



## **Aerospace Propulsion, Turboprop And Turboshaft Propulsion (2A6X1B)**

Inspects, maintains, modifies, tests, and repairs propellers, turboprop and turboshaft engines, jet engines, small gas turbine engines, and engine ground support equipment (SE). Manages aerospace propulsion functions and activities.

### **Alternate Titles:**

AIRFRAME AND POWERPLANT MECHANICS; HELICOPTER MECHANICS; ENGINE MECHANICS

### **Duties and Responsibilities:**

#### BACKGROUND

Military aircraft are used to fly hundreds of missions each day for transport, patrol, and flight training. They need frequent servicing to remain safe and ready to fly. Aircraft mechanics inspect, service, and repair helicopters and airplanes.

#### WHAT THEY DO

Aircraft mechanics in the military perform some or all of the following duties:

Service and repair helicopter, jet, and propeller aircraft engines

Inspect and repair aircraft wings, fuselages (bodies), and tail assemblies

Service and repair aircraft landing gear

Repair or replace starters, lights, batteries, wiring, and other electrical parts

#### PHYSICAL DEMANDS

Some specialties require moderate to heavy lifting. Normal color vision is required to work with color-coded wiring.

#### HELPFUL ATTRIBUTES

Helpful school subjects include mathematics and shop mechanics. Helpful attributes include:

Interest in work involving aircraft

Interest in engine mechanics

Ability to use hand and power tools

#### WORK ENVIRONMENT

Aircraft mechanics work in aircraft hangars and machine shops located on air bases or aboard aircraft carriers.

#### TRAINING PROVIDED

Job training consists of 3 to 17 weeks of classroom instruction, including inspection and repair of aircraft engines and equipment. Training length varies depending upon the specialty. Course content typically includes:

Engine disassembly and repair

Repair of hydraulic, fuel, and electrical systems

Repair of aluminum, steel, and fiberglass airframes and coverings

Further training occurs on the job and through advanced courses. The Army, Navy, and Marine Corps offer certified apprenticeship programs for some specialties in this occupation.

#### CIVILIAN COUNTERPARTS

Civilian aircraft mechanics work for aircraft manufacturers, commercial airlines, and government agencies. They perform duties similar to military aircraft mechanics. They may also be called airframe or power plant mechanics.

#### OPPORTUNITIES

The services have about 75,000 aircraft mechanics. On average, they need about 5,500 new mechanics each year. After job training, mechanics are assigned to an aircraft maintenance unit, where they perform routine maintenance and simple repair jobs. In time, they may perform more difficult repairs and train and supervise new mechanics. Eventually, they may become inspectors, shop supervisors, or maintenance superintendents.