Update to General Test

July 2026

General Mechanic Test Guide 2026

ASA-AMG-26

With the following changes, ASA's *General Mechanic Test Guide 2026* provides complete preparation for the FAA General Knowledge Test. This test continues to reference the *Airman Knowledge Testing Supplement for Aviation Maintenance Technician* (FAA-CT-8080-4G).

About the Test Changes

The FAA tests are "closed tests," which means the database of questions used on the test 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 test. 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 test, 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
v			**The sixth paragraph is revised to read:** **Aviation Supplies & Academics, Inc.** 817 Walbridge Street Kalamazoo, Michigan 49007 Email: cfi@asa2fly.com Phone: 425-235-1500 Website: asa2fly.com
viii			**A new section is added following Use of Test Aids and Materials to read:** **Use of Figures on FAA Knowledge Tests** Some sample FAA questions refer to figures or legends immediately following the question number (e.g., "8078. (Refer to Figure 22.)"). These figures and legends are taken from the *Airman Knowledge Testing Supplement* (FAA-CT-8080-4G) and are included at the back of this book for reference. During your actual test, this supplement is typically provided to you as a separate booklet at the testing center. However, in the computer-based testing system used by the Federal Aviation Administration and administered through providers such as PSI Services, these same figures may be embedded directly into test questions or accessed onscreen via an exhibit button. As testing continues to evolve, applicants should be prepared to use either a printed supplement or onscreen figures and be comfortable locating and interpreting both formats efficiently.
4	8009-3	A	**Explanation is revised to read:** *One farad is equal to 10^{12} picofarads. Example: 2 farads is equal to 2×10^{12} (2,000,000,000,000) picofarads. (AM.I.A.K8) — FAA-H-8083-30*
6	8018	C	**Answer stem C is revised to read:** C—25.21 amperes.

Page Number	Question Number	Correct Answer	Explanation
16	8002-3	B	**A new question is added to read:** **8002-3.** While performing maintenance on an aircraft avionics component, a technician installs a replacement circuit board without using a grounding strap. Shortly after installation, the unit fails during testing with no visible signs of damage. What is the most likely cause of this failure? A—Thermal runaway due to improper cooling. B—Electrostatic discharge (ESD) damage. C—Inductive coupling from nearby wiring. *Electrostatic discharge (ESD) occurs when a buildup of static electricity is suddenly transferred between objects with different electrical potentials. Sensitive avionics components—especially modern solid-state electronics—can be damaged or degraded by ESD at levels far below what a human can feel or see.* *In this scenario, the lack of proper grounding (such as a wrist strap or grounded work surface) likely allowed static electricity to discharge into the circuit board during handling. This often results in latent or immediate component failure without visible damage, making ESD a common and often overlooked cause of avionics issues. (AM.I.A.K24) — FAA-H-8083-30*
32	8613	C	**A new question is added to read:** **8613.** During a weight and balance check after maintenance, an aircraft is found to have a total weight of 2,500 pounds and a center of gravity (CG) at 41.5 inches aft of the datum. The maximum allowable CG is 40.0 inches. A technician corrects the condition by removing 50 pounds of equipment located at an arm of 90 inches. What will the approximate new CG location be? A—39.9 inches. B—40.2 inches. C—40.5 inches. *First calculate the original total moment:* *2,500 × 41.5 = 103,750 in-lb* *Moment removed:* *50 × 90 = 4,500 in-lb* *New totals:* *Weight: 2,500 – 50 = 2,450 lb* *Moment: 103,750 – 4,500 = 99,250 in-lb* *Now calculate new CG:* *CG = 99,250 ÷ 2,450 = 40.5 inches* *The new CG location will be 40.5 inches aft of datum. (AM.I.C.K4) — FAA-H-8083-30*
32	8613-1	B	**A new question is added to read:** **8613-1.** After installing new avionics, a technician must compute the updated center of gravity (CG). The aircraft originally had a total weight of 2,200 pounds with a moment of 88,000 inch-pounds. The new avionics weigh 40 pounds and are installed at an arm of 10 inches. What is the new CG location? A—38.6 inches. B—39.5 inches. C—41.2 inches. *First determine the added moment:* *40 × 10 = 400 in-lb* *New totals:* *Weight: 2,200 + 40 = 2,240 lb* *Moment: 88,000 + 400 = 88,400 in-lb* *Now calculate CG:* *CG = 88,400 ÷ 2,240 = 39.5 inches* *The new CG location is 39.5 inches aft of datum. (AM.I.C.K4) — FAA-H-8083-30*

Page Number	Question Number	Correct Answer	Explanation
63	8360-1	C	**A new question is added to read:** **8360-1.** During an aircraft inspection, a technician observes a rough, powdery, white deposit forming on an aluminum skin panel with slight pitting beneath the surface. What type of corrosion is most likely present? A—Intergranular corrosion. B—Exfoliation corrosion. C—Pitting corrosion. *Pitting corrosion is a localized form of corrosion that typically appears as small pits or holes in the metal surface. On aluminum, it often presents as a white or gray powdery deposit with underlying surface penetration. While it may initially appear minor, pitting can progress deeper into the material and compromise structural integrity if not addressed. (AM.I.G.K6) — FAA-H-8083-30*
73	8393-1	A	**Answer stem C is revised to read:** C—Neither.
82	8457-4	B	**The question is revised to read:** **8457-4.** When performing a major repair or alteration, for which aircraft must an aviation mechanic submit Form 337 to the FAA?
83	8527	B	**The correct answer is B, and the explanation is revised to read:** *The vertical stabilizer is a primary structural component. Even when it is replaced with a new, identical part from the manufacturer and no design change is made, the work still involves primary structure and therefore meets the FAA definition of a major repair. (AM.I.I.K7) — 14 CFR Part 43, Appendix A*
94	8479-1	A	**A new question is added to read:** **8479-1.** A technician uses a torque wrench with a 1.5-foot handle to tighten a bolt. If 80 pounds of force is applied perpendicular to the handle, how much torque is applied? A—120 ft-lb. B—80 ft-lb. C—100 ft-lb. *Torque is the product of force and the distance from the pivot point (lever arm):* *Torque = Force × Distance* *Torque = 80 lb × 1.5 ft = 120 ft-lb* *Applying force perpendicular to the handle ensures maximum torque. This concept is critical in maintenance to achieve proper fastener tension and avoid under- or over-tightening. (AM.I.J.K2) — FAA-H-8083-30*
101	8222-1	B	**A new question is added to read:** **8222-1.** Which nondestructive testing (NDT) method is most suitable for detecting surface and slightly subsurface cracks in nonporous materials such as aluminum? A—Magnetic particle inspection. B—Dye penetrant inspection. C—Ultrasonic inspection. *Dye penetrant inspection is commonly used to detect surface and slightly subsurface defects in nonporous materials, including aluminum. The process relies on a liquid penetrant that seeps into cracks or flaws, making them visible under appropriate lighting. Magnetic particle inspection is limited to ferromagnetic materials, so it cannot be used on aluminum. Ultrasonic inspection is effective for detecting internal flaws but is less sensitive for fine surface cracks compared to penetrant methods. (AM.I.K.K3) — AC 43.13-1B*

Page Number	Question Number	Correct Answer	Explanation
101	8244-1	C	**A new question is added to read:** **8244-1.** During a detailed visual inspection of a riveted aluminum skin panel, an inspector positions a light source at a low angle relative to the surface. What is the primary advantage of this technique? A—It reduces glare and improves overall brightness of the inspection area. B—It allows internal defects to be detected without additional nondestructive testing (NDT) methods. C—It enhances the visibility of surface irregularities such as cracks, dents, or corrosion. *Using a low-angle (oblique) light source creates shadows across the surface, which makes small discontinuities, such as cracks, raised edges, dents, or corrosion, more visible during a visual inspection. This technique is particularly effective on smooth metal surfaces where defects might otherwise blend in under direct lighting. While proper lighting improves inspection quality, it does not enable detection of internal defects, which require other NDT methods. (AM.I.K.K3) — AC 43.13-1B*