

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

| AIRCRAFT MECHANICS, 47.0600.50 | |
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| STANDARD 1.0 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 |
| STANDARD 2.0 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 |
| STANDARD 3.0 WEIGH AND BALANCE AIRCRAFT | |
| 3.1 | Weigh aircraft |
| 3.2 | Perform weight and balance check and record data |
| STANDARD 4.0 MAINTAIN AND REPAIR FLUID LINES AND FITTINGS | |
| 4.1 | Fabricate and install rigid fluid lines |
| 4.2 | Fabricate and install flexible fluid lines |
| STANDARD 5.0 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 |
| STANDARD 6.0 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 |

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on February 23, 2012, and approved by the Arizona Skill Standards Commission on May 16, 2012.

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| 6.4 | Identify procedures for securing aircraft in a variety of conditions |
| STANDARD 7.0 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 |
| STANDARD 9.0 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) |
| STANDARD 10.0 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 |
| STANDARD 10.0 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 |
| STANDARD 11.0 INTERPRET MECHANIC PRIVILEGES AND LIMITATIONS | |
| 11.1 | Identify mechanic privileges within the limitations prescribed by FAR Part 65 |
| STANDARD 12.0 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 |

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