## FAA-H-8083-25A Pilot's Handbook of Aeronautical Knowledge Dated 2009

## Errata as of January 21, 2011

- 1. Page 1-18, right column, 1<sup>st</sup> 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, 3<sup>rd</sup> 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, 2<sup>nd</sup> paragraph, 3<sup>rd</sup> line; change the word "life" to "lift".

- 12. Page 4-6, right column, 3<sup>rd</sup> paragraph, 3<sup>rd</sup> line; 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  $18^{\circ}$  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  $20^\circ$  Angle of attack line. The existing "Stall" tag incorrectly points to the right end of the green line. The  $20^\circ$  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, 1<sup>st</sup> paragraph, 3<sup>rd</sup> line; 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, 2<sup>nd</sup> 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, Load Factors and Flight Maneuvers section, 1st 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<sub>A</sub>."
- 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, right column, top line; 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, 1<sup>st</sup> bullet, last sentence; change "VA" to "V<sub>A</sub>".
- 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, 1<sup>st</sup> line; 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, *Eddy Current Damping* section, 1<sup>st</sup> sentence; delete the sentence.
- 33. Page 10-3, Pressure Altitude section, 3<sup>rd</sup> paragraph; change the word "either" to "any" in the 1<sup>st</sup> sentence. Change the word "two" to "three" in the 1<sup>st</sup> 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, 2<sup>nd</sup> line; change the 2<sup>nd</sup> 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, 1<sup>st</sup> 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, 1<sup>st</sup> 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, Nontowered Airport section, 1<sup>st</sup> word; change "An" to "A".
- 45. Page 13-3, right column, Notices to Airmen (NOTAMs) section, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence; change the word "three" to "four".
- 46. Page 13-3, right column, Notices to Airmen (NOTAMs) section; 1<sup>st</sup> paragraph, 4<sup>th</sup> 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, Fuel Consumption section, 1<sup>st</sup> line; 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, Loran-C Navigation section; delete the section. The Loran-C system is no longer in use.
- 54. Page 16-8, 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<sub>A</sub>); 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<sub>A</sub> 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".