



## Update to Commercial Pilot Test

Commercial Pilot Test Prep 2020

September 2020

ASA-TP-C-20

With the following changes, ASA's *Commercial Test Prep 2020* provides complete preparation for the FAA Commercial Pilot and Military Competence Knowledge Exams. This test continues to reference the *Airman Knowledge Testing Supplement for Commercial Pilot* ([FAA-CT-8080-1E](#)).

### 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](mailto:cfi@asa2fly.com)

Page Number	Question Number	Correct Answer	Explanation
2-20	5698	[C]	<p><i>Answer stem C and the explanation are changed to read:</i></p> <p>C—vortex ring state could develop, particularly during the termination.</p> <p>Situations that are conducive to a vortex ring state condition are:</p> <ol style="list-style-type: none"><li>1. Attempting to hover out of ground effect at altitudes above the hovering ceiling of the helicopter;</li><li>2. Attempting to hover out of ground effect without maintaining precise altitude control; or</li><li>3. A steep power approach in which airspeed is permitted to drop nearly to zero.</li></ol>
2-20	5699	[B]	<p><i>Answer stem B and the explanation are changed to read:</i></p> <p>B—Vortex ring state.</p> <p>Situations that are conducive to a vortex ring state condition are:</p> <ol style="list-style-type: none"><li>1. Attempting to hover out of ground effect at altitudes above the hovering ceiling of the helicopter;</li><li>2. Attempting to hover out of ground effect without maintaining precise altitude control; or</li><li>3. A steep power approach in which airspeed is permitted to drop nearly to zero.</li></ol>
2-20	5700	[C]	<p><i>The question and explanation are changed read:</i></p> <p><b>5700.</b> Which procedure will result in recovery from a vortex ring state?</p> <p>When recovering from a vortex ring state condition, pilots tend to try to stop the descent by increasing collective pitch. However, this only results in increasing the stalled area of the rotor, thus increasing the rate of descent. Since inboard portions of the blades are stalled, cyclic control is limited. Recovery is accomplished by increasing forward speed, and/or partially lowering collective pitch.</p>

Page Number	Question Number	Correct Answer	Explanation
2-21	5701	[B]	<p><i>The question and explanation are changed to read:</i></p> <p><b>5701.</b> The addition of power in a vortex ring state situation produces an</p> <p>When recovering from a vortex ring state condition, pilots tend to try to stop the descent by increasing collective pitch. However, this only results in increasing the stalled area of the rotor, thus increasing the rate of descent. Since inboard portions of the blades are stalled, cyclic control is limited. Recovery is accomplished by increasing forward speed, and/or partially lowering collective pitch.</p>
2-21	5702	[A]	<p><i>The question and explanation are changed to read:</i></p> <p><b>5702.</b> Under which situation is accidental vortex ring state likely to occur?</p> <p>Situations that are conducive to a vortex ring state condition are:</p> <ol style="list-style-type: none"> <li>1. Attempting to hover out of ground effect at altitudes above the hovering ceiling of the helicopter;</li> <li>2. Attempting to hover out of ground effect without maintaining precise altitude control; or</li> <li>3. A steep power approach in which airspeed is permitted to drop nearly to zero.</li> </ol>
2-21	5703	[A]	<p><i>Question and explanation now read:</i></p> <p><b>5703.</b> To recover from a vortex ring state condition, the pilot should</p> <p>When recovering from a vortex ring state condition, pilots tend to try to stop the descent by increasing collective pitch. However, this only results in increasing the stalled area of the rotor, thus increasing the rate of descent. Since inboard portions of the blades are stalled, cyclic control is limited. Recovery is accomplished by increasing forward speed, and/or partially lowering collective pitch. In a fully developed vortex ring state, the only recovery may be to enter autorotation to break the vortex ring state. When cyclic authority is regained, you can then increase forward airspeed.</p>
2-21	5703-1	[C]	<p><i>A new question is added to read:</i></p> <p>RTC</p> <p><b>5703-1.</b> Loss of tail rotor effectiveness (LTE) is caused by</p> <p>A—a main rotor disk vortex causes the tail rotor to operate in an extremely turbulent environment.  B—the failure of the power drive portion of the tail rotor disk, resulting in a complete loss of antitorque.  C—an aerodynamic interaction between the main rotor and tail rotor and not caused from a mechanical failure.</p> <p>LTE is caused by an aerodynamic interaction between the main rotor and tail rotor and not caused by mechanical failure. Some helicopter types are more likely to encounter LTE due to the normal thrust produced by having a tail rotor that, although meeting certification standards, is not always able to produce the additional thrust demanded by the pilot. (PLT262) — FAA-H-8083-21</p>
4-6	5545	[B]	<p><i>Correct answer and explanation now read:</i></p> <p>A Letter of Authorization must be obtained from your local Flight Standards District Office (FSDO) prior to conducting commercial air tours. These regulations can be found under 14 CFR §91.146 and §91.147. (PLT448, CA.I.A.K2) — 14 CFR §61.133, §119.1</p>
4-20	Chapter text		<p><i>The subheading and chapter text are changed to read:</i></p> <p><b>Transponder and ADS-B Requirements</b></p> <p>A coded transponder with altitude reporting capability is required for flight in all airspace over the 48 contiguous states and the District of Columbia; at and above 10,000 feet MSL; and below the floor of a Class A airspace, excluding the airspace at and below 2,500 feet AGL.</p> <p>ATC may authorize deviations on a continuing basis or for individual flights. To operate an aircraft without a transponder, a request must be submitted at least 1 hour before the proposed operation to the ATC facility that has jurisdiction over the airspace.</p> <p>As of January 1, 2020, aircraft operating in airspace previously requiring the use of a transponder will in addition 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). Operations in class A airspace require the use of extended squitter ADS-B and Traffic</p>

Page Number	Question Number	Correct Answer	Explanation
			<p>Information Services – Broadcast (TIS-B) equipment operating on the radio frequency of 1090 MHz. This combination of equipment is simply referred to as 1090-ES.</p> <p>All aircraft equipped with functioning ADS-B Out must operate in transmit mode at all times, unless otherwise authorized by the FAA. Authorization may be approved when the aircraft is performing a sensitive government mission for national defense, homeland security, intelligence, or law enforcement purposes when transmitting would compromise the operations security and safety of the mission.</p>
4-21	5061-1	[A]	<p><i>A new question is added to read:</i></p> <p>ALL, MIL</p> <p><b>5061-1.</b> What type of ADS-B equipment is required for aircraft operating in class A airspace?</p> <p>A— 1090-ES. B— Universal Access Transceiver. C— 1090-ES or Universal Access Transceiver.</p> <p>For flights at and above 18,000 feet MSL in Class A airspace, the aircraft must be equipped with 1090-ES and meet the performance requirements outlined in 14 CFR §91.227. For flights below 18,000 feet MSL, either 1090-ES or UAT equipment can be used. (PLT497, CA.VI.B.K4) — 14 CFR §91.225</p>
4-21	5061-2	[B]	<p><i>A new question is added to read:</i></p> <p>ALL, MIL</p> <p><b>5061-2.</b> Operations in Class A airspace require the aircraft be equipped with</p> <p>A— ADS-B and FIS-B. B— ADS-B and TIS-B. C— ADS-B.</p> <p>No person may operate an aircraft in Class A airspace unless that aircraft is equipped with an extended squitter ADS-B and TIS-B operating on the radio frequency 1090 MHz. (PLT497, CA.VI.B.K4) — 14 CFR §91.225</p>
4-21	5061-3	[B]	<p><i>A new question is added to read:</i></p> <p>ALL, MIL</p> <p><b>5061-3.</b> When may an aircraft equipped with ADS-B Out not operate in transmit mode?</p> <p>A— Anytime the aircraft is operating in Class G airspace. B— If the aircraft is being operated for law enforcement purposes and transmitting would jeopardize the safety of the mission. C— If the aircraft was not originally certificated with an electrical system.</p> <p>If transmitting would jeopardize the safety or security of a law enforcement mission, the FAA may approve the flight to be conducted without ADS-B Out equipment in transmit mode. (PLT497, CA.VI.B.K4) — 14 CFR §91.225</p> <p>Answers (A) and (C) are incorrect. Regardless of airspace or whether the aircraft was originally certificated with an electrical system, it must operate any installed ADS-Out equipment in transmit mode.</p>
4-44 through 4-53			<p>LTA Fundamentals of Instructing: “students” has been changed to “learners” throughout this section’s questions, answer stems, and explanations to be consistent with the latest edition of the <i>Aviation Instructor’s Handbook</i> (FAA-H-8083-9B).</p>
5-20	5983-1	[C]	<p><i>The question now includes reference to Figure 51, A.</i></p>
7-12	5400		<p><i>This question is removed. HIWAS has been discontinued and is no longer on the FAA Knowledge Exams.</i></p>