Update to Airframe Test

Airframe Mechanic Test Guide 2023

September 2023

ASA-AMA-23

With the following changes, ASA's *Airframe Mechanic Test Guide 2023* provides complete preparation for the FAA Airframe Knowledge Exam. This test continues to reference the *Airman Knowledge Testing Supplement for Aviation Maintenance Technician* (FAA-CT-8080-4G).

About the Test Changes

The FAA exams are "closed tests," which means the database of questions used on the exam is not available to the public. However, the FAA identifies subjects that have been removed or added to a test, as well as pertinent information to ensure training and testing remain correlated, which, in turn, promotes a reliable certification system.

The questions and answer choices in this book provide a comprehensive representation of FAA questions, derived from history and experience with the airman testing process. You might see similar, though not exactly the same, questions on your official FAA exam. On the test, answer choices may be rearranged from the A, B, C order you see in this book. Therefore, be careful to fully understand the intent of each question and corresponding answer while studying, rather than memorize the A, B, C answer. While you may be asked a question that has unfamiliar wording, studying and understanding the information in this book and the associated reference documents will give you the tools to answer all types of questions with confidence. We invite your feedback. After you take your official FAA exam, let us know how you did. Were you prepared? Did the ASA products meet your needs and exceed your expectations? We want to continue to improve these products to ensure applicants are prepared, and become safe aviation maintenance technicians. Send feedback to: cfi@asa2fly.com

Page Number	Question Number	Correct Answer	Explanation
Throughout			**The Airman Knowledge Test Report (AKTR) now reflects Airman Certification Standard (ACS) codes; reference the Aviation Mechanic ACS (FAA-S-ACS-1) to know what subject corresponds to the ACS on your AKTR. The 2024 Airframe Mechanic Test Guide includes the ACS codes with each question.**
6	**8026**		**This question has been moved to the General Mechanic Test Guide.**
6	**9033**	**B**	**A new question is added to read:** **9033.** For doped and overlapping span-wise seams on a wing's leading edge, overlap the fabric at least 4 inches, and A—cover with finishing tape at least 3 inches wide, with the tape centered on the leading edge of the wing. B—cover with finishing tape at least 4 inches wide, with the tape centered on the leading edge of the wing. C—cover with finishing tape at least 4 inches wide, with the tape centered at the outside edge of the overlap seam. *For an overlapped and doped span-wise seam on a wing's leading edge, overlap the fabric at least 4 inches and cover with finishing tape at least 4 inches wide, with the tape centered at the outside edge of the overlap seam.*
8	**9032**	**C**	**A new question is added to read:** **9032.** Servicing diagrams that show the arrangement of equipment and location of quick access doors on an aircraft can be found in the A—Type Certificate Data Sheets. B—pilot's operating handbook. C—aircraft manufacturer's maintenance manual. *Servicing diagrams showing the arrangement of equipment and location of access doors are supplied by the manufacturer in the aircraft maintenance manual.*

Page Number	Question Number	Correct Answer	Explanation
8	9034	B	**A new question is added to read:** **9034.** Which of the following statements is true regarding replacement rivets? A—Rivets may never be replaced with a type having lower strength properties. B—The new edge distance of larger replacement rivet must not be less than minimums. C—Rivet spacing for larger replacement rivets is regarded as a design parameter of the manufacturer and does not need to be considered. *Replacement rivets are to be of the same size and strength whenever possible. If the rivet hole has become enlarged or damaged, the next larger size rivet is used. Edge distance and rivet spacing must be considered and is not allowed to be less than minimums. Rivets may not be replaced by a type having lower strength properties, unless the lower strength is adequately compensated with an increase in size or a greater number of rivets.*
19	9031	B	**A new question is added to read:** **9031.** Which type of monocoque structure has the skin reinforced by a complete framework of structural members? A—Semimonocoque. B—Reinforced shell. C—Monocoque. *The reinforced shell monocoque structure has the skin reinforced by a complete framework of structural members.*
31	9035	A	**A new question is added to read:** **9035.** When soldering close fitting parts, solder is drawn into the space between the two parts by A—capillary action. B—the dissimilar temperatures of the parts. C—the pressure caused by the flame of the soldering torch. *The molten alloy (solder) is pulled up between close-fitting parts by capillary action.*
39	8261		**This question has been moved to the General Mechanic Test Guide.**
39	8261-1		**This question has been moved to the General Mechanic Test Guide.**
39	8262		**This question has been moved to the General Mechanic Test Guide.**
39	8263		**This question has been moved to the General Mechanic Test Guide.**
44	8291		**This question has been moved to the General Mechanic Test Guide.**
44	8292		**This question has been moved to the General Mechanic Test Guide.**
88	8598		**This question has been moved to the General Mechanic Test Guide.**
97	9038	B	**A new question is added to read:** **9038.** Which of the following is a two-way text communication link between an airliner in flight and the airline's main ground facilities? A—Wide Area Augmentation System (WAAS). B—Aircraft Communication Addressing & Reporting System (ACARS). C—Cospas-Sarsat. *ACARS is a two-way communication link between an airliner in flight and the airline's main ground facilities. Data is collected in the aircraft by digital sensors and is transmitted to the ground facilities. Replies from the ground may be printed out, so the appropriate flight crew member can have a hard copy of the response.*

Page Number	Question Number	Correct Answer	Explanation
98	9036	C	**A new question is added to read:** **9036.** When testing a 406 MHz emergency locator transmitter (ELT), A—testing inside of a metal hangar will prevent detection of an emergency ELT signal. B—the unit sends a test signal that will not generate an emergency signal. C—care must be taken as the unit could send an emergency signal, activating search and rescue (SAR) agencies. *Over-air testing of an ELT should always be avoided if possible. Activation of an ELT, whether accidentally, or for test, will generate an emergency signal that cannot be distinguished from an actual emergency. Testing the system inside a metal hangar does not guarantee that the radiated signal will not be detected.*
98	9037	B	**A new question is added to read:** **9037.** When testing an emergency locator transmitter (ELT), a 50-ohm dummy load A—is connected in parallel with the antenna to reduce transmissions. B—is connected in place of the antenna to prevent the signal from being radiated into space. C—amplifies the ELT output for better analysis of the signal. *When testing an ELT, a 50-ohm dummy load or antenna boot should be used to prevent the signal from being radiated into space. The signal must be attenuated to less than –51 dBW, a power flux density of –37.4 dB (W/m^2), or a field intensity of –11.6 dB (V/m).*
142	9039	A	**A new question is added to read:** **9039.** An amber light in a gear position indicator system typically indicates what condition? A—At least one gear is in transition. B—The airspeed is too high for selecting gear down. C—All landing gear are down and locked. *An amber in-transit light is typically used to indicate that the landing gear is in transition. In older aircraft, an amber light may be used to indicate that the gear is up.*
145	8970	C	**Answer stem A is revised to read:** A—Autotransformer, heat control relay, heat control toggle switch, 115V DC power supply, and indicating light.
152	9029	A	**A new question is added under a new subheading “Water and Waste Systems” to read:** **9029.** What are the components used to heat water supply lines and waste water tanks? A—Heater blankets and inline heaters. B—Combustion heaters and fuel heaters. C—Heater boots and combustion heaters. *Heater blankets, in-line heaters, or heater boots are often used to heat the water supply lines, water tank drain hoses, waste drain lines, waste tank rinse fittings, and drain masts.*
152	9030	B	**A new question is added under a new subheading “Water and Waste Systems” to read:** **9030.** The waste water tanks hold A—potable water. B—gray water. C—drinking water. *Transport type aircraft have water and waste systems on board. Water lines carry water from the potable tanks to the lavatories and galleys. The waste water tanks collect the gray water from the galleys and lavatories.*