Update to Private Pilot Test

April 2020

Private Pilot Test Prep 2020

ASA-TP-P-20

With the following changes, ASA's *Private Pilot Test Prep 2020* provides complete preparation for the FAA Private, Sport, and Recreational Pilot Knowledge Exams. These tests continue to reference the *Airman Knowledge Testing Supplement for Sport Pilot, Recreational Pilot, Remote Pilot and Private Pilot* (FAA-CT-8080-2H).

About the Test Changes

The FAA exams are "closed tests" which means the exact database of questions is not available to the public. However, each test cycle the FAA provides a What's New document, which identifies subjects that have been removed or added to a test. This document also includes pertinent information to ensure training and testing remains correlated, which in turn promotes a reliable certification system.

The question 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 although not exactly the same questions on your official FAA exam. Answer stems 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. 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 pilots. Send feedback to: cfi@asa2fly.com

The next FAA test change is expected in June 2020.

Page Number	Question Number	Correct Answer	Explanation
2-22	3734	[B]	*Answer stem B and the explanation now read:* B— A vortex ring state condition. The following combination of conditions are likely to cause vortex ring state: 1. A vertical, or nearly vertical, descent of at least 300 FPM. (The actual critical rate depends on the gross weight, RPM, density altitude, and other pertinent factors.) 2. The rotor disk must be using some of the available engine power (20 to 100 percent). 3. The horizontal velocity must be slower than effective translational lift.
2-22	3734-1	[B]	*A new question is added to read:* RTC **3734-1.** A fully developed vortex ring state may reach a rate of descent that approaches A— 4,000 FPM. B— 6,000 FPM. C— 8,000 FPM. A fully developed vortex ring state is characterized by an unstable condition in which the helicopter experiences uncommanded pitch and roll oscillations, has little or no collective authority, and achieves a descent rate that may approach 6,000 fpm if allowed to develop. (PLT264) — FAA-H-8083-21

Page Number	Question Number	Correct Answer	Explanation
2-22	3734-2	[A]	*A new question is added to read:* RTC **3734-2.** An uncommanded, rapid yaw towards the advancing blade which does not subside of its own accord is known as A— a loss of tail rotor effectiveness. B— vortex ring state. C— main rotor disk interference. Loss of tail rotor effectiveness (LTE), or an unanticipated yaw, is an uncommanded, rapid yaw towards the advancing blade which does not subside of its own accord. It can result in the loss of the aircraft if left unchecked. (PLT262) — FAA-H-8083-21
2-22	3734-3	[C]	*A new question is added to read:* RTC **3734-3.** What flight activity or condition would lend itself to a higher risk for loss of tail rotor effectiveness (LTE)? A— While on short approach to landing at a heliport. B— During departure from a heliport in a no-wind condition. C— In a low-and-slow situation over a remote area. Low-and-slow situations over geographical areas where the exact wind speed and direction are hard to determine will typically lend the aircraft to be at higher risk for loss of tail rotor effectiveness. (PLT262) — FAA-H-8083-21 Answer (A) is incorrect because there will typically be a windsock available to determine wind direction and strength when landing at a heliport. Answer (B) is incorrect because in a no-wind condition the aircraft is less susceptible to LTE.
10-3	Chapter text		*Under VHF Omnidirectional Range (VOR), the second paragraph has been changed to read:* On sectional aeronautical charts, VOR locations are shown by blue symbols centered in a blue compass rose which is oriented to Magnetic North. A blue identification box adjacent to the VOR symbol lists the name and frequency of the facility, its three-letter identifier and Morse Code equivalent, and other information as appropriate. *See* the “Radio Aids to Navigation and Communications Box” information in FAA Legend 1.
11-4	3630		*This question has been removed. HIWAS has been discontinued and is no longer on the FAA Knowledge Exams.*
11-13	Chapter text		*The subheading and chapter text are changed to read:* **Transponder and ADS-B Requirements** A transponder is an airborne radar beacon transmitter-receiver that automatically receives signals from a ground-based radar beacon transmitter-receiver (interrogator). The transponder selectively replies (with a specific code) only to interrogations received on the mode to which it is set. Civil Mode A transponders have 4,096 discrete four-digit codes. This return signal is displayed on a radarscope on the ground, which a controller can then identify and pinpoint the position of each aircraft (target) under his or her control. Additionally, some Mode A transponders are equipped with an automatic altitude reporting capability. This system converts aircraft altitude (in 100-foot increments) to coded digital information which is transmitted back to the interrogating radar system. Mode C transponders have this same altitude reporting capability, giving the controller information on the aircraft’s altitude as well as its position. The transponder “Ident” feature should not be activated unless requested by ATC. Activating it will show a blip on a radar screen allowing the controller to quickly locate your position. Mode C, which should be operated at all times, unless ATC requests otherwise, is also required for all flights above 10,000 feet MSL. The transponder code for VFR flight is 1200. When changing transponder codes, avoid inadvertent selection of codes 7500 (hijack), 7600 (lost communications), 7700 (emergency), and 7777 (military interceptor operations). *(Continued)*

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			If air traffic control advises that radar service is being terminated, the transponder should be set to code 1200 for VFR flight. As of January 1, 2020, aircraft operating in airspace previously requiring the use of a transponder will be required to have an Automatic Dependent Surveillance – Broadcast (ADS-B) system that includes a certified position source capable of meeting requirements defined in 14 CFR §91.227. For altitudes below FL180, this system can be either a 1090-ES or Universal Access Transceiver (UAT). ADS-B Out is a function of an aircraft's avionics that periodically broadcasts the aircraft's three-dimnesional position and velocity along with additional identifying information prescribed by §91.227. If the aircraft is equipped with ADS-B Out, it must be operated in transmit mode at all time. The following airspace requires the use of ADS-B Out: • Class A; • Class B, from the surface to 10,000 feet MSL including the airspace from portions of Class B that extend beyond the Mode C Veil up to 10,000 feet MSL; • Class C, from the surface up to 4,000 feet MSL including the airspace above the horizontal boundary up to 10,000 feet MSL; • Class E, above 10,000 feet MSL over the 48 states and Washington, D.C., excluding airspace at and below 2,500 feet AGL, and over the Gulf of Mexico at and above 3,000 feet MSL within 12 NM of the coastline of the United States; and • Within a Mode C Veil, the airspace within a 30 NM radius of any airport listed in Part 91, Appendix D, Section 1, from the surface up to 10,000 feet MSL. Aircraft that were not originally certificated with an electrical system, such as balloons and gliders, are exempt from operations requiring ADS-B Out in certain specified airspace: • Outside any Class B or Class C airspace area; and • Below the altitude of the ceiling of a Class B or Class C airspace area designated for an airport, or 10,000 feet MSL—whichever is lower. Operations of aircraft with inoperable ADS-B equipment are allowed as long as an ATC authorized deviation has been approved by the ATC facility that has jurisdiction over the airspace. These requests can be made at any time.
11-14	3166	[C]	*Answer stem C and the explanation are changed to read:* C—ADS-B Out Equipment. With certain exceptions, all aircraft operating within 30 miles of Class B airspace will require ADS-B equipment to be installed and in transmit mode. (PLT161, PA.VI.B.K4) — 14 CFR §91.225
11-14	3166-1	[A]	*A new question is added to read:* ALL **3166-1.** Each person operating an aircraft equipped with ADS-B Out must operate this equipment A—in transit mode at all times. B—when flying in controlled airspace. C—at all times at and above 10,000 feet MSL. Each person operating an aircraft equipped with ADS-B Out must operate this equipment in transit mode at all times, regardless of the airspace or altitude. (PLT161, PA.VI.B.K4) — 14 CFR §91.225

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11-14	3166-2	[C]	*A new question is added to read:* ALL **3166-2.** What type of ADS-B Out equipment is required for aircraft operating below 18,000 feet MSL when flying in class C airspace? A—1090-ES. B—Universal Access Transceiver. C—1090-ES or Universal Access Transceiver. For flights below 18,000 feet MSL either 1090-ES or Universal Access Transceiver ADS-B Out equipment can be used. For flights above 18,000 feet MSL in Class A airspace, the aircraft must be equipped with 1090-ES. (PLT161, PA.VI.B.K4) — 14 CFR §91.225
11-14	3166-3	[B]	*A new question is added to read:* ALL **3166-3.** For operations of an aircraft in class C airspace with inoperative ADS-B Out equipment, a request must be made to the ATC facility having jurisdiction over the airspace A—at least 1 hour before the operation. B—at any time. C—24 hours before the proposed operation. For operations of an aircraft with inoperative ADS-B Out, the request may be made to ATC at any time. (PLT161, PA.VI.B.K4) — 14 CFR §91.225 Answer (A) is incorrect because a request to operate an aircraft without ADS-B equipment must be made 1 hour before the operation. Answer (C) is incorrect because the request may be made at any time.
11-14	3166-4	[C]	*A new question is added to read:* ALL **3166-4.** ADS-B Out equipment broadcasts the aircraft's A—three-dimensional position. B—three-dimensional velocity. C—three-dimensional position and velocity. ADS-B Out broadcasts the aircraft's state vector (three-dimensional position and velocity) as well as additional required information. (PLT161, PA.VI.B.K4) — 14 CFR §91.227