

# GENERAL AIRPLANE OPERATIONS

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Part  
**B**

Customer's Name \_\_\_\_\_

Signature \_\_\_\_\_

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STUDENT PILOTS: Answer questions with diamonds (◆) for Pre-Solo quiz.

1. What minimum proficiency requirements, per FAR 61.57, must be met to carry passengers?  
 (a) Three touch-and-gos in the preceding 90 days for daytime operations.  
 (b) Three stop-and-gos in the preceding 90 days for night operations.  
 (c) In taildraggers, day landings must be stop-and-gos.  
 (d) All of the above.
2. For day VFR flight, how will you determine if an item is a required piece of equipment for an aircraft's airworthiness? (FAR 91.205(b), 91.213(d)(2)(ii), Airplane Flying Handbook [AFH], FAA-H-8083-3, pg. 2-4)  
 (a) Consult Federal Aviation Regulations (FARs).  
 (b) Refer to manufacturer's Make and Model's Type Certificate Data Sheet.  
 (c) Check manufacturer's Required Equipment List for Make and Model.  
 (d) All of the above.
- ◆ 3. Which statement(s) regarding an airspeed indicator's WHITE arc is / are correct? (Pilot's Handbook of Aeronautical Knowledge [PHAK] AC 61-23C, pg. 3-6)  
 (a) The white arc identifies an aircraft's "Flap Operating Range."  
 (b) The white arc incorporates speeds from V<sub>so</sub> to V<sub>fe</sub>.  
 (c) "V" speed abbreviations are found in FAR Part 1.  
 (d) All of the above.
- ◆ 4. Which statement(s) regarding an airspeed indicator's GREEN arc is / are correct? (PHAK 3-6)  
 (a) The green arc identifies an aircraft's "Normal Operating Range."  
 (b) The green arc incorporates speeds from V<sub>s1</sub> to V<sub>no</sub>.  
 (c) V<sub>s1</sub> is an aircraft's stall speed at full power, without flaps, and gear extended.  
 (d) Both choices A and B, but not C.
- ◆ 5. Which statement(s) regarding an airspeed indicator's YELLOW arc is / are correct? (PHAK 3-6)  
 (a) The yellow arc identifies an aircraft's "Smooth Air Operating Range."  
 (b) The yellow arc incorporates speeds from V<sub>no</sub> to V<sub>ne</sub>.  
 (c) Operations in the yellow arc are permitted only if at maximum Gross Weight.  
 (d) Both choices A and B, but not C.
- ◆ 6. Which statement(s) regarding an airspeed indicator's RED line is / are correct? (PHAK 3-6)  
 (a) Red line identifies an aircraft's "Never Exceed Speed."  
 (b) Red line speed is also known as V<sub>ne</sub>.  
 (c) Red line speed may be exceeded if in calm air and below max Gross Weight.  
 (d) Both choices A and B, but not C.
7. Which common V-speed is not depicted on the airspeed indicator? (PHAK 3-6)  
 (a) V<sub>I</sub> (Landing Speed).  
 (b) V<sub>a</sub> (Maneuvering Speed).  
 (c) V<sub>g</sub> (Obstacle Clearance Landing Speed).  
 (d) V<sub>m</sub> (Maneuvering Speed).
8. Maneuvering speed (V<sub>a</sub>) applies to an aircraft at a specific Gross Weight; as the Gross Weight of the aircraft decreases, maneuvering speed also decreases.  
 (a) True.  (b) False.
- ◆ 9. When should aircraft brakes be tested? (AFH 2-9)  
 (a) Every 50-hour airframe inspection.  
 (b) On initial taxi.  
 (c) During pre-takeoff engine runup.  
 (d) When full power is applied for takeoff.
10. What is the purpose of a magnetos grounding test before engine shutdown? (AFH 2-11)  
 (a) Test for proper magneto output necessary for flight.  
 (b) Test output of voltage regulator during simulated magneto failure.  
 (c) Test for proper electrical grounding by the magneto (key) switch.  
 (d) Test ability of battery to support ignition during magneto failure.
11. No person may operate an aircraft during daylight hours that is equipped with anticollision lights unless the anticollision lights are lighted, with the exception that the anticollision lights may be left off if the PIC determines that to be in the best interest of safety. (FAR 91.209 & AFH 2-6)  
 (a) True.  (b) False.
12. What is regulation regarding the use of transponder squawking Mode C? (FAR 91.215(c), AIM 4-1-19)  
 (a) Transponders are not required in Class E airspace when below 10,000' MSL.





- (b) If installed and maintained, it must be used when in controlled airspace.
- (c) Transponder operation in Class G airspace is not required, but recommended.
- (d) All of the above.
13. What practicality is there to squawking Mode C when not in radar coverage? (*AIM 4-4-15 c.*)
- (a) Mode C arms the ELT (Emergency Locator Transmitter) before a crash.
- (b) It assists FlightWatch in determining your position.
- (c) It benefits aircraft equipped with TCAS (Traffic Collision Avoidance System).
- (d) Mode C permits a DF (Direction Finding) steer from Flight Service.
- ◆ 14. What would you do if, during takeoff roll the aircraft swerves sharply and unexpectedly? (*AFH 3-10*)
- (a) Correct with ailerons, continue, troubleshoot during climbout.
- (b) Maintain directional control and abort the takeoff before conditions deteriorate.
- (c) Announce on CTAF or tower frequency, "Abort, Abort, Abort."
- (d) Abort if aircraft is below Vr speed, otherwise continue with the takeoff.
- ◆ 15. How would you handle a door opening during climb-out? (*AFH 12-3*)
- (a) Aviate - Return to the airport, or close the door when at a safe altitude.
- (b) Navigate - Climbout on center line to avoid becoming lost.
- (c) Communicate - Declare an emergency to obtain assistance from ATC.
- (d) Checklist - First turn to the appropriate checklist in aircraft's POH.
- ◆ 16. When is a turn a "steep" turn? (*AFH 4-4*)
- (a) When the aircraft displays "overbanking tendency."
- (b) When bank angle exceeds 37.5-degrees.
- (c) When the turn increases stall speed by 25%.
- (d) When ailerons can be neutralized to maintain bank.
- ◆ 17. What is the first sign of engine induction or carburetor icing? (*PHAK 2-11*)
- (a) Decrease in oil temperature.
- (b) Loss of engine RPM.
- (c) Decrease in Manifold Pressure (MP).
- (d) Both choices B and C, but not A.
- ◆ 18. When should you use carburetor heat or Alternate Induction Air? (*PHAK 2-11*)
- (a) When carburetor icing conditions are known or suspected.
- (b) When operating the engine below the normal operating RPM range.
- (c) Immediately after a sudden engine failure, if altitude permits.
- (d) All of the above.
- ◆ 19. What is the first thing you should do for a partial or complete power plant failure while in flight (may be done simultaneously with other actions)? (*AFH 12-2*)
- (a) Aviate: Pitch for best glide attitude to maximize range and avoid stalling.
- (b) Navigate: Look for an emergency landing site.
- (c) Communicate: Switch to 121.5 MHz. and declare an emergency.
- (d) Checklists: Consult POH for appropriate action.
- ◆ 20. What will you do if, while climbing to 400 feet on takeoff the engine suddenly quits? (*AFH 12-6*)
- (a) Immediately execute a 180-degree turn to land at the airport.
- (b) Pitch for best glide attitude and prepare to land straight ahead.
- (c) Immediately check carburetor heat and fuel selector setting.
- (d) Declare an emergency and state your intentions.
- ◆ 21. What are the actions for an engine fire on the ground during starting? (*AFH 12-1*)
- (a) Keep cranking the engine with the throttle full open.
- (b) Place mixture control at full lean.
- (c) If fire does not extinguish, exit the airplane and fight from outside.
- (d) All of the above.
- ◆ 22. What are the actions for an engine fire in flight?
- (a) Throttle IDLE, Mixture LEAN, Fuel OFF.
- (b) Dive to extinguish the flames, then fly emergency descent or best glide.
- (c) Attempt a restart after fire completely extinguished.
- (d) Both choices A and B, but not C.
23. Once an electrical fire is controlled, restarting the fire should never be risked by turning electrical equipment back on. (*AFH 12-1*)
- (a) True.  (b) False.
- ◆ 24. A low oil pressure indication is always a sign of imminent engine failure requiring an off-airport landing. (*PHAK 2-14*)
- (a) True.  (b) False.
- ◆ 25. When operating in cold weather, the oil temperature gauge is the only reliable way to determine that an engine is sufficiently warm for takeoff.
- (a) True.  (b) False.

"People do what you expect only if you inspect, but you must do it with respect." —Ralph Hood

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