# 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 Federal Aviation Administration (FAA) regulations.

## Position Code Title - Aircraft Mechanic-E

## Aircraft Mechanic 8

This is the entry level. The employee performs a range of aircraft mechanic assignments while learning the methods of the work.

## Aircraft Mechanic 9

This is the intermediate level. The employee performs an expanding range of aircraft mechanic assignments in a developing capacity.

## Aircraft Mechanic E10

This is the experienced level. The employee performs a full range of aircraft mechanic assignments and uses independent judgment to make decisions in specific work situations.

# Position Code Title - Aircraft Mechanic-A

#### Aircraft Mechanic 11

This is the advanced level. The employee functions as a senior worker performing duties which have been recognized by Civil Service as having greater complexity than those assigned at the experienced level.

**NOTE:** Employees can progress to the experienced level based on satisfactory performance and possessing required experience.

#### **JOB DUTIES**

**NOTE:** Listed job duties are typical examples of work of positions in this classification. Not all duties assigned to every position are included, nor will all positions be assigned every duty. The general description of job duties does not authorize performance contrary to any state or federal licensing or certification requirements.

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.

Consults aircraft maintenance manuals for specifications and feasibility of repair or replacement according to malfunction.

Examines and inspects engines and turbine blades for signs of defect or malfunction.

Uses engine testing equipment, such as ignition analyzer compression checks, distributor timer, and ohmmeter, to identify and 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.

Assists in training others in work techniques.

Repairs metal or fabric airframes.

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

Spray paints metal or fabric-covered sections of aircraft.

Enters notations in aircraft engine and airframe logbooks.

Cleans and maintains tools and equipment.

Performs related work and other tasks as assigned.

## **Additional Job Duties**

Aircraft Mechanic 11 (Senior Worker)

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

Maintains aircraft records, reports, and parts inventory.

Updates federal aircraft documents to meet federal requirements.

#### **JOB QUALIFICATIONS**

## Knowledge, Skills, and Abilities

**NOTE:** Some knowledge is required at the entry level, 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 fixed-wing and rotary-wing aircraft.

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

Knowledge of 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 the tools and equipment 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 communicate effectively.

# Additional Knowledge, Skills, and Abilities

Aircraft Mechanic 11 (Senior Worker)

Ability to perform the most complex maintenance and repair operations.

Ability to maintain aircraft records, reports, and parts inventory.

# **Working Conditions**

Job requires employee to be exposed to hazards associated with the work.

# **Physical Requirements**

The job duties may require an employee to lift and/or move heavy objects.

#### **Education**

Education typically acquired through completion of high school.

# **Experience**

## Aircraft Mechanic 8

No specific type or amount is required.

#### 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.

**NOTE:** Civil Service can individually evaluate equivalent combinations of education and experience providing required knowledge, skills, and abilities to qualify.

## Special Requirements, Licenses, and Certifications

Aircraft Mechanic 9-11: Possession of an FAA Airframe and FAA Powerplant license.

See individual position descriptions for other requirements.

# JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job CodeJob Code DescriptionAIRCFTMCHAIRCRAFT MECHANIC

Position TitlePosition CodePay ScheduleAircraft Mechanic-EAIRCMCHEA31-014

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