NOTE: Text that should be deleted 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 our materials or this update, please share this information with Gleim so we can continue to provide the most complete knowledge test preparation experience possible. You can submit feedback at www.GleimAviation.com/questions. Thank you in advance for your help!

Study Unit 5 – Airports, Air Traffic Control, and Airspace

Page 131, Subunit 5.8, item 3.c.: This information was added to improve coverage of pointer NOTAMs.

c. **Pointer NOTAMs** reduce total NOTAM volume by pointing to other NOTAMs (D) and FDC NOTAMs rather than duplicating potentially unnecessary information for an airport or NAVAID. They allow pilots to reference NOTAMs that might not be listed under a given airport or NAVAID identifier. **These NOTAMs are issued by a flight service station.**

Page 139, Subunit 5.2, Question 9: These edits change the foils to better match an FAA question.

9. The “runway hold position” sign denotes

   A. intersecting runways an entrance to a taxiway from a runway.
   B. an entrance to a runway from a taxiway.
   C. an area protected for an aircraft approaching a runway.

Answer (B) is correct. *(AIM Para 2-3-8)*

**DISCUSSION:** Runway holding position signs, consisting of white numbering on a red background, are found adjacent to runway holding position markings that are painted on a taxiway or a runway. These signs and markings indicate the point at which aircraft are expected to hold short of a runway if an ATC clearance to proceed onto that runway has not been received at an airport with an operating control tower or without making sure of adequate separation at an airport without an operating control tower. Runway holding position signs therefore denote the entrance to a runway from a taxiway or from an intersecting runway.

Answer (A) is incorrect. A runway hold position sign is only used to denote an intersecting runway when that runway is used for “Land and Hold Short” operations or as a taxiway. A direction sign, not a runway holding position sign, denotes the entrance to a taxiway from a runway. Answer (C) is incorrect. A runway approach area holding position sign, not a runway holding position sign, denotes an area protected for aircraft approaching or departing a runway.
Page 151, Subunit 5.8, Question 55: This question was edited to improve product quality.

55. What information is contained in the Notices to Airmen Publication (NTAP)?

A. Current NOTAMs (D) and FDC NOTAMs.
B. Current NOTAMs (D) and military NOTAMs only.
C. Current Pointer NOTAMs (D) and FDC NOTAMs, and military NOTAMs.

Answer (A) is correct. (IPH Chap 1)

DISCUSSION: The NTAP contains NOTAMs (D) that are expected to remain in effect for an extended period and FDC NOTAMs that are current at the time of publication. Answer (B) is incorrect. Military NOTAMs are not published in the NTAP. Answer (C) is incorrect. While current NOTAMs (D) and FDC NOTAMs are published in the NTAP, military pointer NOTAMs are issued by a flight service station to highlight or point out another NOTAM and are not published in the NTAP.

Study Unit 6 – Holding and Instrument Approaches

Page 216, Subunit 6.8, Question 41: These edits correct technical errors.

41. (Refer to Figure 153 on page 217.) For a stabilized approach, the aircraft must be in an approved configuration for landing

A. with the engines spooled up, before descending below 1,768 feet MSL.
B. with the correct speed and on glide path before descending below 1,268 feet MSL.
C. with a descent rate of less than 1,000 fpm below 1,080 feet MSL and bank angles of less than 15° below 500 feet AGL.

Answer (C B) is correct. (IPH)

DISCUSSION: For turbojets, the airplane must be in an approved configuration for landing or circling, if appropriate, with the engines spooled up and on the correct speed and flight path with a descent rate of less than 1,000 fpm before descending below the following minimum stabilized approach heights:

1. For all straight-in instrument approaches (including contact approaches) in IFR weather conditions, the approach must be stabilized before descending below 1,000 ft. above the airport or TDZE.
2. For visual approaches and straight-in instrument approaches in VFR weather conditions, the approach must be stabilized before descending below 500 ft. above the airport elevation.
3. For the final segment of a circling approach maneuver, the approach must be stabilized 500 ft. above the airport elevation or at the MDA, whichever is lower.

The stabilized approach concept includes maintaining a constant approach speed, descent rate, vertical flight path, and configuration during the final stages of an approach. In addition, a stabilized approach should be established at least 1,000 feet AGL or 1,268 feet MSL.

Answer (A) is incorrect. The aircraft should be spooled up before descending below 1,000 feet above the airport TDZE elevation of 268 feet, not 1,500 feet above that TDZE elevation. Answer (B C) is incorrect. The correct speed should be attained before passing the final approach fix at 2,200 feet. The correct glide path should be attained just after crossing the final approach fix at 2,200 ft. and before the 24 DME fix at 1,140 feet. A stabilized approach should be established at least 1,000 feet AGL. The MDA is 1,080 feet MSL, which is only 812 feet above the TDZE.
Study Unit 8 – Aviation Weather

Pages 309-311, Subunit 8.7, items 2-12: These edits remove inaccurate information about supercooled water droplets and rearrange the outline to improve flow. Items 3-12 were renumbered accordingly.

1. Structural icing requires two conditions:
   a. Flight through visible moisture
   b. The temperature at freezing or below

2. Freezing rain usually causes the greatest accumulation of structural ice.
   a. Freezing rain indicates that temperatures are above freezing at some higher altitude.
   b. Supercooled Large Droplets (SLD) can accrue even if SLD droplets are not being observed at the surface.
      4) A visible symptom of supercooled water droplets is a buildup of ice forward of an unheated propeller spinner, but not extending past back the blades.

3. Ice pellets are caused when rain droplets freeze at a higher altitude; i.e., freezing rain exists above.

[. . .]

11. In an aircraft equipped with a pneumatic deicing system, the appropriate technique for removing ice is to operate the pneumatic deicing system several times.
   a. This technique will clear accumulated ice as well as residual ice left behind between system cycles.
   b. The FAA recommends that the deicing system be activated at the first indication of icing rather than after any significant amount of ice is allowed to accumulate.
      1) Because some residual ice continues to adhere between pneumatic boot system cycles, the wing is never entirely “clean.”
      2) The amount of residual ice increases as airspeed and/or temperature decrease due to the more favorable conditions for ice accumulation associated with these conditions.
      3) At airspeeds typical of small airplanes, it may take many boot cycles to effectively shed the ice.

12. Freezing rain usually causes the greatest accumulation of structural ice.
   a. Freezing rain indicates that temperatures are above freezing at some higher altitude.
   b. Supercooled Large Droplets (SLD) can accrue even if SLD droplets are not being observed at the surface.
Study Unit 9 – Aviation Weather Services

Page 345, Subunit 9.5, item 2.e.1(a): This edit corrects the wind speed of variable wind direction coded as VRB.

a) **VRB** means that the wind direction is forecast to fluctuate due to convective activity or low wind speeds (3-6 kt. or less inclusive).

Page 359, Subunit 9.5, Question 20: This edit corrects the wind speed of variable wind direction coded as VRB.

20. A “VRB” wind entry in a Terminal Aerodrome Forecast (TAF) will be indicated when the wind is

A. 3 knots or less.
B. 6 knots or less.
C. 9 knots or less.

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

**DISCUSSION:** A “VRB” wind entry in a TAF indicates that the wind direction is forecast to fluctuate due to convective activity or low wind speeds of 1 to 6 knots inclusive, 3 kt. or less.

Answer (B A) is incorrect. A “VRB” wind entry in a TAF indicates that the wind direction is forecast to fluctuate due to convective activity or low wind speeds of 3 kt., not 6 kt., 3 knots or less. Answer (C) is incorrect. A “VRB” wind entry in a TAF indicates that the wind direction is forecast to fluctuate due to convective activity or low wind speeds of 3 kt., not 9 kt., or less 1 to 6 knots inclusive.

Page 362, Subunit 9.8, Questions 35-38: The following questions were removed because four-panel Low Level Significant Weather Prognostic Charts are no longer tested on the FAA knowledge test.

35. The chart symbols shown in the Gulf of Mexico . . .

36. The U.S. Low Level Significant Weather Surface . . .

37. The 24-Hour Low Level Significant Weather . . .

38. A planned low altitude flight from northern Florida . . .