FAA-H-8083-25A
Pilot's Handbook of Aeronautical Knowledge (dated 2008)
Updated October 24, 2014

Errata as of October 24, 2014

1. Page 10-7, left column, fourth paragraph (one sentence paragraph located directly under the caption for Figure 12-8); remove the paragraph/sentence.

Errata as of September 30, 2014

1. Page 16-3, left column, last paragraph; change the third item in the bulleted list to "Decreased response to stimuli and increased reaction time."

Errata as of July 28, 2014

1. Page 15-3, left column; change the heading to "Latitude and Longitude (Parallels and Meridians)."

Errata as of July 2, 2014

1. Page 7-3, right column, last paragraph; change the last sentence to: "In *Figure 7-2*, the long, thin needle with the inverted triangle at the end indicates tens of thousands of feet; the short, wide needle indicates thousands of feet; and the long needle on top indicates hundreds of feet."

Errata as of April 25, 2014

1. Page 16-2, left column, third paragraph; disregard the requirements for a third-class medical certificate as stated in the text as they are currently under review. For the latest information and requirements regarding third-class medical certificates, reference the updated regulation (14 CFR part 61, section 61.23), particularly the table in paragraph (d), which is available at the following website:

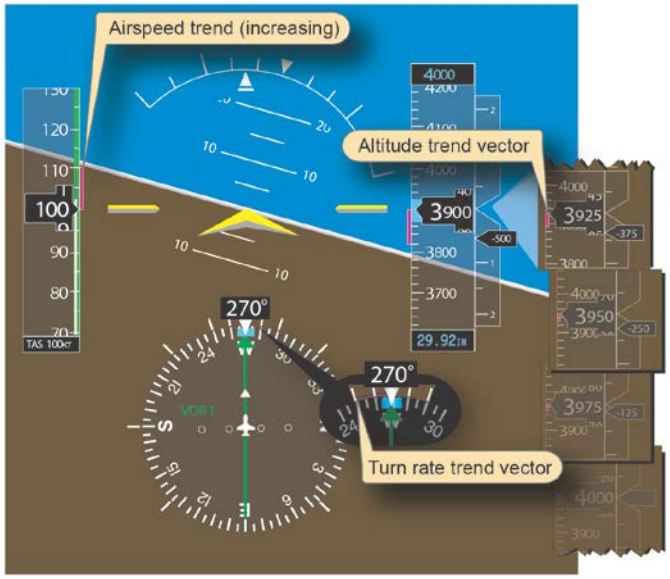
   http://www.ecfr.gov/cgi-bin/text-idx?SID=3f5ff91cc68d68a7d11085e32c236dcd&node=14:2.0.1.1.2.1.1.17&rgn=div8

Errata as of February 12, 2014

1. Page 4-34, right column; change the last sentence (above figure 4-51) to: "Note that if the speed is doubled, the radius is quadrupled."
2. Page 15-25, Figure 15-32; change the Morse code for the "B" in the orange box to "— •••".
3. Page 6-9, left column, next to last paragraph; change the last two sentences to:

   This temperature drop can be as much as 60 to 70 absolute (versus relative) Fahrenheit degrees (70 x 100/180 = 38.89 Celsius degrees)(Remember 180 Fahrenheit degrees from freezing to boiling versus 100 degrees for the Celsius scale.). Therefore, at an outside air temperature of 100 °F (37.78°C), a temperature drop of an absolute 70 F degrees (38.89 Celsius degrees) results in an air temperature in the carburetor of 30 °F (-1 °C). [Figure 6-12]

4. Page 7-15; replace Figure 7-17 with Figure 6-31 (shown below) from page 6-23 of the Instrument Flying Handbook.



Errata as of October 28, 2013

1. Page 3-5, left column, fourth paragraph, last sentence; change the URL for Cornell University's website on viscosity to http://www.geo.cornell.edu/hawaii/220/PRI/viscosity.html.

Errata as of June 26, 2013

1. Page 17-23, left column, delete paragraph 3, (that begins with "Another external…") and paragraph 4 (that begins with "Experience has shown…"). (Note: paragraph 4 extends into the right column. Delete the entire paragraph.)

Errata as of January 21, 2011

1. Page 1-18, right column, first paragraph, last sentence; change the uniform resource locator (URL) to read: "www.faa.gov/training_testing/testing/airmen/test_questions".
2. Page 2-13, Figure 2-19, top figure; change the green label "Altitude Indicator" to "Attitude Indicator".
3. Page 2-13, Figure 2-19, bottom figure; center the Primary Flight Display white Slip/skid indicator to match the centered ball (in-trim) indication of the Turn coordinator in the top figure.
4. Page 2-13, Figure 2-19, bottom figure; the reddish brown line inadequately identifies and tags a turn rate trend vector/indicator on the HSI. Tag the blue square as the "heading bug." Tag the green triangle as the top of the "course arrow."
5. Page 2-13, Figure 2-19, bottom figure; the green, "To-From" triangle on the CDI needle to white.
6. Page 2-13, Figure 2-19, bottom figure; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.
7. Page 2-14, Figure 2-20, bottom figure; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.

8. Page 2-15, Figure 2-21, HSI depictions labeled 1 and 2; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.

9. Page 3-7, left column, second paragraph; change “AOA” to “angle of attack (AOA)”.

10. Page 4-2, Figure 4-2; add a “Lift” label on the green upward arrow perpendicular to the relative wind. The “Lift” label indicates the green arrow represents the lift vector. Depict the Center of Lift (CL) on the wing, similar to the way the CG is depicted on the fuselage; label the “CL” on the wing similar to the way the CG is labeled on the fuselage. Depict the green arrow to originate at the Center of Lift (CL) of the wing, not at the aircraft CG.

11. Page 4-6, right column, second paragraph, second sentence; change the word “life” to “lift”.

12. Page 4-6, right column, third paragraph, second sentence; change “15°” to read “20°”.

13. Page 4-6, Figure 4-9; delete the word “Critical” from the bottom axis label.

14. Page 4-6, Figure 4-9; reposition the orange line (depicting C_D). It starts correctly but should pass through the intersection of the green and red lines. The orange line should terminate near the top of the graph as it approaches 18° Angle of Attack in an upward direction.

15. Page 4-6, Figure 4-9; move the blue “Stall” tag to the right so it correctly points to the vertical 20° Angle of attack line. The existing “Stall” tag incorrectly points to the right end of the green line. The 20° Angle of attack line is the correct location for the C_{Lmax} tag on the red C_L line.

16. Page 4-7, left column, first paragraph, first full sentence; change the word “orange” to “blue”.

17. Page 4-27, figure 4-42; point the black arrow, representing propeller rotation, in the opposite direction. Point the gray arrow, representing Resultant force, in the opposite direction. Point the orange arrow, representing Yaw, in the opposite direction. The result of the depicted “Applied force” to a typical United States built airplane is a left yawing moment.

18. Page 4-29, right column, paragraph between figures, second sentence; insert the words “coordinated level turn at” before “60°”.

19. Page 4-30, right column, last paragraph; add the following sentence to the end of the paragraph: “Operating at or below design maneuvering speed does not provide structural protection against multiple full control inputs in one axis or full control inputs in more than one axis at the same time."

20. Page 4-31, left column, third paragraph; add the following two sentences to the end of the paragraph: "Full application of pitch, roll, or yaw controls should be confined to speeds below the maneuvering speed. Avoid rapid and large alternating control inputs, especially in combination with large changes in pitch, roll, or yaw (e.g., large sideslip angles) as they may result in structural failures at any speed, including below V_A."

21. Page 4-33, Figure 4-47; move the label reading “Never exceed speed” left to the small dark red area bordering the yellow area.

22. Page 6-9, left column, next to last paragraph, next to last sentence; change the numbers in parentheses from “15 to 21” to “33 to 39”.

23. Page 6-9, left column, next to last paragraph, last sentence; change the number in the first parentheses from “37” to “38” and in the second parentheses from “21” to “39”.

24. Page 6-18, figure 6-20; show a diode in the circuit between the top of the Battery contactor (solenoid) and the connection to the ALT/BAT switch.

25. Page 7-2, third paragraph, fourth sentence; change “insure” to “ensure”.

26. Page 7-3, figure 7-2; change the label presently reading “1,000 ft. pointer” to read “100 ft. pointer”. Change the label presently reading “100 ft. pointer” to read “10,000 ft. pointer”. Change the label presently reading “10,000 ft. pointer” to read “1,000 ft. pointer”.

27. Page 7-3, right column, top paragraph, last sentence; change “ASI” to “altimeter”.

28. Page 7-10, left column, Other Airspeed Limitations section, first bullet, last sentence; change “VA” to “V_A”.

29. Page 7-13, figure 7-12; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.

30. Page 7-23, left column, first sentence; change “*Figure 7-30*” to “*Figure 7-31*”.

31. Page 7-24, right column, last paragraph; delete the next to last sentence and the phrase “(and weight)” in the last sentence. No known compass manufacturer uses dip magnet compensators for aviation or weights that compensate for magnetic dip.

32. Page 7-26, right column, second paragraph, first sentence; delete the sentence.

33. Page 10-3, left column, fourth paragraph; change the word “either” to “any” in the first sentence. Change the word “two” to “three” in the first sentence. Add “(See figure 10-3)” to bullet 2. Add a bullet: “3. By using a flight computer.”

34. Page 10-9, right column, last paragraph; delete this duplicate paragraph.

35. Page 10-17, left column, next to last paragraph, first sentence; change the second word “or” to “for”.

36. Page 10-20, Figure 10-22, Wind component (knots) column; the red line is incorrect. Show the short section parallel the headwind trend lines over to 6 knots. Accordingly, adjust the right end of the line upward.

37. Page 10-20, left column, first paragraph; based on correcting the above mistake in plotting the red line, change the ground roll distance and distance over a 50 foot. Change the ground roll distance to be 700 feet, not 600 feet. Change the total distance over a 50 foot obstacle to be 1,400 feet, not 1,200 feet.

38. Page 10-25, Figure 10-31, figures in the green column; change “59°” to “50°”.

39. Page 10-26, Figure 10-32, Outside air temperature column and Weight column; the red line is incorrect. Show the left vertical stopping at 4,000 feet Pressure altitude then turning right to the Reference line. In the Weight column, show the red line left section so it is parallel to the trend lines over to 2,400 pounds. Accordingly, adjust the other sections of the red line to match these corrections.

40. Page 10-26, left column, first paragraph, last sentence; change the total ground roll to 975 feet. Change the total distance over a 50 foot obstacle to 1,500 feet.

41. Page 12-10, right column, subparagraph number 4; change the paragraph to read “Valid period dates and times, either 24 hours or 30 hours. The first two digits of EACH four digit number indicate the date of the valid period; the final two digits indicate the time.

42. Page 12-11, left column, TAF Example; change the first 2 lines under “TAF” to read:

    KPIR 111130Z 1112/1212

    TEMPO 1112/1114

43. Page 12-16, Figure 12-15; change the next to the last Wind Speed and Direction Plot label to read “W/50 kts”.

44. Page 13-2, left column, second paragraph, first sentence; change the first word “An” to “A”.

45. Page 13-3, right column, second paragraph, third sentence; change the word “three” to “four”.

46. Page 13-3, right column, second paragraph, fourth sentence; replace the sentence with this sentence: “See Chapter 5 of the AIM for a description of the Notice to Airmen (NOTAM) System.”

47. Page 13-8, Figure 13-10; on the right side reverse the “Pulsating red” label with the “Steady red” label.

48. Page 15-5, Figure 15-5; change the time shown in the Eastern Standard time zone from “13:00 PM” to “1:00 PM”.

49. Page 15-6, Figure 15-6; change the right side number (between “12” and “6”) from “15” to “9”.

50. Page 15-12, left column, first paragraph, first sentence; insert the word “frequently” between “is” and “computed”.

51. Page 15-19, Figure 15-26, Pilot’s Planning Sheet; change the column label above “7° E” from “WCA R+ L-” to “Mag Var W+ E-”.

52. Page 15-19, Figure 15-26; show an additional column labeled “Altitude” on both the Pilot’s Planning Sheet and the Visual Flight Log.

53. Pages 15-30 through 15-32; delete the *Loran-C Navigation* section. The Loran-C system is no longer in use.

54. Page 16-13, Figure 16-8, label at bottom; change “Impairement” to “Impairment”.

55. Page 17-6, right column, bullet number 6; change it to read “Emotion – Am I emotionally upset?”

56. Page 17-26, Figure 17-18, top right electronic flight display depiction; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.

57. Page 17-28, Figure 17-19, bottom portion; change the white course deviation circles/indicators to be in a horizontal line perpendicular to the course arrow, not on top of the course arrow.

58. Page G-18, Maneuvering speed (V_A); replace the last sentence with these sentences: “The design maneuvering speed. Operating at or below design maneuvering speed does not provide structural protection against multiple full control inputs in one axis or full control inputs in more than one axis at the same time."

59. Page G-31, Tropopause; change “mesosphere” to “stratosphere”.

60. Page G-32, V_A definition; delete the last sentence. Replace it with this sentence: “Operating at or below design maneuvering speed does not provide structural protection against multiple full control inputs in one axis or full control inputs in more than one axis at the same time."

61. Page I-7, Spins; change “4-32” to “4-31”.