

AVQUIZ

FLYING OPS

- The ERSA entry for a particular aerodrome reads: 2200-1200 MON-THU: 2200-0500 FRI, OT & PH CTAF PROC apply (1HR earlier HDS). The local time is UTC +10 HR. At 0445 on a Friday, CTAF procedures would**
 - not apply under any circumstances.
 - not apply because the local time is always within the non-CTAF time period.
 - apply if there was a public holiday or daylight saving, but not otherwise.
 - apply if there was a holiday because of the statement '1HR earlier HDS'.
- At the above aerodrome, CTAF procedures would**
 - apply on any public holiday regardless of the time.
 - apply on any public holiday one hour earlier.
 - not apply at weekends.
 - never apply between 0800 and 1500 local.
- In a climbing turn it is necessary to**
 - hold off bank due to the outer wing having a smaller angle of attack than the inner wing.
 - hold on bank due to the outer wing travelling faster than the inner wing.
 - hold off bank due to the relatively greater angle of attack of the outer wing.
 - hold on bank due to the relatively greater angle of attack of the outer wing.
- With respect to fuel tanks in the wings, an advantage of a low wing aircraft over a high wing aircraft is**
 - fuel loss due to tank cross-connection when parked on sloping ground is not possible.
 - fuel pumps are employed so inverted flight is permissible.
 - fuel pumps are employed so aerobatic flight is permissible.
 - a relatively constant fuel pressure is available at the carburettor.
- A taxiway sign consisting of the taxiway letter designation in white on a red background indicates**
 - a taxiway mandatory holding position other than at a taxiway/runway intersection.
 - a no-entry sign.
 - a taxi-holding position sign at a taxiway/runway intersection.
 - a holding point on a Cat II ILS runway.
- Observed intermediate QNH values are rounded**
 - down so that the altimeter reading is from a pressure level slightly lower than MSL.
 - down so that the altimeter reading is from a pressure level slightly higher than MSL.
 - up so that the altimeter reading is from a pressure level slightly lower than MSL.
 - up so that the altimeter reading is from a pressure level slightly higher than MSL.
- When turning by reference to a magnetic compass, the acceleration errors**
 - are a maximum on E and W headings, and the turning errors are a maximum on N and S headings.
 - are a maximum on N and S headings, and the turning errors are a maximum on E and W headings.
 - and turning errors are at a maximum on N and S headings.
 - and turning errors are at a maximum on E and W headings.
- You are planning to track 225(m) with a heading of 240(m). After travelling 60NM you obtain a position fix indicating that you are 15 degrees right of track. You have therefore been experiencing**
 - left drift and 15 degrees of track error.
 - right drift.
 - left drift.
 - no drift.
- A pre-flight information bulletin via NAIPS will provide NOTAM information on PRD areas**
 - only on request.
 - within 50NM of the departure and destination unless entered by latitude and longitude.
 - always within 10NM each side of the nominated track.
 - always within 50NM each side of the nominated track.
- When distinguishing between transmissions to different aircraft in a very busy environment the words**
 - 'break break' are used, but 'break' can be used between portions of a message.
 - 'break break' is used and 'break' is no longer used for any purpose.
 - 'break' is used and 'break break' is no longer used.
 - either 'break break or break' may be used depending on the emphasis needed.



MAINTENANCE



- If the inlet filter to a vacuum-operated gyro instrument requires changing due to partial restriction the**
 - vacuum gauge will read low.
 - vacuum gauge will read high.
 - vacuum reading will be normal, but the rotational speed of the gyro will be high.
 - vacuum gauge reading will be normal, but instrument performance will be degraded.
- The voltage drop along a length of electrical cable is, most correctly,**
 - proportional to the length, and inversely proportional to the square of the conductor diameter.
 - proportional to the length and diameter.
 - inversely proportional to the length, and proportional to the gauge.
 - inversely proportional to the length, and inversely proportional to the square of the gauge.
- 121.5 MHz distress beacons will**
 - no longer be detected by satellite after 01 February, 2009.
 - no longer detected by satellite after 01 January, 2010.
 - be illegal after 01 February, 2009.
 - be illegal after 01 February, 2009 unless paired with 406 MHz.
- The apparent drift of a directional gyro heading indicator due to the earth's rotation, if uncorrected, is at a maximum of**
 - 5 degrees per hour at the poles.
 - 5 degrees per hour at the equator.
 - 15 degrees per hour at the poles.
 - 15 degrees per hour at the equator.
- It is inadvisable to weld areas of steel that have been previously brazed or soldered because**
 - the welding temperatures will not be sufficient to permit the flux to clean the surfaces and exclude oxygen.
 - the solder will oxidise forming lead oxide.
 - the brazing mixture will oxidise.
 - the brazing mixture or solder may penetrate the hot steel and weaken it.
- A balun is a device for matching**
 - an unbalanced feeder, such as coaxial cable, to a balanced load.
 - an unbalanced feeder, such as coaxial cable, to a higher impedance load.
 - a high to a lower impedance.
 - a low to a high impedance.
- The moving magnet assembly in a magnetic compass is arranged with its centre of gravity well below the pivot point in order to**
 - maximise the effects of fluid damping.
 - minimise the effects of magnetic dip.
 - minimise the effects of external soft magnetic fields.
 - minimise the effects of external hard magnetic fields.
- A mass balance is used on**
 - the empennage, to lower the resonant frequency of the fin.
 - the empennage, to raise the resonant frequency of the fixed surfaces.
 - a control surface, to move the centre of gravity aft to reduce the probability of flutter.
 - a control surface, to move the centre of gravity forward to reduce the probability of flutter.
- With reference to a jet engine, an active clearance control system is one where compressor bleed air is used to cool**
 - the turbine blades to preserve the tip clearances.
 - the compressor blades to preserve the tip clearances.
 - the turbine case, and thus reduce the turbine blade tip clearances.
 - the compressor case to reduce the compressor blade tip clearances.
- Amongst the first symptoms of the onset of dehydration is typically**
 - thirst.
 - drying of the nasal passages.
 - reduced sweating.
 - hot flushes.

I.F.R. OPERATIONS

Hobart, TAS RWY 12 ILS or LOC

You are the PIC of a PA31-350 (Chieftain) operating as a category B aircraft into Hobart, Tasmania. Your aircraft is equipped and serviceable for all ground-based nav aids and also TSO approved GNSS. You are inbound via the HB 006 radial with an ETA YMHB of 1500Z and you brief the RWY 12 ILS. The following questions relate to this approach; plate dated 13 March 2008.

Note: The landline AWIS for YMHB is NOTAM'd not available and ATC is not active.

1. Can you expect to copy a terminal information?

- (a) Yes, ATIS on 112.7 or 128.45.
- (b) Yes, AWIS on 112.7 or 128.45.
- (c) No ATIS since out of TWR hours, but AWIS on 128.45 or 112.7.
- (d) No ATIS or AWIS.



2. What is the correct frequency and method to key the P.A.L. on?

- (a) 112.7 and three times 3-second transmits within 25 seconds.
- (b) 118.1 and three times 3-second transmits within 25 seconds.
- (c) 118.1 and three times 1-second transmits within 25 seconds.
- (d) 118.1 and three times 1-second transmits, no time frame.

You decide to join the 22 HB DME ARC from the appropriate position.

3. What would the initial HDG be to establish the ARC, and what is the minimum altitude to which you may descend on the arc?

- (a) HDG 096, 5000.
- (b) HDG 276, 5000.
- (c) HDG 276, 3900.
- (d) HDG 358, 5600.

4. What readings would you expect on DME and GNSS groundspeeds once fully established on the ARC and abeam HB VOR?

- (a) Both DME and GNSS will show current groundspeed.
- (b) DME 0 kts, GNSS current groundspeed.
- (c) Both DME and GNSS will show 0 kts.
- (d) DME will show current groundspeed, GNSS 0 kts.

You are approaching the lead radial for the turn to intercept the LOC on a HDG now of 220M.

5. Which of the following nav aid readings will be correct at the L.R.?

- (a) HB VOR 125 'TO' centred, HB LOC full scale right, GS full scale fly up, HB NDB bearing can not be determined from the plate.
- (b) HB VOR 305 'FROM' centred, HB LOC ½ scale right, GS full scale up, HB NDB 265 relative.
- (c) HB VOR 115 'TO' centred, HB LOC full scale left, GS full scale up, HB NDB bearing can not be determined from the plate.
- (d) HB VOR 305 'FROM' centred, HB LOC full scale right, GS centred.

You intercept the HB LOC at 5000 and at GS intercept you select gear down, groundspeed now 120 kts.

6. At what DME is the GS intercept, and what ROD would stabilise the approach?

- (a) 22 DME HB, 600 FPM.
- (b) 13.2 DME HB, 600 FPM.
- (c) 17.1 DME HB, 360 FPM.
- (d) 17.1 DME HB, 600 FPM.

The nose gear does not show a down and locked indication, so you elect to enter the holding pattern at TTR to trouble-shoot the problem.

7. What is the lowest holding altitude at TTR?

- (a) 5000.
- (b) 4200.
- (c) 4000.
- (d) 5600.

You recycle the gear, and obtain down-and-locked indications on all gear legs, so you re-intercept the ILS at TTR.

8. What are the remaining check heights for the ILS, and what is the DA?

- (a) 2000, 1300, 500, 1.8 km VIS.
- (b) 2110, 1290, 500, 1.8 km VIS.
- (c) 2110, 1290, 320, 1.2 km VIS.
- (d) 2110, 1290, 220, 0.8 km VIS.

9. If the glide slope were to fail, what is the correct minima now for landing RWY 12?

- (a) DA 320 / 1.2 km VIS.
- (b) DA 220 / 0.8 km VIS.
- (c) MDA 1140 / 2.4 km VIS.
- (d) MDA 500 / 1.8 km VIS.
- (e) MDA 400 / 1.8 km VIS.

10. Where is the MAPt for the ILS and LOC/DME respectively?

- (a) DA, 2 DME HB.
- (b) MM, 2.9 DME HB.
- (c) MM for both approaches.
- (d) DA, 1.4 DME HB.



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