NOTE: Deleted text is displayed with a line through it. New text is shown with a blue background.

If you see any additional content on your knowledge test not represented in this update, please share that information with Gleim so that we can continue to provide the most complete knowledge test preparation experience possible. You can contact our aviation team at aviationteam@gleim.com. Thank you in advance for your help!

Study Unit 3 – Airports, Air Traffic Control, and Airspace

Page 77, Subunit 3.13, 2.: This question was edited to reflect the change in FAA language pursuant to the February 9, 2015 update.

3.13 RADIO PHRASEOLOGY

1. When contacting a flight service station, the proper call sign is the name of the FSS followed by “radio” (e.g., McAlester Radio).

2. When contacting an En Route Flight Advisory Service (EFAS) Flight Watch, the proper call sign is the name of the Air Route Traffic Control Center facility serving your area followed by “flight watch” (e.g., “Seattle Flight Watch”).

Study Unit 5 – Airplane Performance and Weight and Balance

Page 195, Subunit 5.4, Question 27.: This question was edited as a result of the FAA February 9, 2015 update.

27. (Refer to Figure 36 on page 194.) Approximately what true airspeed should a pilot expect with 85 percent maximum continuous power at 9,500 feet with a temperature of 36°F below standard?

A. 478 MPH  163 KTS.
B. 481 MPH  161 KTS.
C. 483 MPH  158 KTS.

Answer (C) is correct. (PHAK Chap 10)

DISCUSSION: The left part of the chart applies to 36°F below standard. At 8,000 ft., TAS is 481 MPH 157 KTS. At 10,000 ft., TAS is 484 MPH 160 KTS. At 9,500 ft., with a temperature 36°F below standard, the expected true airspeed is 75% above the 481 MPH 157 KTS at 8,000 ft. toward the 484 MPH 160 KTS at 10,000 ft., i.e., approximately 483 MPH 158 KTS.

Answer (A) is incorrect. This is the expected TAS at 6,000 ft. is 163 KTS. Answer (B) is incorrect. This is the expected TAS at 8,000 ft. is 161 KTS.
8.7 RADAR SUMMARY CHARTS AND RADAR WEATHER REPORTS

1. Radar summary charts graphically display a collection of radar reports concerning the type, intensity, and movement of precipitation, e.g., squall lines, specific thunderstorm cells, and other areas of hazardous precipitation.
   a. Lines and cells of hazardous thunderstorms can be seen on radar summary charts and are not shown on other weather charts.

2. The symbols below are used on radar summary charts.

   ![Radar Summary Chart Symbols](image)

   - **Symbol:** Depiction of precipitation type and intensity.
   - **Meaning:** Describes the condition or type of precipitation.

3. Severe weather watch areas are enclosed by a heavy dashed line, usually in the form of a rectangular box.

4. Radar weather reports are textual reports of weather radar observations.
   a. They include the type, intensity, location, and cell movement of precipitation.

5. Finally, it is important to remember that the intensity trend (increasing or weakening) is no longer coded on either the radar summary chart or radar weather report (SD/ROB).

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8.8 EN ROUTE FLIGHT ADVISORY SERVICE (EFAS) FLIGHT WATCH

1. En Route Flight Advisory Service (EFAS) Flight Watch provides weather advisories on 122.0 MHz below FL 180. It is called Flight Watch.
   a. Generally, service is available from 6 a.m. to 10 p.m. local time.
   b. **EFAS Flight Watch** provides information regarding actual weather and thunderstorm activity along a proposed route.

2. It is designed to be a continual exchange of information on winds, turbulence, visibility, icing, etc., between pilots and weather briefers.
Page 257, Subunit 8.1, Question 2: This question was edited to remove the reference to TWEB as specified by the February update from the FAA.

2. Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?

   A. Outlook briefing.
   B. Abbreviated briefing.
   C. Standard briefing.

   Answer (C) is correct. (AWS Sect 1)

   DISCUSSION: A pilot should request a standard briefing anytime (s)he is planning a flight and has not received a previous briefing or has not received preliminary information through mass dissemination media (e.g., TWEB, PATWAS, etc.). Answer (A) is incorrect. Outlook briefings are for flights 6 hr. or more in the future. Answer (B) is incorrect. Abbreviated briefings are to update previous briefings, supplement other data, or answer a specific inquiry.

Page 261, Subunit 8.4, Question 22.: This question was edited as a result of the FAA Update in February 2015.

22. To best determine general forecast weather conditions over several states covering a flight information region, the pilot should refer to

   A. Aviation Area Forecasts.
   B. Weather Depiction Charts.
   C. Satellite Maps.

   Answer (A) is correct. (AWS Sect 7)

   DISCUSSION: An aviation area forecast is a prediction of general weather conditions over an area consisting of several states or portions of states covering a flight information region. It is used to obtain expected en route weather conditions and also to provide an insight to weather conditions that might be expected at airports where weather reports or forecasts are not issued.

   Answer (B) is incorrect. Weather depiction charts are compiled from METAR reports of observed, not forecast, areas. Answer (C) is incorrect. Satellite pictures (maps) are observed pictures used to determine the presence and types of clouds, not forecast conditions.

Page 268, Subunit 8.6, Figure 19: This figure was removed as a result of the FAA Update in February 2015.

Page 269, Subunit 8.7, Questions 44-48: These questions were removed as a result of the FAA Update in February 2015.

Page 270, Subunit 8.8, Questions 50-51: These questions were edited as a result of the FAA Update in February 2015.

8.8 En Route Flight Advisory Service (EFAS) Flight Watch

50. How should contact be established with an En Route Flight Advisory Service (EFAS) Flight Watch station, and what service would be expected?

   A. Call EFAS Flight Watch on 122.2 for routine weather, current reports on hazardous weather, and altimeter settings.
   B. Call flight assistance on 122.5 for advisory service pertaining to severe weather.
   C. Call Flight Watch on 122.0 for information regarding actual weather and thunderstorm activity along proposed route.

   Answer (C) is correct. (AIM Para 7-1-5)

   DISCUSSION: The frequency designed for en route flight advisory stations calling Flight Watch is 122.0 MHz. It is designed to provide en route aircraft with timely and meaningful weather advisories during the route. It is not for complete briefings or random weather reports.

   Answer (A) is incorrect. You would call FSS (not EFAS Flight Watch) on 122.2 for routine weather, current reports on hazardous weather, and altimeter settings. Answer (B) is incorrect. You would possibly call FSS (not Flight Watch) on 122.5 for advisory service pertaining to severe weather.
51. What service should a pilot normally expect from an En Route Flight Advisory Service (EFAS) station Flight Watch?

A. Actual weather information and thunderstorm activity along the route.
B. Preferential routing and radar vectoring to circumnavigate severe weather.
C. Severe weather information, changes to flight plans, and receipt of routine position reports.

Answer (A) is correct. (*AIM Para 7-1-5*)

**DISCUSSION:** Flight Watch is designed to provide en route traffic with timely and meaningful weather advisories pertinent to the type of flight intended. It is designed to be a continuous exchange of information on winds, turbulence, visibility, icing, etc., between pilots and Flight Watch specialists on the ground.

Answer (B) is incorrect. Preferential routing and radar vectoring is provided by approach control and ATC center.

Answer (C) is incorrect. Changes to flight plans and routine position reports should be given to an FSS.

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**Study Unit 9 – Navigation: Charts and Publications**

Page 281, Subunit 9.4, 2.-3.: This edit was made as a result of the FAA Update of February, 2015.

2. Flight Watch is the common term for En Route Flight Advisory Service (EFAS). It specifically provides en route aircraft with current weather along their route of flight.

   a. Flight Watch is available throughout the country on 122.0 between 5,000 ft. MSL and 18,000 ft. MSL.

   b. The name of the nearest Flight Watch facility is sometimes indicated in communications boxes.

3. Hazardous Inflight Weather Advisory Service (HIWAS) is available from navigation facilities that have a small square inside “H” indicated inside of a solid black circle at the upper right corner of the navigation aid identifier box.

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Page 357, Subunit 9.6, Question 91.: The edit was made to correct the runway reference.

91. (Refer to Figure 81 below, and Figure 82 on page 356.) Refer to Crawford Airport (N38°42.25’ W107°38.62’). What is the traffic pattern for the west runway 25?

A. Right hand traffic pattern.
B. Left hand traffic pattern.
C. It does not matter because it is an uncontrolled airport.

Answer (A) is correct. (*A/FD*)

**DISCUSSION:** The traffic pattern for the west runway (RWY 25) is a right-hand pattern. It is noted on the sectional chart excerpt (Fig. 81). Under the airport information, near Crawford Airport, the third line displays the letters “RP 25.” On the Airport/Facility Directory excerpt in Fig. 82, the section titled RWY 25 has “Rgt tfc” (right traffic) written to give pilots the pattern direction of the west runway. Answer (B) is incorrect. It is a left-hand traffic pattern for the east runway (RWY 07), not for Runway 25. Answer (C) is incorrect. Standard traffic patterns are left turns, unless otherwise noted. If there is nothing that states which direction the pattern is, it is left patterns.

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Page 362, Subunit 9.6, Question 96.: This question was edited to match the language in Legend 16.

96. (Refer to Legend 16 below.) If the SSVCC Class of VORTAC is listed as a Terminal Class, the altitudes and distance to adequately receive the signal of the VORTAC is

A. 1,000 feet to 12,000 feet and 25 NM.
B. 1,000 feet to 18,000 feet and 40 NM.
C. 1,000 feet up to 60,000 feet and up to 130 NM.

Answer (A) is correct. (*A/FD*)

**DISCUSSION:** The (T) or Terminal Class VORTAC can be received at 1,000 ft. to 12,000 ft. and 25 NM.

Answer (B) is incorrect. The (L) or Low Altitude Class VORTAC can be received at 1,000 ft. to 18,000 ft. and 40 NM.

Answer (C) is incorrect. The (H) or High Altitude Class VORTAC can be received at 1,000 ft. up to 18,000 ft. and up to 130 NM.
Study Unit 10 – Navigation Systems

Page 366, Subunit 10.3.: This material was deleted from our outline as a result of an FAA Update in February.

Page 371, Subunit 10.2, Question 5.: This question was edited to clarify the location of the city referred to in the stem and change “VOR” to “VOR/DME.”

5. (Refer to Figure 29 below, and Figure 21 on page 370.) The VOR is tuned to Elizabeth City VOR/DME (area 3 in Figure 21), and the aircraft is positioned over Shawboro, a small town 3 NM west of Currituck County Regional (ONX). Which VOR indication is correct?

A. 5
B. 9
C. 2

Answer (C) is correct. (PHAK Chap 15)

DISCUSSION: See Fig. 21, northeast of 3 along the compass rose. Shawboro is northeast of the Elizabeth City VOR on the 030° radial. To be over it, the needle should be centered with either an OBS setting of 210° and a TO indication or with an OBS setting of 030° and a FROM indication. VOR 2 matches the latter description.

Answer (A) is incorrect. VOR 5 indicates that the aircraft is southwest, not northeast, of Elizabeth City VOR. Answer (B) is incorrect. VOR 9 indicates that the aircraft is southwest, not northeast, of Elizabeth City VOR.

Pages 382 – 385, Subunit 10.3, Questions 15.- 32.: These questions were deleted as a result of the FAA Update in February.

Appendix A: Private Pilot Practice Test

Page 436, Question 44.: This question was replaced following the FAA Update of February, 2015.

44. What information is provided by the Radar summary chart that is not shown on other weather charts?

A—Lines and cells of hazardous thunderstorms.
B—Ceilings and precipitation between reporting stations.
C—Types of clouds between reporting stations.

What is the one common factor which affects most preventable accidents?

A — Structural failure.
B — Mechanical malfunction.
C — Human error.

FAA Listing of Learning Statement Codes

Page 441-446

PLT063 Interpret information on a Radar Summary Chart Removed by the FAA
PLT090 Interpret VOR - charts / indications / CDI / ADF / NAV
PLT091 Interpret VOR / ADF / NDB / CDI / RMI – illustrations / indications / procedures
PLT353 Recall Radar Summary Chart Removed by the FAA
PLT513 Recall weather information – TWEB broadcasts / FAA Avcams
PLT515 Recall weather services – EFAS / TIBS / TPS / WFO / AFSS / HIWAS / Flight Watch
Abbreviations and Acronyms in *Private Pilot FAA Knowledge Test*

Page 457 – The following acronyms were removed from our book as a result of the FAA Update of February, 2015.

- **ADF** automatic direction finder
- **EFAS** En Route Flight Advisory System
- **NDB** nondirectional radio beacon
- **TWEB** Transcribed Weather Broadcast

Index of Legends and Figures

Page 459 – The following figures were removed from our book as a result of the FAA Update of February, 2015.

**Figure**

- 49 Radar summary chart, page 268
- 30 ADF (movable card), page 383
- 31 ADF (fixed card), page 384