

**MICHIGAN CIVIL SERVICE COMMISSION  
JOB SPECIFICATION**

**AIRCRAFT MECHANIC**

**JOB DESCRIPTION**

Employees in this job perform activities to maintain and repair aircraft engines, alter airframes, and conduct inspections in accordance with the manufacturer's recommendations and FAA regulations.

There are three classifications in this job.

**Position Code Title – Aircraft Mechanic-E**

Aircraft Mechanic 9

This is the intermediate level. The employee works in a developing capacity with increasing responsibility for performing a range of aircraft mechanic assignments.

Aircraft Mechanic E10

This is the experienced level. The employee performs a full range of aircraft mechanic assignments, using independent judgment in making decisions requiring the interpretation and application of guidelines to specific situations.

**Position Code Title – Aircraft Mechanic-A**

Aircraft Mechanic 11

This is the advanced level. The employee performs the most complex maintenance and repair operations, and may have responsibility to train and direct the work of others.

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

**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.

Services, maintains, and repairs single and multi-engine aircraft engines and airframes on fixed-wing and/or rotary wing aircraft.

Repairs, replaces, and assembles parts, such as wings, fuselage, tail assembly, landing gear, control cables, and propeller assembly, using tools, such as power shears, sheet metal breaker, arc and acetylene welding equipment, rivet gun, and air or electric drills to rebuild or replace airframe or its components.

## **AIRCRAFT MECHANIC**

### **PAGE NO. 2**

Consults manufacturers' manuals and airline's maintenance manual for specifications and to determine feasibility of repair or replacement according to malfunction.

Examines engines for cracked cylinders and oil leaks, and listens to detect sounds of malfunctioning, such as sticking or burnt valves.

Inspects turbine blades to detect cracks or breaks.

Tests engine operation, using testing equipment, such as ignition analyzer compression checks, distributor timer, and ohmmeter, to locate source of malfunction.

Replaces or repairs worn or damaged components, such as carburetors, superchargers, and magnetos, using hand tools, gauges and testing equipment.

Adjusts and repairs electrical wiring system and aircraft accessories and instruments.

Inspects, services, and repairs pneumatic and hydraulic systems.

Performs miscellaneous duties and services aircraft, including flushing crankcase, cleaning screens, greasing moving parts, and checking brakes.

May assist in training less skilled Aircraft Mechanics in the repair and maintenance of airframes and engines.

Repairs metal or fabric airframes.

Starts and operates engines to detect malfunctions; makes adjustments while engine is running.

Repairs and fabricates sheet metal parts for airframes.

Patches fabric-covered parts of airframes.

Spray paints metal or fabric-covered sections of aircraft.

Enters notations in aircraft engine and airframe logbooks.

Maintains tools and other repair equipment.

Performs related work as assigned.

### **Additional Job Duties**

#### **Aircraft Mechanic 11 (Lead worker)**

Conducts annual and 100 hour inspections on a variety of aircraft.

Maintains parts inventory for all aircraft.

Maintains aircraft records and reports.

Updates federal aircraft publications.

Coordinates, oversees, and inspects the work of lower-level Aircraft Mechanics.

### **JOB QUALIFICATIONS**

#### **Knowledge, Skills, and Abilities**

**NOTE:** Developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of the mechanics and operation of internal combustion and/or turbine aircraft engines.

Knowledge of the tasks involved in the repair and maintenance of airframes and engines.

Knowledge of airframe and engine inspection procedures and methods.

Knowledge of metal fabricating machines, and metals or fabrics used in aircraft maintenance and repair operations.

Knowledge of the adjustment and repair of variable pitch propellers.

Skill in the use of tools of the trade.

Ability to use micrometers, rivet guns, power and hand drills, dial indicators, lathes, grinders, pressure gauges, ohmmeters, torque wrenches, timing lights, sheet metal shears, spray guns, and other items.

Ability to follow instructions.

Ability to communicate effectively.

#### **Additional Knowledge, Skills, and Abilities**

##### **Aircraft Mechanic 11**

Knowledge of fixed-wing and rotary-wing aircraft.

Knowledge of departmental operations and procedures.

Ability to perform the most complex maintenance and repair operations.

Ability to maintain aircraft maintenance logbooks.

Ability to effectively explain instructions and guidelines to others.

Ability to train and coordinate the work of others.

**Working Conditions**

Potential hazards associated with working around aircraft, electricity, pressurized air, hydraulic systems, use of hand and power tools, solvents, lubricants, and other combustible substances (aircraft fuel).

**Physical Requirements**

Ability to transport heavy tools and equipment.

**Education**

Educational level typically acquired through completion of high school.

**Experience**

Aircraft Mechanic 9

Eighteen months of experience acquired under the direction of a certified aircraft mechanic.

Aircraft Mechanic E10

Forty-two months of experience acquired under the direction of a certified aircraft mechanic, including two years equivalent to the Aircraft Mechanic 9.

Aircraft Mechanic 11

Four years of experience as a licensed Aircraft Mechanic, including two years equivalent to the Aircraft Mechanic E10.

**Alternate Education and Experience**

Aircraft Mechanic 9

Completion of an accredited aircraft mechanics course may be substituted for the experience requirement.

**Special Requirements, Licenses, and Certifications**

Possession of a FAA Airframe and power plant license in accordance with Federal Aviation Regulations.

Some positions may require possession of a FAA Inspection Authorization license.

**AIRCRAFT MECHANIC**

**PAGE No. 5**

**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**

AIRCFTMCH

**Job Code Description**

Aircraft Mechanic

**Position Title**

Aircraft Mechanic-E

Aircraft Mechanic-A

Aircraft Mechanic-A

**Position Code**

AIRCMCHE

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AIRCMCHA

**Pay Schedule**

A31-016

A31-019

NERE-069

ECP Group 1  
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TeamLeaders