



## Melbourne Coastal VFR Chart Quiz

1. What would be the highest VFR altitude which could be continuously maintained outside controlled airspace on a coastal flight from Moorabbin to Geelong aerodrome via Williamstown, Point Cook and Point Wilson, assuming the Avalon CTR is not active?

  - 1500ft.
  - 2500ft.
  - 4500ft.
  - 5000ft.
2. What is the significance of the line of purple dots on the VTC extending from just south of Moorabbin to just north of Point Cook?

  - Aircraft flying coastal must remain seaward of this line heading north and landward of this line heading south.
  - Aircraft flying coastal must remain landward of this line heading north and seaward of this line heading south.
  - The line is the preferred VFR route for coastal flight.
  - The line is a series of marine lights.
3. What is the significance of the half-shaded purple diamond symbols at Albert Park Lake, Station Pier and Altona South?

  - They are VFR tracking points for the designated coastal VFR route.
  - They are VFR approach points to the Melbourne CTR.
  - They are reporting points for VFR coastal flights
4. What procedure applies to a portion of a coastal flight from Station Pier to Little River Mouth?

  - None, provided the flight was conducted at at least 2000ft to stay clear of both the danger area and the restricted area.
  - Permission to transit the zone must be obtained from the Point Cook aerodrome operator.
  - The flight must be conducted at at least 2000ft when the restricted and danger areas are active.
  - You must broadcast callsign, aircraft type, position, level and intentions on 126.2 MHz before 5nm of Point Cook.
5. You wish to fly from St Leonards to Point Nepean via Queenscliff, remaining clear of built-up areas. NOTAMS for R374 are "nil current". The lowest altitude at which you may overfly Swan Island is

  - 500ft because the restricted area is not active.
  - 1000ft because there are some buildings on the island.
  - 1500ft.
  - 2500ft to provide adequate clearance above the restricted area.
6. What hazards would you expect to encounter on a coastal flight at 1000ft from Barwon Heads airfield to south of Point Addis?

  - Ultralights, parachuting and hang gliding.
  - Heavy jet training, ultralights, parachuting and hang gliding.
  - Ultralights and hang gliding only.
  - Parachuting and hang gliding only.
7. What frequency should be monitored between Sorrento and Dromana at 1000ft?

  - Melbourne Radar (RAS) 135.7 MHz
  - Melbourne Centre 135.3 MHz
  - Melbourne Centre 125.9 MHz



8. Inbound to Moorabbin from the south with RWY 17 active, you would track via:

  - CARRUM for the western circuit, which is right-hand
  - CARRUM for the western circuit, which is left-hand
  - CARRUM for either circuit
  - SHOAL for the western circuit, which is right-hand
9. The recommended procedure for a VFR



rephrase of this quiz with the permission of the author for navigational purposes.

flight following the coast from Altona to Carrum includes:

- Maintaining an altitude as high as possible to avoid traffic arriving at or departing Moorabbin.
- Broadcasting aircraft callsign, type, position, level and intentions at the beginning and end of the designated VFR route.
- Reporting position to the Radar Advisory

Service at the beginning and end of the designated VFR route.

- Turning on landing and taxi lights.

10. You plan to fly coastal abeam Moorabbin without entering the zone. What requirements apply to flight in proximity to Moorabbin during Tower hours?

- You must obtain the ATIS then report to Moorabbin Tower if you will be tracking within 5 nm of the CTR boundary.
- You must obtain the ATIS then report to Moorabbin Tower if you will be tracking within 3nm of the CTR boundary.
- You must obtain the ATIS then broadcast on the Tower frequency if you will be tracking within 5 nm of the CTR boundary.
- You must obtain the ATIS then broadcast on the Tower frequency if you will be tracking within 3nm of the CTR boundary.

## FLYING OPS

1. **One restriction imposed on VFR flights operating at or below 2000ft AMSL is that:**
  - a) No cloud is permitted below the aircraft.
  - b) Visibility should not be less than 8km.
  - c) The aircraft shall be navigated by visual reference to ground or water.
  - d) Position reports shall be made every 30 min.
2. **Which limitation applies to the carriage of cargo in an aircraft with MTOW less than 5700kg?**
  - a) Cargo must not be carried in the passenger compartment.
  - b) Cargo must not be carried on an unoccupied control seat.
  - c) Cargo placed on seats shall not exceed 77kg and must be restrained.
  - d) All hand baggage must be stowed under a passenger seat during flight.
3. **Your aircraft suffers a bird strike resulting in damage to a navigation light. As pilot in command you are required to submit:**
  - a) An immediate verbal report followed by a written report to the Area Office of the CASA.
  - b) A written report of the incident to the nearest CASA unit within 24hrs.
  - c) A written report to any airways operations unit or office of the Australian Transport Safety Bureau within 48hrs.
  - d) A radio broadcast on the area frequency informing other aircraft of the presence of birds in the vicinity, and on landing, make an endorsement in the maintenance release
4. **Provided that no other person's egress is blocked, a disabled passenger restricted to travelling in a seat which has the back in a reclined position shall be seated in**
  - a) The most rearward seat in the cabin.
  - b) A forward facing seat with no passenger in the seat immediately behind.
  - c) An aft facing seat with no passenger in the seat immediately behind.
  - d) The most forward seat in the cabin.
5. **One situation in which a passenger is required to wear a seat belt is when:**
  - a) Flying over water.
  - b) A passenger occupies a control seat.
  - c) Flying below 5000ft AMSL.
  - d) Flying below 1000ft AGL.
6. **To operate an aeroplane with a MTOW less than 5700kg, on a charter flight, which of the following flight instrument(s) must be serviceable?**
  - a) Vertical speed indicator.
  - b) Altimeter.
  - c) Attitude indicator.
  - d) Both ASI's (if 2 fitted).



7. **Flight time means the total time occupied by a flight, from the moment:**
  - a) The aircraft commences its take-off to the moment it has completed its landing at the end of the flight.
  - b) The aircraft moves under its own power to the moment it has completed its subsequent landing.
  - c) The engine starts to the moment the aircraft comes to a stop at the destination apron.
  - d) The aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest after landing.

*Questions 8 and 9 relate to a pilot engaging in commercial operations in an aircraft requiring no more than 2 pilots.*

8. **In the last six days you have flown 23 hours. You are not restricted by the flight time limits for 30 or 365 consecutive days. Today you may fly for a maximum of :**
  - a) 2 hours.
  - b) 8 hours.
  - c) 7 hours.
  - d) 3 hours.
9. **Yesterday was a rest day. Today (11 December) you finished a tour of duty of 6 hours at 2030 Local Standard Time (LST). Your next tour of duty will begin at 0615 LST and be of 8 hours duration. What is the earliest date on which you may commence this tour of duty?**
  - a) 15th December.
  - b) 12th December.
  - c) 13th December.
  - d) 14th December.

## MAINTENANCE

1. **The owner reports that on his Cessna 172, when he switches the master switch on, the prop turns. This is most likely to be a faulty:**
  - a) Master switch.
  - b) Battery relay.
  - c) Magneto / starter switch.
  - d) Starter relay.
2. **After an annual or periodic inspection, a power check and leak check is carried out on the engine in the run up bay. This should be done with:**
  - a) Cows on,
  - b) Cows off,
  - c) Not needed, as the plugs have been cleaned and the compressions already checked.
  - d) Cows off, aircraft pointed into wind.
3. **Apart from being a fire hazard, excessive priming should be avoided because:**
  - a) It fouls the spark plugs.
  - b) It causes oil dilution.
  - c) It washes oil from the cylinder walls,
  - d) It drains the carb float bowl.
4. **A wasp nest is found blocking the fuel tank vent of an aircraft fitted with bag tanks. It would be wise to check:**
  - a) The fuel cap for leaks.
  - b) The pitot for blockage.
  - c) That fuel will flow from the tank to the engine.
  - d) That the fuel tank is secure.

*Answers page 55*

# P I C K T H E P I C

**Q1.** Wing Commander S. J. Goble (pilot) and Flight Lieutenant I. E. McIntyre (navigator) achieved a milestone in Australian aviation in 1924. What was this feat?



**Q2.** The crew of the Southern Cross (Harry Lyon, Charles Ulm, Charles Kingsford Smith and James Warner) pictured at Brisbane in June 1928. What historic flight have they just completed?



**Q3.** In April 1929, H. Hitchcock and K. Anderson were killed in the Northern Territory when their Widgeon Kookaburra crashed in a forced landing. Ironically, they were searching for another aircraft which had undertaken a forced landing. What was that aircraft?



**Q4.** What is the name of this Australian airport (shown here in 1938)?

**Q5.** A KLM DC-2, pulled out of a bog by the citizens of Albury, NSW. In spite of this setback, the aircraft was soon able to fly on to Melbourne, for victory in which 1934 air race?



# RULES & REGS



**Q.** At a water aerodrome which is a controlled aerodrome, the swept part of an alighting area shall be indicated by the control launch which shall take up position:

- a) At the windward and on the left side of the area and shall head into the direction of an aircraft taking-off or landing?
- b) At the leeward and on the right side of the area and shall head into the direction of an aircraft taking-off or landing.
- c) At the windward and on the left side of the area and shall head away from the direction of an aircraft taking-off or landing.
- d) At the leeward and on the left side of the area and shall head into the direction of an aircraft taking-off or landing?

**A.** (d) CAR 169(6) specifies that the swept part of an alighting area shall be indicated by the control launch which shall take up position at the leeward and on the left side of the area and shall head into the direction of an aircraft taking-off or landing.

**Q.** The pilot in command of a multi-engine aircraft in which one engine fails may proceed to an aerodrome of her selection instead of the nearest suitable aerodrome if, upon consideration of all relevant factors,

she deems such action to be safe and operationally acceptable. Which of the following factors are considered to be relevant in such a situation:

- a) The nature of the malfunction and the possible mechanical difficulties which may be encountered if flight is continued?
- b) Air traffic congestion?
- c) Weather conditions en route and at possible landing points?
- d) The familiarity of the pilot with the aerodrome to be used?
- e) The type of terrain to be flown over?
- f) All of the above?

**A.** (f) In addition to these factors, CAO 20.6 paragraph 3.2 also lists; the availability of the inoperative engine for use; the altitude, aircraft weight, and usable fuel at the time of engine stoppage; the relative characteristics of aerodromes available for landing; the distance to be flown coupled with the performance

availability should another engine fail [if it was a 2 engine plane, they could be stuck up there all night! ed].

**Q.** Under CAR 5.52(2) CASA may give directions in CAO's setting out the information about each flight undertaken by the holder of a flight crew licence, a special pilot licence or a certificate of validation that the holder must record in his or her personal log book. Which of the following pieces of information has CASA stipulated must be recorded:

- a) The date of each flight?
- b) The type of aeroplane flown?
- c) The time flown in single and multi-engined aeroplanes by day and by night?
- d) The point of departure and the destination of each flight?
- e) The nature of each flight?
- f) All of the above?

**A.** (f) These points are listed in CAO 40.1.0 para 9.5. In addition to the above, CAO 40.1.0 para 9.5 provides that for the purposes of CAR 5.52(2), the information about each flight must also include the following: the point of departure and the destination of each flight; the time flown on instruments; and in accordance with subsection 10, the capacity in which the person flew the aeroplane.

## Across

- 1. A condition with an excess of electrons.
- 3. Air in motion.
- 5. Perpendicular (synonym; abbrev).
- 6. Negative.
- 7. Electromagnetic radiation.
- 8. Directional gyro (abbrev).
- 9. An eccentric plate or shaft.
- 11. Open-ended tube.
- 13. Stationary seal between two flat surfaces.
- 14. Plan position indicator (abbrev).
- 15. Clearway (abbrev).
- 16. A proportion, expressed as a fraction.
- 19. A rotating device.
- 20. Input/output (abbrev).
- 21. Airflow being compressed without heat gain or loss.
- 23. Hail (abbrev).
- 24. \_\_\_ spot (often a result of a malfunctioning fuel nozzle).
- 28. Water droplets.
- 30. To set something in motion.
- 31. Valued commodity and chemical element (abbrev).
- 32. Malleable metallic chemical element.
- 34. To stretch out.

35. Type of current.

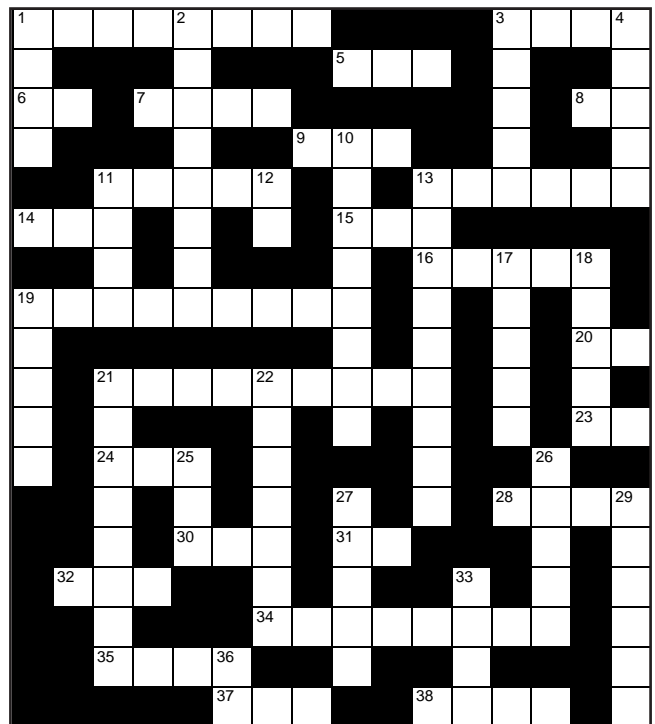
37. Departure and approach (abbrev).

38. Lifts equipment off floor.

## Down

- 1. One billionth of a unit.
- 2. Valve for fuel-air mixture.
- 3. Produces lift.
- 4. Numeral.
- 10. Free from error.
- 11. One millionth of a unit.
- 12. Top of Climb (abbrev).
- 13. A device utilising a rapidly spinning wheel.
- 17. Poisonous.
- 18. Type of sealing device.
- 19. Lateral rotation of an aircraft
- 21. Substance used to bond two materials together.
- 22. A state of equilibrium.
- 25. Aerodrome control tower (abbrev).
- 26. A device regulating flow in one direction only.
- 27. Gaseous state of a material.
- 29. Created law of physics describing inertia.
- 33. Safety authority.
- 36. Imperial unit of measure (abbrev).

## CROSSWORD no. 11



Send your completed crossword by 20 December to the editor, Flight Safety Australia, PO Box 2005, Canberra ACT 2601 for a chance to win \$100 worth of aviation publications. The winner will be selected from a draw of correct entries. Answers will be published in the next issue.

## WHAT'S THE MESSAGE?



In 25 words or less, tell us what you think is the message to be inferred from this photo. The best entry will be published in the next issue. The winner will receive \$50 worth of safety education products. Send your entries to the editor, Flight Safety Australia, GPO Box 2005, Canberra ACT 2601 by Monday 20 December.

## How did you rate?

### Flying ops quiz - pg 52

1. c) AIP ENR 1.2 para 1.1.1 (b) and ENR 1.1 para 17.2.1 (a).
2. c) CAO 20.16.2 Subsection 5 para 5.1.
3. c) AIP ENR 1.14 para 1.3.2 and 1.3.3.
4. b) CAO 20.16.3 Subsection 5 para 5.2.
5. d) CAO 20.16.3 Subsection 4 and 3.
6. b) CAO 20.18 Appendix 1 para 1(b).
7. d) CAR para 2 (Interpretation).
8. c) CAO 48.1 para 1.16.

9. b) CAO 48.1 para 1.2. *The rest period is 9hrs 45mins and embraces the hours 10pm and 6am. The rest period is adequate and duty may commence the following day at 0615hrs.*

### Maintenance - pg 52

1. d) Prolonged cranking of the starter can draw enough current through the starter relay to cause the contacts to weld closed. When the master is switched on, the starter relay passes the power to the starter, spinning the prop.
2. a) The only time that the engine should be run without cowls is for minor

troubleshooting. Power runs of any duration must be carried out with all cowls in place, into wind to ensure uniform cooling of the engine.

3. c) On initial start, the cylinder walls will be devoid of lubrication until the oil film is built up, and may result in abnormal wear and scoring.

4. d) With the fuel vent blocked, unless there is a cross vent or a vented cap, the tank will keep feeding as it collapses and pulls away from its supports in the tank bay.

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1. b)
2. c) Good practice is to "keep to the right" but the line itself is not the demarcation between northbound and southbound flights.
3. b)
4. d) See ERSA entry, Point Cook. Point Cook is in an MBZ so broadcast is mandatory. No requirement to avoid the danger area. Permission only required to land, not to transit.
5. c) "nil current" for a restricted area not activated by NOTAM means that it is still active. See ERSA entry for R374. You may fly at the upper boundary of a restricted area.
6. a) Heavy jet training is above 5000ft and to the south west of Avalon.
7. c)
8. a) See ERSA entry for Moorabbin, Special Procedures.
9. d) Recommended procedures are detailed on the larger scale VTC section. Broadcasts are not specifically recommended for this route. Even though many schools teach that it is good

practice to broadcast at the beginning of VFR routes, a broadcast at the end as well would be overkill.

10. d) ERSA Moorabbin Special Procedures note 1 and AIP ENR 1.1 para 30.2.

**Pick the pic - 53**

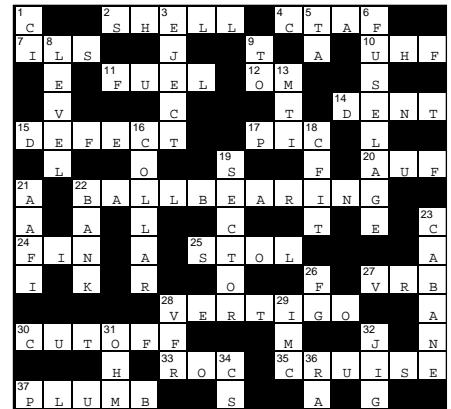
1. Goble and McIntyre completed the first flight around Australia in April-May of 1924. Their aircraft was a modified Fairey IILD A10-3. The journey of 8,459 miles was completed in 44 days, with 93 hours logged as actual flight time.
2. The crew of the Southern Cross completed the first aerial crossing of the Pacific on 9 June 1928. The three-leg journey began in Oakland, California, proceeding to Hawaii, Fiji, and finally touching down near Brisbane. Total flight time was 83 hours, 38 minutes.
3. Hitchcock and Anderson were assisting in the search for Charles Kingsford Smith's Southern Cross, which had failed to reach its destination of Wyndham, WA. Hitchcock and Anderson died in their search attempt as a result of losing their bearings and running out of fuel. The occupants of the Southern Cross

were found alive and well by the crew of DH 61 Canberra. Running low on fuel, the Southern Cross had made a successful forced landing some 200 miles from Wydham.

4. Parafield Airport, South Australia.
5. The DC-2 was a participant in the 1934 England to Australia Centenary Air Race.

**Crossword no. 10 – last issue**

The first correct entry drawn was from John Royce of Airlie Beach, QLD. Mr Royce wins a voucher for \$100 worth of Aviation products from Airlines Publications Centre.



The winner of last issue's *What's the message* is the Reverend Dr Richard Martin, of Gympie, QLD.

**"Where's the priest?  
We're ready for the baptism!"**