Private Pilot Airman Knowledge Test Guide — 10001387-022

Corrections, March 2017

With the rollout of the Private Pilot Airman Certification Standards (ACS) in 2016, the FAA made a number of changes to their knowledge test, immediately removing many questions that are considered obsolete or irrelevant. They have also published a new computerized testing supplement that contains all redrawn figures.

A number of errors were introduced into the Private Pilot Test Guide when some of these figures were redrawn in the supplement FAA-CT-8080-2F. Some were drawn improperly and subsequently corrected in FAA-CT-8080-2G. Other figures, such as sectional charts, contained changes that invalidated some of the questions. Examples include:

- Changes in magnetic variation. This resulted in changes of 2 to 5 degrees in questions requiring calculation of a magnetic course, magnetic heading, or compass heading.
- In one figure, a VOR was relocated onto the field at Savannah Hilton Head International Airport. This resulted in noticeable changes in the results of any problem referencing the Savannah (SAV) VOR.
- One figure showing VOR indicators was redrawn in a way that made it apparent that the OBS settings were reciprocal of those in the previous version of the figure, which was not clearly drawn. This resulted in changes to the correct answer of all questions referencing this figure.

Because the FAA does not publish changes to the affected test questions, Jeppesen editors are working to revise the test questions in the test guide so that they work with the new figures. Keep in mind that questions published by Jeppesen and other test prep providers are sample questions designed to increase understanding of the learning objectives published in the *Private Pilot Airman Certification Standards* (ACS). You should not expect to see these exact questions on your Private Pilot airman knowledge test.

Jeppesen thanks the students and flight instructors that have helped us identify the affected questions. This report corrects the known issues in the Private Pilot Knowledge Test Guide. Changes are marked in blue.

Question(s)	Explanation
En Route Flight Advisory Service (EFAS)	*The FAA knowledge test no longer includes questions about En Route Flight Advisory Service (EFAS). Skip these questions. To obtain weather information during flight use the nearest FSS frequency.*
Radar summary charts	*The FAA knowledge test no longer includes questions about radar summary charts. Skip these questions, and for actual flight planning, use digital radar information from AviationWeather.gov or 1800wxBrief.com.*
TWEB	*The FAA knowledge test no longer includes questions about TWEB. You can skip these questions if desired. Alaska pilots might still wish to review this information.*
Questions about FAA flight plan forms	*The FAA is adopting the ICAO flight plan form, and the knowledge test no longer includes questions that use the old FAA flight plan form. Skip these questions. The FAA intends to create questions that reference the new flight plan form in the near future.*

Questions that require the use of a plotter to measure distance on a chart	*The FAA is currently omitting these types of questions from the test because the FAA figures in the most-recent supplement are not properly scaled to enable accurate measurements with a plotter. If desired, you can still solve these problems by marking the distances from the scale at the edge of the sectional chart excerpt on the edge of a piece of paper and then using that paper to measure distance.*
Questions that involve multiple interpolations across multiple charts	*The FAA knowledge test no longer includes questions that involve multiple interpolations across multiple charts. Skip these questions, and in actual flight planning, always use the more conservative values.*
Airport/Facility Directory	*Change all references Airport/Facility Directory references to Chart Supplement.*
Tri-color VASI	*The FAA knowledge test no longer includes questions about tri-color VASI. Skip these questions.*
2-71 **2-72**	*These two questions should reference figure 7, not figure 6.)*
ADF/NDB	*The FAA knowledge test no longer includes questions ADF or NDB. You can skip these questions, although this knowledge could be useful if you operate an airplane with an ADF or any kind of bearing pointer.*
2-86 PLT041 *"High" and "low" were reversed on this question, making it the same as 2-85. It should read as follows:* If a flight is made from an area of high pressure into an area of low pressure without the altimeter setting being adjusted, the altimeter will indicate A– lower than the actual altitude above sea level. B– higher than the actual altitude above sea level. C– the actual altitude above sea level.	**2-86. Answer B. GFDPP 2-59, AW** Remember, "from high to low, look out below." In other words, the aircraft will be at a lower true (actual) altitude than indicated, so the altimeter indicates higher than actual.

3-27 PLT309 PA.VII.A.K2 *The previous correct answer, as published by the FAA, was not very close. We revised answer C to make it closer to what you would compute using the load factor value from the table.* (Refer to figure 2.) If an airplane weighs 3,300 pounds, what approximate weight would the airplane structure be required to support during a 30° banked turn while maintaining altitude? A– 1,200 pounds B– 3,100 pounds C– 3,800 pounds	**3-27. Answer C. GFDPP 3-60, PHB** The load factor for 30 degrees of bank is 1.154 [(1 ÷ Cos (30°)]. The airplane weight (3,300 lb) multiplied by the load factor (1.154) is 3,810 pounds, which the wing structure must support.
3-28 PLT309 PA.VII.A.K2 *The previous correct answer, as published by the FAA, was not very close. We revised answer B to make it closer to what you would compute using the load factor value from the table.* (Refer to figure 2.) If an airplane weighs 4,500 pounds, what approximate weight would the airplane structure be required to support during a 45° banked turn while maintaining altitude? A– 4,500 pounds B– 6,400 pounds C– 7,200 pounds	**3-28. Answer B. GFDPP 3C, PHB** At 45 degrees of bank, the load factor is 1.414. The wing loading would be 4,500 lb × 1.414, or 6,365 lb.
4-47 PLT077 PA.II.D.K6 *Figure 49 was changed to an airport chart for an actual airport, requiring changes to the question.* (Refer to figure 49.) According to the airport diagram, which statement is true? A–Takeoffs may be started at position D on Runway 32, but the landing portion of this runway begins at position E. B–Takeoffs may be started at position A on Runway 25, and the landing portion of this runway begins at position B. C–The takeoff and landing portion of Runway 25 begins at position B.	**4-47. Answer B. GFDPP 4-24, AIM** At many airports, the area prior to a displaced threshold may be used for taxi and takeoff (and rollout after landing). Landings may be made after the displaced threshold at position “B” on Runway 25.
4-68 PLT141 PA.II.D.K2 What is the purpose of the runway/runway hold position sign? A– Denotes entrance to runway from a taxiway. B– Denotes area protected for an aircraft approaching or departing a runway. C– Denotes intersecting runways.	**4-68. Answer C. GFDPP Chap 4B, AIM** These signs are installed together with pavement markings only on runways that are used for land-and-hold-short operations (LAHSO) or taxiing operations. Like other holding position signs, they consist of white runway numbers on a red background.

4-80 PLT064 PA.I.D.K8 (Refer to figure 27.) (Area 5) What is the CTAF/UNICOM frequency at Barnes County Airport? A– 118.725 MHz. B– 122.8 MHz. C– 1402 kHz.	**4-80. Answer B. GFDPP 4-47, AIM** The CTAF symbol is next to the UNICOM frequency 122.8. 118.725 is the ASOS weather frequency and 1402 is the field elevation. **NOTE:** *Answer C, although incorrect, previously referenced an AM broadcast station that is no longer charted.*
4-86 PLT064 PA.I.E.K2 (Refer to figure 21, area 1.) The NALF Fentress (NFE) Airport is in what type of airspace? A– Class C. B– Class D. C– Class E.	**4-86. Answer B. GFDPP 4C, Chart Legend** NFE is outside the solid magenta lines delineating the Norfolk Class C airspace, but inside a dashed blue circle indicating Class D airspace.
4-139 PLT064 (Refer to figure 22, Area 3.) What type military flight operations should a pilot expect along IR 644? A– VFR training flights above 1,500 feet AGL at speeds less than 250 knots. B– IFR training flights above 1,500 feet AGL at speeds in excess of 250 knots. C– Instrument training flights below 1,500 feet AGL at speeds in excess of 150 knots.	**[Question removed]** *The IR644 label on the military training route is not visible in the latest figure 22.*
4-143 PLT040 (Refer to figure 27, Area 5.) The airspace overlying and within 5 miles of Barnes County Airport is A– Class D airspace from the surface to the floor of the overlying Class E airspace. B– Class E airspace from the surface to 1,200 feet MSL. C– Class G airspace from the surface to 700 feet AGL.	**Area 6 is not marked on the latest chart excerpt.** *Look for Barnes County Airport to the right of the Area 5 ball flag.*
4-148 PLT064 PA.I.E.K3 (Refer to figure 26.) At which airports is fixed-wing Special VFR not authorized? A– Fort Worth Meacham and Fort Worth Spinks B– Dallas-Fort Worth International and Dallas Love Field C– Addison and Dallas Executive	**4-148. Answer B. GFDPP 4D, Chart Legend** The “NO SVFR” above the airport name indicates that fixed-wing special VFR is not authorized.

5-44 PLT078 PA.I.D.S9

(Refer to figure 53.)

When approaching Lincoln Municipal from the west at noon for the purpose of landing, initial communications should be with

A– Lincoln Approach Control on 124.0 MHz.

B– Minneapolis Center on 128.75 MHz.

C– Lincoln Tower on 118.5 MHz.

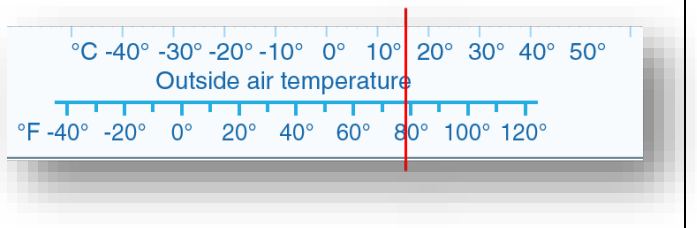
5-44. Answer A. GFDPP 5-26, Chart Supplement

The communications section of the Chart Supplement Airport/Facility Directory entry indicates that the airport is in Class C airspace, and that you should contact approach control. When west of the airport (180°-359°), the frequency to use is 124.0. The Lincoln Approach Control hours of operation are 1130-0600Z (5:30 a.m. - midnight local time).

8-27 — Use 38°C instead of 100°F to work this problem.

8-28 — Use 32°C instead of 90°F to work this problem.

The new FAA figure 41 was misdrawn; the Fahrenheit temperature scale is not lined up properly. As an example, note that 59°F should line up with 15°C, but instead lines up with 79°F. The FAA corrected this error in computer testing supplement FAA-CT-8080-2G, which will be in the next printing of the Private Pilot Knowledge Test Guide.



8-32 PLT328

GIVEN:

	WEIGHT (LB)	ARM (IN)	MOMENT (LB-IN)
Empty weight	1,495.0	101.4	151,593.0
Pilot and Pass	380.0	64.0	-----
Fuel (30 gal usable no reserve)	-----	96.0	-----

The CG is located how far aft of datum?

A– 92.44 inches

B– 94.01 inches

C– 119.8 inches

Third column should be labeled MOMENT instead of WEIGHT.

9-7 PLT012 PA.VI.A.K5 (Refer to figure 23.) Determine the magnetic heading for a flight from Sandpoint Airport (area 1) to St. Maries Airport (area 4). The wind is from 215° at 25 knots, and the true airspeed is 125 knots. A– 171° B– 187° C– 351°	**9-7. Answer A. GFDPP 9A, PHB** This question requires you to find magnetic heading. This is done by first determining true heading by correcting true course for winds. Then, correct true heading for magnetic variation. 1. The plotter is used to measure true course (181°). 2. Use the flight computer to determine true heading. a. Enter the wind direction and speed (215° at 25 knots). b. Enter the true course (181°). c. Enter the TAS (125 knots). d. Determine true heading (TH = 187°). 3. Convert TH to MH by correcting for magnetic variation (round to 16°E). Since this is an east variation, you must subtract it from the true heading.) TH ± Variation = MH 187° – 16° = 171°.
9-8 PLT012 (Refer to figure 23.) What is the magnetic heading for a flight from Priest River Airport (area 1) to Shoshone County Airport (area 3)? The wind is from 030° at 12 knots and the true airspeed is 95 knots. A– 120° B– 136° C– 143°	**9-8. Answer A. GFDPP 9A, PHB** …Convert TH to MH by correcting for magnetic variation (round to 16°E). Since this is an east variation, you must subtract it from the true heading.) TH ± Variation = MH (136° – 16° = 120°).

9-9 PLT012 PA.VI.A.K5 (Refer to figure 23.) Determine the magnetic heading for a flight from St. Maries Airport (area 4) to Priest River Airport (area 1). The wind is from 340° at 10 knots and the true airspeed is 90 knots. A– 320° B– 329° C– 345°	**9-9. Answer B. GFDPP 9A, PHB** This question requires you to find magnetic heading. This is done by first determining true heading by correcting true course for winds. Then, correct true heading for magnetic variation. 1. Use the plotter to measure true course (345°). 2. Use the flight computer to determine true heading. a. Enter the wind direction and speed (340° at 10 knots). b. Enter the true course (345°). c. Enter the TAS (90 knots). d. TH = 345° 3. Convert TH to MH by correcting for magnetic variation (round to 16°E). Since this is an east variation, you must subtract it from the true heading.) TH± Variation = MH 345° – 16° = 329°.
9-10 PLT012 PA.VI.A.K5 (Refer to figure 24.) Determine the magnetic heading for a flight from Allendale County Airport (area 1) to Claxton-Evans County Airport (area 2). The wind is from 090° at 16 knots and the true airspeed is 90 knots and the magnetic variation is 6°W. A– 209° B– 215° C– 230°	**9-10. Answer A. GFDPP 9A, PHB** This question requires you to find magnetic heading. This is done by first determining true heading by correcting true course for winds. Then, correct true heading for magnetic variation. 1. The plotter is used to measure true course (212°). 2. The flight computer is used to determine true heading. a. Enter the wind direction and speed (090° at 16 knots). b. Enter the true course (212°). c. Enter the TAS (90 knots). d. TH = 203° 3. Convert TH to MH by correcting for magnetic variation (6°W). Since this is a west variation, you must add it from the true heading.) TH ± Variation = MH (203° + 6° = 209°).
9-11 PLT012 PA.VI.A.K10 (Refer to figure 24 and 59.) Determine the compass heading for a flight from Claxton-Evans County Airport (area 2) to Hampton Varnville Airport (area 1). The wind is from 280° at 08 knots, and the true airspeed is 85 knots, and the magnetic variation is 6°W. A– 033° B– 038° C– 043°	**9-11. Answer C. GFDPP 9A, PHB** This question requires you to find the heading, then correct for variation and deviation to achieve compass heading. 1. Use plotter to determine true course (044°). 2. Use flight computer to calculate true heading (040°). 3. Add variation (6°W) to TH to get magnetic heading (046°). 4. Adjust per compass card (−3°) to determine compass heading (043°).

9-12 PLT012 PA.VI.A.K2 (Refer to figure 25.) Determine the magnetic course from Airpark East Airport (area 1) to Winnsboro Airport (area 2). The magnetic variation is 3°E. A– 079° B– 082° C– 091°	**9-12. Answer A. GFDPP 9A, PHB** This question requires you find the magnetic course by determining true course, then correcting it for magnetic variation. 1. Use your plotter to determine true course (082°). 2. Convert TC to MC by correcting for variation. (Since this is an east variation, you must subtract it from true course.) TC ± Variation = MC (082° – 3° = 079°)
9-13 PLT012 PA.VI.A.K5 (Refer to figure 26.) Determine the magnetic heading for a flight from Fort Worth Meacham (area 4) to Denton Muni (area 1). The wind is from 330° at 25 knots, the true airspeed is 110 knots, and the magnetic variation is 4° east. A– 007° B– 017° C– 023°	**9-13. Answer A. GFDPP 9A, PHB** This question requires you to find magnetic heading. This is done by first determining true heading by correcting true course for winds. Then, correct true heading for magnetic variation. 1. Use your plotter to determine true course (021°). 2. Use your flight computer to determine true heading. a. Enter the wind direction and speed (330° at 25 knots). b. Enter the true course (021°). c. Enter the TAS (110 knots). d. TH = 011° 3. Convert TH to MH by correcting for magnetic variation (4°E). (Since this is an east variation, you must subtract it from the true heading.) TH ± Variation = MH (011° – 4° = 007°)
9-20 PLT090 PA.VI.B.K1 (Refer to figure 21, Area 3 and figure 29.) The VOR is tuned to Elizabeth City VOR, and the aircraft is positioned over Shawboro, a small town 3 NM west of Currituck County Regional (ONX). Which VOR indication is correct? A– 2 B– 5 C– 8	**9-20. Answer B. GFDPP 9-23, PHB** Shawboro is on the 030° radial of Elizabeth City VOR. A VOR needle would be centered on 030° with a FROM indication (VOR #9) or 210° with a TO indication (VOR #5).
9-21 PLT014 PA.VI.B.K1 (Refer to figure 22.) What course should be selected on the omnibearing selector (OBS) to make a direct flight from Mercer County Regional Airport (area 3) to the Minot VORTAC (area 1) with a TO indication? A– 357° B– 177° C– 001°	**9-21. Answer A. GFDPP 9B, PHB** The magnetic course can be determined by plotting a line from Mercer County Regional Airport to the Minot VORTAC. The line intersects the Minot VORTAC compass rose at 177°. The reciprocal of 177° is 357°. This is what you would set in the OBS.

9-22 PLT012 PA.VI.B.K1 (Refer to figure 24.) What is the approximate position of the aircraft if the VOR receivers indicate the 341° radial of Savannah VORTAC (area 3) and the 184° radial of Allendale VOR (area 1)? A– Town of Guyton B– Town of Springfield C– 3 miles east of Marlow	**9-22. Answer B. GFDPP 9B, PHB** The intersection of these two radials places the aircraft near the town of Springfield. The town of Guyton is southwest of Springfield.
9-23 PLT014 PA.VI.B.K1 (Refer to figure 24.) On what course should the VOR receiver (OBS) be set to navigate direct from Hampton Varnville Airport (area 1) to Savannah VORTAC (area 3)? A– 015° B– 195° C– 220°	**9-23. Answer B. GFDPP 9B, PHB** If you draw a line from Hampton Varnville Airport to Savannah VORTAC, which is on the field at Savannah Hilton Head International airport, it crosses the Savannah compass rose at 015°. To navigate inbound with a "TO" indication would require the reciprocal of 015°, or 195°, to be set in the course selector.
9-24 PLT014 PA.VI.B.K1 (Refer to figure 25.) What is the approximate position of the aircraft if the VOR receivers indicate the 245° radial of Sulphur Springs VOR-DME (area 5) and the 144° radial of Bonham VORTAC (area 3)? A– The town of Lone Oak B– Glenmar Airport C– Majors Airport	**9-24. Answer B. GFDPP 9-23, PHB** Draw the radials from these VORs. The intersection of these two radials puts the aircraft near the Glenmar Airport. Majors Airport and the town of Lone Oak are both west of the Bonham 144° radial.
9-27 PLT014 PA.VI.B.K1 (Refer to figure 26, Area 5.) The VOR is tuned to the Maverick VORTAC, SE of DFW. The omnibearing selector (OBS) is set on 253°, with a TO indication, and a right course deviation indicator (CDI) deflection. What is the aircraft's position from the VORTAC? A– East-northeast. B– North-northeast. C– West-southwest.	**[no change]**

9-28 PLT014 PA.VI.B.K1 (Refer to figure 27, areas 4 and 2, and figure 29.) The VOR is tuned to Jamestown VOR, and the aircraft is positioned over Cooperstown Airport. Which VOR indication is correct? A– 1 B– 6 C– 9	**9-28. Answer C. GFDPP 9B, PHB** Jamestown VOR is in area 4 and the aircraft is positioned over Cooperstown Airport in area 2, which is on the JMS 030° radial. With the OBS set to 030º, the TO-FROM indicator will read “FROM”, and the CDI will show the aircraft centered on course as in OBS number 9.
9-29 PLT014 PA.VI.B.K1 (Refer to figure 29, illustration 1.) The VOR receiver has the indications shown. What is the aircraft’s position relative to the station? A– North B– East C– South	**9-29. Answer A. GFDPP 9-28, PHB** With the 210° course selected, a “TO” indication, and a left CDI deflection, the aircraft is right of course, between the 300° and 030° radials. That places it north of the station.
9-30 PLT014 PA.VI.B.K1 (Refer to figure 29, illustration 3.) The VOR receiver has the indications shown. What is the aircraft’s position relative to the station? A– East B– Northwest C– West	**9-30. Answer B. GFDPP 9-28, PHB** Since the TO-FROM indicator is blank, the aircraft is either over the station or on either the 120° or 300° radial. These radials are 90° from the 210° setting. The left CDI deflection puts the aircraft right of the selected course. Therefore, the correct answer is northwest of the station.
9-31 PLT014 PA.VI.B.K1 (Refer to figure 29, illustration 8.) The VOR receiver has the indications shown. What radial is the aircraft on? A– 030° B– 210° C– 300°	**9-31. Answer B. GFDPP 9-28, PHB** The selected course of 030° would take the aircraft to the station, as indicated by a “TO” in the TO-FROM window. This places the aircraft southwest of the station on the reciprocal radial of 030°, which is the 210° radial.