

Aircraft Mechanics (2012)

Adopted 2012

Perform Electrical Maintenance And Repair

- 1.1 Calculate and measure electrical power
- 1.2 Measure voltage, current, resistance, and continuity
- 1.3 Determine the relationship of voltage, current, and resistance in electrical circuits
- 1.4 Read and interpret aircraft electrical circuit diagrams, including solid-state devices and logic functions

Prepare Aircraft Drawings

- 2.1 Identify aircraft drawings and symbols and interpret system schematics
- 2.2 Draw sketches of repairs and alterations
- 2.3 Interpret graphs and charts prior to maintaining and repairing systems

Weigh and Balance Aircraft

- 3.1 Weigh aircraft
- 3.2 Perform weight and balance check and record data

Maintain and Repair Fluid Lines and Fittings

- 4.1 Fabricate and install rigid fluid lines
- 4.2 Fabricate and install flexible fluid lines

Inspect and Test Aircraft Welds and Materials

- 5.1 Identify and select nondestructive testing processes
- 5.2 Identify and select aircraft hardware and materials
- 5.3 Perform precision measurements

Perform Ground Operation and Services

- 6.1 Identify types of fires and fire extinguishers
- 6.2 Identify safe practices in aircraft fueling and handling
- 6.3 Identify aircraft ground movement procedures
- 6.4 Identify procedures for securing aircraft in a variety of conditions

Perform Aircraft Cleaning and Corrosion Control	<p>7.1 Identify and select aircraft cleaning materials</p> <hr/> <p>7.2 Identify types of aircraft corrosion</p> <hr/> <p>7.3 Identify corrosion removal techniques</p> <hr/> <p>7.4 Identify corrosion treatment techniques</p>
Prepare Aircraft Maintenance Forms and Records	<p>8.1 Write descriptions of work performed using standard protocols (FAA Regulation 43.9)</p> <hr/> <p>8.2 Prepare FAA Form 8130-3 and FAA Form 337 (FAA Order 8130.21 revised)</p>
Apply Basic Physics to Aircraft Systems	<p>9.1 Use and understand the principles of simple machines</p> <hr/> <p>9.2 Use and understand the principles of sound, fluid, and heat dynamics</p> <hr/> <p>9.3 Use and understand the principles of basic aerodynamics</p> <hr/> <p>9.4 Use and understand the principles of aircraft structures</p> <hr/> <p>9.5 Use and understand the principles of theory of flight</p>
Demonstrate Appropriate Understanding of Basic Science	<p>10.1 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content</p> <hr/> <p>10.2 Identify health-related problems that may result from exposure to work-related chemicals and hazardous materials and know the proper precautions required for handling such materials</p> <hr/> <p>10.3 Understand pressure measurement in terms of PSI, inches of mercury, and KPA</p>
Interpret Mechanic Privileges and Limitations	<p>11.1 Identify mechanic privileges within the limitations prescribed by FAR Part 65</p>
Identify Federal Aviation Administration Licensing Requirements	<p>12.1 Identify the information in FAR Part 65 pertaining to eligibility for Aviation Maintenance Technician certification and ratings</p>