Update to Powerplant Test

July 2026

Powerplant Mechanic Test Guide 2026

ASA-AMP-26

With the following changes, ASA's *Powerplant Mechanic Test Guide 2026* provides complete preparation for the FAA Powerplant 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.
29	8133-1	A	**A new question is added to read:** **8133-1.** During a post-maintenance engine run on a turbine engine, a technician observes that exhaust gas temperature (EGT) rises rapidly toward limits during acceleration, while engine RPM and fuel flow remain within normal ranges. No abnormal vibrations are noted. What is the most likely cause? A—Turbine section damage or reduced cooling efficiency. B—Faulty tachometer indicating inaccurate RPM. C—Low fuel pressure to the fuel control unit.

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			Damage to turbine blades or a reduction in cooling airflow can cause localized overheating in the turbine section. This results in a rapid rise in EGT without corresponding changes in RPM or fuel flow. Since RPM and fuel flow are normal, the issue is likely not in the fuel or compressor system, but rather in the turbine section's ability to withstand and dissipate heat. (AM.III.B.K4) — FAA-H-8083-32
29	**8206-1**	**A**	**A new question is added to read:** **8206-1.** During normal operation of a turbine engine, a technician notes a gradual increase in exhaust gas temperature (EGT) along with a slight decrease in engine RPM at a constant power setting. What is the most likely cause? A—Compressor blade erosion or contamination. B—Malfunctioning ignition system. C—Excessively rich fuel-to-air ratio. *Compressor blade erosion or contamination reduces compressor efficiency, resulting in decreased airflow and pressure. To maintain the same power output, the engine operates at a higher EGT while producing fewer RPM. This trend is a key indicator of compressor degradation and is commonly monitored in turbine engine performance analysis. (AM.III.B.K4) — FAA-H-8083-32*
34	**9022**	**C**	**A new question is added to read:** **9022.** During a maintenance run, a turbine engine produces lower-than-expected thrust and higher-than-normal EGT at the specified RPM. Which condition is the most likely cause? A—Faulty fuel flow transmitter. B—Low oil pressure. C—Fuel control unit out of adjustment. *If the fuel control is improperly adjusted, the engine may not produce the required EGT or EPR at a specified RPM. A high EGT with reduced performance during a run-up can indicate improper fuel scheduling and should be corrected according to the manufacturer's engine trimming procedures. (AM.III.B.K7) — FAA-H-8083-32*
34	**9023**	**A**	**A new question is added to read:** **9023.** During an engine performance check, a technician observes normal N_1 and N_2 speeds but lower-than-expected thrust and higher fuel flow for the selected power setting. Which condition is the most likely cause? A—A bleed air leak in the pneumatic system. B—A faulty N_2 tachometer indication. C—Improper ignition timing. *A bleed air leak allows compressed air to escape from the engine before it can be fully utilized in the combustion and turbine process. Engine speeds (N_1/N_2) may still appear normal, but this leak results in reduced engine efficiency and thrust output while requiring increased fuel flow to maintain the selected power setting.* *From a maintenance standpoint, bleed air leaks are a known cause of performance loss without obvious compressor or turbine damage that are often identified through system checks and trend monitoring. An indication error would not result in an actual loss of thrust or increased fuel consumption, and turbine engines do not rely on ignition timing in the same way reciprocating engines do as ignition is primarily used for starting. (AM.III.B.K8) — FAA-H-8083-32*