| **Skills** | **Airman Certification Standards—General** | **Description of qualifying work experience** |
| --- | --- | --- |
| **II. Airframe** | **Subject A. Metallic Structures** |  |
| AM.II.A.S1 | Install and remove solid rivets. |  |
| AM.II.A.S2 | Install and remove a blind rivet. |  |
| AM.II.A.S3 | Determine applicability of sheet metal for a repair in a specific application. |  |
| AM.II.A.S4 | Select and install special purpose fasteners. |  |
| AM.II.A.S5 | Design a repair using a manufacturer's structural repair manual. |  |
| AM.II.A.S6 | Prepare and install a patch to repair an aircraft or component. |  |
| AM.II.A.S7 | Make a drawing of a repair, including the number of rivets and size of sheet metal required. |  |
| AM.II.A.S8 | Remove a repair that was installed with rivets. |  |
| AM.II.A.S9 | Trim and form a piece of sheet metal to fit a prepared area. |  |
| AM.II.A.S10 | Fabricate an aluminum part in accordance with a drawing. |  |
| AM.II.A.S11 | Determine a rivet pattern for a specific repair. |  |
| AM.II.A.S12 | Countersink rivet holes in sheet metal. |  |
| AM.II.A.S13 | Perform a repair on a damaged aluminum sheet. |  |
| AM.II.A.S14 | Determine extent of damage and decide if metallic structure is repairable. |  |
|  | **Subject B. Non-Metallic Structures** |  |
| AM.II.B.S1 | Identify appropriate fasteners on composite structures. |  |
| AM.II.B.S2 | Inspect and repair fiberglass. |  |
| AM.II.B.S3 | Inspect composite, plastic, or glass-laminated structures. |  |
| AM.II.B.S4 | Clean and inspect acrylic type windshields. |  |
| AM.II.B.S5 | Locate and explain procedures for a temporary repair to a side window. |  |
| AM.II.B.S6 | Locate and explain the procedures for tying a modified seine knot. |  |
| AM.II.B.S7 | Prepare composite surface for painting. |  |
| AM.II.B.S8 | Perform a tap test on composite material. |  |
| AM.II.B.S9 | Locate and explain repair standard dimensions. |  |
| AM.II.B.S10 | Locate and explain repair procedures for elongated bolt holes. |  |
| AM.II.B.S11 | Determine extent of damage and decide if nonmetallic structure is repairable. |  |
| AM.II.B.S12 | Perform lay up for a repair to a composite panel, including preparation for vacuum bagging, using a manufacturer’s repair manual. |  |
|  | **Subject C. Flight Controls** |  |
| AM.II.C.S1 | Identify fixed-wing aircraft rigging adjustment locations. |  |
| AM.II.C.S2 | Identify control surfaces that provide movement about an aircraft's axes. |  |
| AM.II.C.S3 | Inspect a primary and secondary flight control surface. |  |
| AM.II.C.S4 | Remove and reinstall a primary flight control surface. |  |
| AM.II.C.S5 | Inspect primary control cables. |  |
| AM.II.C.S6 | Adjust and secure a primary flight control cable. |  |
| AM.II.C.S7 | Adjust push-pull flight control systems. |  |
| AM.II.C.S8 | Check the balance of a flight control surface. |  |
| AM.II.C.S9 | Determine allowable axial play limits for a flight control bearing. |  |
| AM.II.C.S10 | Inspect a trim tab for freeplay, travel, and operation. |  |
| AM.II.C.S11 | Balance a control surface. |  |
| AM.II.C.S12 | Fabricate a primary flight control cable. |  |
| AM.II.C.S13 | Locate aircraft flight control travel limits. |  |
|  | **Subject D. Airframe Inspection** |  |
| AM.II.D.S1 | Perform an airframe inspection, including a records check. |  |
| AM.II.D.S2 | Perform a portion of a 100-hour inspection in accordance with 14 CFR part 43. |  |
| AM.II.D.S3 | Enter results of a 100-hour inspection in a maintenance record. |  |
| AM.II.D.S4 | Determine compliance with a specific AD. |  |
| AM.II.D.S5 | Provide a checklist for conducting a 100-hour inspection. |  |
| AM.II.D.S6 | Determine if any additional inspections are required during a particular 100-hour inspection; (i.e.,  300-hour filter replacement). |  |
| AM.II.D.S7 | Inspect seat and seatbelt, including TSO markings. |  |
|  | **Subject E. Landing Gear Systems** |  |
| AM.II.E.S1 | Inspect and service landing gear. |  |
| AM.II.E.S2 | Inspect, check, and service an anti-skid system. |  |
| AM.II.E.S3 | Locate and explain procedures for checking operation of an anti-skid warning system. |  |
| AM.II.E.S4 | Locate and explain troubleshooting procedures for an anti-skid system. |  |
| AM.II.E.S5 | Jack aircraft. |  |
| AM.II.E.S6 | Troubleshoot a landing gear retraction check. |  |
| AM.II.E.S7 | Inspect wheels, brakes, bearings, and tires. |  |
| AM.II.E.S8 | Remove and replace brake lining(s). |  |
| AM.II.E.S9 | Service landing gear air/oil shock strut. |  |
| AM.II.E.S10 | Bleed air from a hydraulic brake system. |  |
| AM.II.E.S11 | Troubleshoot hydraulic brake systems. |  |
| AM.II.E.S12 | Remove, inspect, and install a wheel brake assembly. |  |
| AM.II.E.S13 | Inspect a tire for defects. |  |
| AM.II.E.S14 | Locate tire storage practices. |  |
| AM.II.E.S15 | Replace air/oil shock strut air valve. |  |
| AM.II.E.S16 | Troubleshoot an air/oil shock strut. |  |
| AM.II.E.S17 | Service a nose-wheel shimmy damper. |  |
| AM.II.E.S18 | Inspect nose-wheel steering system for proper adjustment. |  |
| AM.II.E.S19 | Locate and explain the process for checking landing gear alignment. |  |
| AM.II.E.S20 | Replace master brake cylinder packing seals. |  |
| AM.II.E.S21 | Troubleshoot aircraft steering system. |  |
| AM.II.E.S22 | Identify landing gear position and warning system components. |  |
| AM.II.E.S23 | Troubleshoot landing gear position and warning systems. |  |
| AM.II.E.S24 | Inspect and repair landing gear position indicating system. |  |
| AM.II.E.S25 | Adjust the operation of a landing gear warning system. |  |
| AM.II.E.S26 | Remove, install, and adjust a landing gear down-lock switch. |  |
| AM.II.E.S27 | Inspect a brake for serviceability. |  |
| AM.II.E.S28 | Troubleshoot nose-wheel shimmy. |  |
| AM.II.E.S29 | Inspect tube landing gear for damage. |  |
|  | **Subject F. Hydraulic and Pneumatic Systems** |  |
| AM.II.F.S1 | Identify different types of hydraulic fluids. |  |
| AM.II.F.S2 | Identify different packing seals. |  |
| AM.II.F.S3 | Install seals and backup rings in a hydraulic component. |  |
| AM.II.F.S4 | Remove and install a selector valve. |  |
| AM.II.F.S5 | Check a pressure regulator and adjust as necessary. |  |
| AM.II.F.S6 | Remove, clean, inspect, and install a hydraulic system filter. |  |
| AM.II.F.S7 | Service a hydraulic system accumulator. |  |
| AM.II.F.S8 | Service a hydraulic system reservoir. |  |
| AM.II.F.S9 | Remove, install, and perform an operational check of a hydraulic pump. |  |
| AM.II.F.S10 | Locate procedures for checking pneumatic/bleed air overheat warning systems. |  |
| AM.II.F.S11 | Purge air from a hydraulic system. |  |
| AM.II.F.S12 | Remove and install a system pressure relief valve. |  |
| AM.II.F.S13 | Inspect a hydraulic or pneumatic system for leaks. |  |
| AM.II.F.S14 | Troubleshoot a hydraulic or pneumatic system for leaks. |  |
| AM.II.F.S15 | Locate and explain hydraulic fluid servicing instructions and identify/select fluid for a given aircraft. |  |
| AM.II.F.S16 | Locate installation procedures for a seal, backup ring, or gasket. |  |
|  | **Subject G. Environmental Systems** |  |
| AM.II.G.S1 | Inspect an oxygen system. |  |
| AM.II.G.S2 | Purge an oxygen system prior to servicing. |  |
| AM.II.G.S3 | Service an oxygen system. |  |
| AM.II.G.S4 | Clean and inspect a pilot emergency oxygen mask and supply hoses. |  |
| AM.II.G.S5 | Inspect an oxygen system pressure regulator. |  |
| AM.II.G.S6 | Inspect an oxygen system cylinder for serviceability. |  |
| AM.II.G.S7 | Inspect a chemical oxygen generator for serviceability and safe handling. |  |
| AM.II.G.S8 | Locate the procedures to troubleshoot a combustion heater. |  |
| AM.II.G.S9 | Locate the procedures for servicing a refrigerant (vapor-cycle) system. |  |
| AM.II.G.S10 | Inspect a combustion heater fuel system for leaks. |  |
| AM.II.G.S11 | Locate the troubleshooting procedures for an air-cycle system. |  |
| AM.II.G.S12 | Troubleshoot an air-cycle air conditioning system. |  |
| AM.II.G.S13 | Inspect a cabin heater system equipped with an exhaust heat exchanger for cracks. |  |
| AM.II.G.S14 | Clean and inspect an outflow valve for a pressurization system. |  |
| AM.II.G.S15 | Locate troubleshooting procedures for a pressurization system. |  |
|  | **Subject H. Aircraft Instrument Systems** |  |
| AM.II.H.S1 | Perform a static system leak test. |  |
| AM.II.H.S2 | Remove and install an instrument. |  |
| AM.II.H.S3 | Install range marks on an instrument glass. |  |
| AM.II.H.S4 | Determine barometric pressure using an altimeter. |  |
| AM.II.H.S5 | Check for proper range markings on an instrument. |  |
| AM.II.H.S6 | Inspect a magnetic compass. |  |
| AM.II.H.S7 | Locate the procedures for troubleshooting a vacuum-operated instrument system. |  |
| AM.II.H.S8 | Select proper altimeter for installation on a given aircraft. |  |
| AM.II.H.S9 | Identify exhaust gas temperature system components. |  |
| AM.II.H.S10 | Inspect a vacuum system filter for serviceability. |  |
| AM.II.H.S11 | Adjust gyro/instrument air pressure/vacuum. |  |
| AM.II.H.S12 | Inspect an aircraft's alternate air (static) source. |  |
| AM.II.H.S13 | Locate and explain the adjustment procedures for a stall warning system. |  |
| AM.II.H.S14 | Inspect outside air temperature gauge for condition and operation. |  |
|  | **Subject I. Communication and Navigation Systems** |  |
| AM.II.I.S1 | Make a list of required placards for communication and navigation avionic equipment. |  |
| AM.II.I.S2 | Locate and explain autopilot inspection procedures. |  |
| AM.II.I.S3 | List autopilot major components. |  |
| AM.II.I.S4 | Locate and identify navigation and communication antennas. |  |
| AM.II.I.S5 | Check VHF communications for operation. |  |
| AM.II.I.S6 | Inspect a coaxial cable installation for security. |  |
| AM.II.I.S7 | Check an emergency locator transmitter for operation. |  |
| AM.II.I.S8 | Inspect ELT batteries for expiration date and locate proper testing procedures. |  |
| AM.II.I.S9 | Inspect electronic equipment mounting base for security and condition. |  |
| AM.II.I.S10 | Inspect electronic equipment shock mount bonding jumpers for resistance. |  |
| AM.II.I.S11 | Inspect static discharge wicks for security and resistance. |  |
| AM.II.I.S12 | Inspect a radio installation for security. |  |
| AM.II.I.S13 | Locate and explain the installation procedures for antennas, including mounting and coaxial connections. |  |
|  | **Subject J. Aircraft Fuel Systems** |  |
| AM.II.J.S1 | Inspect, check, troubleshoot, or repair a fuel system. |  |
| AM.II.J.S2 | Inspect a metal, bladder, or integral fuel tank. |  |
| AM.II.J.S3 | Troubleshoot and repair aircraft fuel system. |  |
| AM.II.J.S4 | Inspect a fuel selector valve. |  |
| AM.II.J.S5 | Inspect and check manually-operated fuel valves for proper operation and leaks. |  |
| AM.II.J.S6 | Troubleshoot a fuel valve problem. |  |
| AM.II.J.S7 | Drain fuel system sump(s). |  |
| AM.II.J.S8 | Service a fuel system strainer. |  |
| AM.II.J.S9 | Inspect a fuel quantity indicating system. |  |
| AM.II.J.S10 | Locate fuel system operating instructions. |  |
| AM.II.J.S11 | Locate fuel system inspection procedures. |  |
| AM.II.J.S12 | Locate fuel system crossfeed procedures. |  |
| AM.II.J.S13 | Locate fuel system required placards. |  |
| AM.II.J.S14 | Locate fuel system defueling procedures. |  |
| AM.II.J.S15 | Troubleshoot fuel pressure warning system. |  |
| AM.II.J.S16 | Locate troubleshooting procedures for fuel temperature systems. |  |
| AM.II.J.S17 | Remove and install a fuel quantity transmitter. |  |
| AM.II.J.S18 | Troubleshoot fuel quantity indicating system. |  |
|  | **Subject K. Aircraft Electrical Systems** |  |
| AM.II.K.S1 | Inspect aircraft wiring to verify installation and routing. |  |
| AM.II.K.S2 | Perform wire terminating and splicing. |  |
| AM.II.K.S3 | Assemble an aircraft electrical connector. |  |
| AM.II.K.S4 | Use a wiring circuit diagram to identify components. |  |
| AM.II.K.S5 | Solder aircraft wiring. |  |
| AM.II.K.S6 | Troubleshoot an airframe electrical circuit. |  |
| AM.II.K.S7 | Install airframe electrical wiring, switches, or protective devices. |  |
| AM.II.K.S8 | Secure wire bundles. |  |
| AM.II.K.S9 | Determine an electrical load in a given aircraft system. |  |
| AM.II.K.S10 | Install bonding jumpers. |  |
| AM.II.K.S11 | Check output voltage of a DC generator. |  |
| AM.II.K.S12 | Check the resistance of an electrical system component. |  |
| AM.II.K.S13 | Inspect generator brush serviceability and brush spring tension. |  |
| AM.II.K.S14 | Inspect and check anti-collision, position, and landing lights for proper operation. |  |
| AM.II.K.S15 | Inspect components in an electrical system. |  |
| AM.II.K.S16 | Troubleshoot a DC electrical system supplied by an AC electrical system. |  |
| AM.II.K.S17 | Identify components in an electrical schematic where AC is rectified to a DC voltage. |  |
| AM.II.K.S18 | Perform a continuity test to verify the condition of a conductor. |  |
| AM.II.K.S19 | Perform a test on a conductor for a short to ground. |  |
| AM.II.K.S20 | Perform a test on a conductor for a short to other conductors. |  |
|  | **Subject L. Ice and Rain Control Systems** |  |
| AM.II.L.S1 | Inspect and operationally check pitot-static anti-ice system. |  |
| AM.II.L.S2 | Inspect and operationally check deicer boot. |  |
| AM.II.L.S3 | Clean a pneumatic deicer boot. |  |
| AM.II.L.S4 | Troubleshoot an electrically-heated pitot system. |  |
| AM.II.L.S5 | Inspect thermal anti-ice systems. |  |
| AM.II.L.S6 | Inspect and operationally check an electrically-heated windshield. |  |
| AM.II.L.S7 | Locate and explain the procedures for inspecting an electrically-operated windshield wiper system. |  |
| AM.II.L.S8 | Locate and explain the procedures for replacing blades on a windshield wiper system. |  |
| AM.II.L.S9 | Locate and explain the procedures for inspecting a pneumatic rain removal system. |  |
|  | **Subject M. Airframe Fire Protection Systems** |  |
| AM.II.M.S1 | Troubleshoot an aircraft fire detection or extinguishing system. |  |
| AM.II.M.S2 | Determine proper container pressure for an installed fire extinguisher system. |  |
| AM.II.M.S3 | Identify maintenance procedures for fire detection and extinguishing system(s) and system  component(s). |  |
| AM.II.M.S4 | Inspect a smoke and toxic gas detection system. |  |
| AM.II.M.S5 | Inspect a carbon monoxide detector. |  |
| AM.II.M.S6 | Locate and explain the procedures for checking a smoke detection system. |  |
| AM.II.M.S7 | Locate and explain the procedures for inspecting an overheat detection system. |  |
| AM.II.M.S8 | Inspect fire protection system cylinders and check for hydrostatic test date. |  |
| AM.II.M.S9 | Inspect fire detection/protection system. |  |
| AM.II.M.S10 | Perform operational check of fire detection/protection system. |  |
| AM.II.M.S11 | Inspect fire extinguishing agent bottle discharge cartridge. |  |
| AM.II.M.S12 | Inspect a continuous-loop type fire detection system. |  |
|  | **Subject N. Rotorcraft Fundamentals** |  |
| AM.II.N.S1 | Locate components of a helicopter rotor system. |  |
| AM.II.N.S2 | Locate helicopter rotor blade track and balance procedures. |  |
| AM.II.N.S3 | Locate and explain procedures needed to rig helicopter controls. |  |
| AM.II.N.S4 | Locate and explain procedures to track and balance a rotor system. |  |
|  | **Subject O. Water and Waste Systems** |  |
| AM.II.O.S1 | Locate and explain the procedures for servicing a lavatory waste system. |  |
| AM.II.O.S2 | Locate and explain the procedures for servicing a potable water system. |  |