classifications in this job title.

Position Code Title – Aviation Electronics Technician-E

Aviation Electronics Technician 9

This is the entry level. The employee, in a learning capacity, performs a range of aviation electronics technician assignments and receives close supervision.

Aviation Electronics Technician 10

This is the intermediate level. The employee works in a developing capacity with increased responsibility for performing a range of aviation electronics technician assignments.

Aviation Electronics Technician E11

This is the experienced level. The employee performs a full range of aviation electronics technician assignments, including the exercise of extensive decision making that may include taking immediate actions with limited opportunity to consider various alternatives.

Position Code Title – Aviation Electronics Technician-A

Aviation Electronics Technician 12

This is the advanced level. The employee at this level serves either as a lead worker overseeing the work activities of other Aviation Electronics Technicians, or as a senior worker performing the most complex aviation electronics technician assignments. Senior-level employees perform complex assignments beyond those expected at the experienced level which have been approved by Civil Service.

NOTE: Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience and FAA letters of verification.

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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.

Installs, inspects, maintains, and repairs avionics, navigational aids, and automated weather observation systems (AWOS).

Calibrates, maintains, and repairs test equipment used for verification and final inspections.

Monitor performance of remote AWOS and navigational aids.

Participates in planning, installing and, in concert with the Federal Aviation Administration (FAA), the commissioning of navigation stations.

Participates in maintaining inventories of spare navigational and weather station parts.

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

Performs related work as assigned.

Additional Job Duties

Aviation Electronics Technician 12 (Lead Worker)

Coordinates work by scheduling assignments and overseeing the work of other Aviation Electronics Technicians.

Oversees and assures work quality by requiring strict adherence to methods and procedures.

Explains work instructions and adapts, if necessary, pertinent general methods and procedures in order to meet the need of special projects.

Aviation Electronics Technician 12 (Senior Worker)

Performs aviation electronics technician assignments that are recognized as the most complex on a regular basis.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable

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knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of the principles of aviation communications.

Knowledge of electronics and electronic testing equipment required to perform inspection, maintenance, and testing.

Knowledge of FCC Rules and Regulations, including Part 87.

Knowledge of FAA rules, regulations, advisory circulars, and directives relating to assigned work.

Knowledge of meteorological observation techniques.

Knowledge of National Electric code, construction techniques, and industrial standards pertaining to lightning protection.

Knowledge of the installation, inspection, maintenance, and theory of operation of avionics.

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

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

Knowledge of the techniques of loading an aircraft so as to achieve proper balance.

Knowledge of maintenance procedures for onboard aircraft electronics.

Knowledge of AWOS operation, inspection, maintenance, and long-line data dissemination.

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

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

Ability to drive vehicle statewide to conduct installation and maintenance activities.

Ability to use various means of communication to remotely monitor equipment status and performance.

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Ability to communicate effectively.

Ability to maintain effective work relationships with airport, community, FAA, and State personnel.

Additional Knowledge, Skills, and Abilities

Aviation Electronics Technician 12 (Senior Worker)

Ability to perform the most complex Aviation Electronics Technician assignments.

Aviation Electronics Technician 12 Lead Worker

Ability to explain instructions and guidelines to others effectively.

Ability to organize and coordinate the work of the unit.

Ability to determine work priorities and assign work to employees.

Working Conditions

Some assignments may require overnight travel for extended periods of time.

Work is performed at sites throughout the state that necessitate transport by vehicle or small aircraft.

Physical Requirements

Assignments may require accessing work sites by walking while carrying heavy equipment.

Construction, installation, and repair activities may include stooping, bending, climbing, digging, working in confined spaces, working with underground cables, and operating trenching equipment.

Education

Possession of an associate's degree in avionics or electronic technology.

Experience

Aviation Electronics Technician 9

No specific type or amount is required.

Aviation Electronics Technician 10

One year of experience in the installation and maintenance of aviation navigation systems, automated weather observation systems, and aircraft avionics equivalent to an Aviation Electronics Technician 9.

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Aviation Electronics Technician E11

Two years of experience in the installation and maintenance of aviation navigation systems, automated weather observation systems, and aircraft avionics equivalent to an Aviation Electronics Technician, including one year equivalent to an Aviation Electronics Technician 10.

Aviation Electronics Technician 12

Three years of experience in the installation and maintenance of aviation navigation systems, automated weather observation systems, and aircraft avionics equivalent to an Aviation Electronics Technician, including one year equivalent to the Aviation Electronics Technician E11.

Alternate Education and Experience

Aviation Electronics Technician E11

Possession of a bachelor's degree or higher with 16 semester (24 term) credits in job specific or related course work may be substituted for the experience requirement.

Special Requirements, Licenses, and Certifications

Aviation Electronics Technician 9-12

Possession of a valid driver's license.

Aviation Electronics Technician 10-12

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).

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

AVICOMTCH

Job Code Description

Aviation Electronics Technician

Position Title

Aviation Electronics Technician-E

Aviation Electronics Technician-A

Position Code

AVCMTCHE

AVCMTCHA

Pay Schedule

L32-007

L32-013