

Review 11: Environmental Control

1. External air inlets.
2. By passing hot air over the exhaust system.
3. Selected by the pilot.
4. Carbon monoxide poisoning.
5. Oxygen.
6. Near sea level.
7. Pressurisation systems.
8. Hypoxia, oxygen.
9. Incompatible, spontaneous combustion (fire).

Review 12: Fire Protection Systems

1. False.
2. The insulated bulkhead behind the engine.
3. Continuous-loop and unit-type detectors.
4. Minimise.
5. Photoelectric cells.
6. Either.
7. Must not.
8. Dry powder.
9. Always.
10. An immediate landing.

Review 13: Pressure Instruments

1. Artificial, real.
2. 2°C per 1,000 feet.
3. False (this is a helpful constant used in the lower atmosphere only).
4. True.
5. True.
6. Static and/or dynamic pressure.
7. Static vent.
8. Total pressure.
9. Could.
10. Dynamic.
11. Pitot, static.
12. Static.
13. The airspeed indicator only.
14. No.
15. No.
16. No.
17. Airspeed indicator, altimeter, VSI.
18. No.
19. The same.
20. Yellow or amber.
21. Green.
22. White.
23. Low, white.

24. Low, green.
25. Maximum normal operating, high, green.
26. Will not.
27. Will.
28. 30 feet.
29. Mean sea level.
30. 250 feet.
31. 1,013.2 hPa.
32. Pressure altitude.
33. Area QNH.
34. While on the ground, set aerodrome elevation on the altimeter and read the approximate QNH from the subscale.
35. Lower than.
36. Higher than.
37. Density.
38. True.
39. Pressure.
40. Zero, indicate the altitude at which it became blocked.
41. Underread.
42. Zero, indicate that altitude at which it became blocked.
43. Overread.
44. Underread.
45. Overreading is more dangerous.
46. Alternate static.
47. Pitot heat.
48. Lag.
49. No. Yes, (if the actual density was less than ISA at MSL).

Review 14: Gyroscopic Instruments

1. Rigidity.
2. Precession.
3. Air (vacuum pressure), electricity.
4. Engine, 5 in. Hg (inches of mercury).
5. Horizontal.
6. Must.
7. Must, latitude.
8. Vertical, gravity sensors.
9. Turn indicator.
10. Turn (yaw-rotation about the aircraft vertical axis).
11. Turn and roll.
12. Does not give pitch information.
13. 3° per second, 2 minutes, 120 seconds.

14. 30 seconds.
15. AI, HI, TC (but if the HI is vacuum powered the TC or TI will be electric).
16. True.
17. Horizontal transverse axis.
18. Gravity.
19. Guard against the simultaneous loss of both 'attitude' gyroscopes.
20. The attitude indicator.
21. The attitude indicator.
22. The turn coordinator or turn indicator.
23. Heading indicator. Magnetic compass.
24. Precession.
25. Rigidity

Review 15: Compass Instruments

1. True.
2. Magnetic.
3. Differ from.
4. Magnetic variation.
5. Magnetic.
6. 10° east variation.
7. 11° east isogonal.
8. Isogonals, agonic line.
9. May.
10. Heading.
11. Different.
12. The same.
13. Nearer.
14. Away from.
15. Pivot point.
16. South.
17. Leads. Overshoot (Northerly heading).
18. Lags. Undershoot (Southerly heading).
19. Overshoot north, undershoot south.
20. Deviation card, compass swing.
21. Equator.
22. Stable indication, north-seeking.
23. True.
24. Special sensor coils called the flux valve (or flux gate).
25. AC.
26. AC, static inverter.
27. Magnetic, automatically, magnetic.
28. Synchronisation, annunciator.
29. Slave, flux valve, free.
30. RMI, HSI.

Review 16: Automatic Flight

1. Relieve the pilots workload.
2. Attitude.
3. Wing leveller, roll axis.
4. Stabilisation, inner loop.
5. Control, outer loop.
6. Coupling.
7. Heading hold (or mode).
8. Two.
9. Two.
10. Will.

Review 17: Introduction to RNAV

1. RNAV.
2. Waypoints.
3. ±2 nm.
4. 24, 12, 20,200 km.
5. 4.
6. Availability and continuity of service.
7. 12.5, track, and 95%.
8. Clear/acquisition (C/A), standard positioning service (SPS).
9. Selective availability (S/A).
10. The receiver measuring the period between the time of transmission and the time of reception of the satellite signal.
11. Barometric aiding.
12. Navigation with RAIM, navigation (two and three dimensional) without RAIM, and loss of navigation or DR.
13. By data received from the satellites.
14. By appropriate software modelling in the receiver.
15. ATC must be advised.
16. The relevant and current navigation chart.
17. It remains current for the duration of the flight.
18. Situational awareness.
19. An oblate spheroid.
20. WGS 84.
21. It is a two-way route.
22. True; however, area LSALTs are shown.
23. RNAV system keeps the aircraft within the tracking tolerances for the aids concerned.