Arizona CTE

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