



## **City of Phoenix AIRCRAFT TECHNICIAN**

**JOB CODE 75010**

Effective Date: Rev. 01/07

### **DISTINGUISHING FEATURES OF THE CLASS:**

The fundamental reason this classification exists is to perform maintenance on an aircraft fleet consisting of helicopters and fixed-wing aircraft. Work involves the inspection, repair, and modification of the entire aircraft and special equipment, including the overhaul of some components, but not engine rebuilding. Work is performed according to manufacturer specifications and Federal Aviation Administration rules and regulations. Work is inspected in process and upon completion. Incumbents work under the general supervision of the Aircraft Maintenance Supervisor.

### **ESSENTIAL FUNCTIONS:**

- Determines serviceability of aircraft by performing maintenance inspections;
- Diagnoses and troubleshoots all systems to determine malfunctions;
- Tightens, adjusts, removes, repairs, or replaces components, assemblies or sub-assemblies with common and special tools and precision instruments;
- Assists other mechanics in operations such as removal and replacement of engines and main transmission assemblies;
- Rigs and adjusts sub-systems such as fuel linkages, pitch change linkages, flight controls, flaps, ailerons, and stabilizers;
- Repairs, removes, services or replaces hydraulic system components, gauges, and instruments and electrical system components;
- Removes, repairs and replaces gear boxes, dampers, drive shafts, rotor hubs, blades, engines, and landing gear components;
- Tests and repairs airframe and fuselage components;
- Services, troubleshoots, and repairs aircraft air conditioning systems;
- Performs static and dynamic balancing of main rotor and tail rotor assemblies;
- Troubleshoots, diagnoses, and clears aircraft fault codes;
- Participates in after-maintenance test flights to verify the quality of maintenance performed;
- Maintains shop tools and equipment such as trailers, aircraft tugs; and auxiliary power units;
- Maintains, services, and tests lead acid batteries;
- Maintains, services, and repairs searchlights;
- Authorizes, inspects, and approves for return to service any aircraft and related part or appliance;



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- Demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.

### **Required Knowledge, Skills and Abilities:**

#### Knowledge of:

- Materials, methods, tools, and standard practices of the aircraft mechanic trade.
- Models of aircraft to be maintained.
- Safety procedures pertaining to aircraft and aircraft maintenance.

#### Skill In:

- Use of all common and special purposes aircraft maintenance tools and test equipment.
- Repair of sheet metal and composite structures.
- Diagnosis and repair of aircraft components.
- Tracking and balancing main rotor and tail rotor systems.
- Diagnosing and repairing electrical wiring and components.

#### Ability to:

- Communicate in the English language by phone or in person.
- Work unsupervised for long periods.
- Move objects weighing less than 50 pounds short and long distances.
- Interpret wiring and schematic diagrams and complex technical instruction.
- Meet prescribed standards in inspection, diagnosis, and repair of aircraft and aircraft components.
- Repair related special equipment.
- Review or check the work products of others to ensure conformance to standards.
- Remain in a standing position for extended periods of time.
- Bend, stoop, climb, and work in cramped spaces when performing aircraft maintenance.
- Work cooperatively with other City employees.
- Work in a variety of weather conditions with exposure to the elements.
- Work with grease, oil, solvents, fuel, and other aircraft-related fluids.
- Observe or monitor objects and compare data to determine compliance with prescribed operating and safety standards.
- Perceive the full range of the color spectrum.
- Install, replace and service filters, light bulbs, belts or similar objects.
- Perform physical inventories of equipment and supplies.



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- Enter data or information into a terminal or PC.
- Produce written documents in English with clearly organized thoughts using proper sentence construction, punctuation, and grammar.
- Work safely without presenting a direct threat to self or others.

### **Additional Requirements:**

- Federal Aviation Administration Airframe and Powerplant Mechanic Certificate.
- Complete set of aircraft mechanic's tools.
- Absence of history of violations of Federal Aviation Administration regulations.
- Travel to in-state and/or out-of-state technical schools.
- After-maintenance test flights.
- Appointments to positions in the Police Department are subject to meeting appropriate polygraph and background standards.
- Some positions require the use of personal or City vehicles on City business. Individuals must be physically capable of operating the vehicles safely, possess a valid driver's license and have an acceptable driving record. Use of a personal vehicle for City business will be prohibited if the employee is not authorized to drive a City vehicle or if the employee does not have personal insurance coverage.
- Some positions will require the performance of other essential and marginal functions depending upon work location, assignment, or shift.

### **ACCEPTABLE EXPERIENCE AND TRAINING:**

Three years of experience within the past five years maintaining helicopters and fixed wing aircraft. Other combinations of experience and education that meet the minimum requirements may be substituted.