

## 2009 Flight Crew Recency Requirements Self-Paced Study Program

Refer to paragraph 421.05(2)(d) of the Canadian Aviation Regulations (CARs).

This questionnaire is for use from November 1, 2009, to October 31, 2010. Completion of this questionnaire satisfies the 24-month recurrent training program requirements of CAR 401.05(2)(a). It is to be retained by the pilot.

All pilots are to answer questions 1 to 28. In addition, aeroplane and ultralight aeroplane pilots are to answer questions 29 and 30; helicopter pilots are to answer questions 31 and 32; gyroplane pilots are to answer questions 33 and 34; balloon pilots are to answer questions 35 and 36; and glider pilots are to answer questions 37 and 38.

Note: Many answers may be found in the Transport Canada Aeronautical Information Manual (TC AIM). TC AIM references are at the end of each question. Amendments to this publication may result in changes to answers and/or references. The TC AIM is available on-line at: [www.tc.gc.ca/CivilAviation/publications/tp14371/menu.htm](http://www.tc.gc.ca/CivilAviation/publications/tp14371/menu.htm)

1. What does the term "PNR" mean in the *Canada Flight Supplement* (CFS)?  
\_\_\_\_\_. (AGA 2.2)
  2. The radiation produced by FM radio receivers and television broadcast receivers falls within which NAVAID frequency band? \_\_\_\_\_. Which NAVAID frequency band does the radiation produced by AM radio receivers fall within? \_\_\_\_\_. (COM 3.1.2)
  3. What information should be included on initial contact with a remote communications outlet (RCO)?  
\_\_\_\_\_; \_\_\_\_\_; \_\_\_\_\_; \_\_\_\_\_. (COM 5.8.3)
  4. In the Air Navigation System (ANS), only \_\_\_\_\_ have 121.5 MHz capability, and this emergency frequency is only monitored during those facilities' hours of operation. (COM 5.11)
  5. What is the correct frequency to use in Canadian Southern Domestic Airspace (SDA) for air-to-air communications between pilots? \_\_\_\_\_. (COM 5.13.3)
  6. What do the letters "QS" signify when shown beside a low-pressure area on a graphic area forecast (GFA)?  
\_\_\_\_\_. [MET 3.3.11(a)]
  7. What intensity of turbulence is depicted on a GFA?  
\_\_\_\_\_. [MET 3.3.12(b)]
  8. What is an AIRMET?  
\_\_\_\_\_. (MET 3.4.1)
  9. In an aerodrome forecast (TAF), strong non-convective low-level wind shear within \_\_\_\_\_ ft above ground level (AGL) will be labelled as \_\_\_\_\_. (MET 3.9.3)
- TAF CYYZ 111207Z 1112/1218 14008KT 3SM -RA BR BKN007 OVC012  
TEMPO 1112/1116 6SM -RA BR FEW007 OVC012 BECMG 1112/1114 19012KT  
FM111600 23015G30KT P6SM OVC040 TEMPO 1116/1117 OVC020  
FM111800 25025G40KT P6SM SCT050 BECMG 1122/1124 26020G30KT  
FM120300 27015KT P6SM SKC  
RMK NXT FCST BY 111500Z**
10. In the TAF shown above, when are the winds forecast to be less than 20 kt?  
\_\_\_\_\_. [MET 3.9.3(f)]
  11. In the TAF shown above, what is the lowest forecast ceiling? \_\_\_\_\_. [MET 3.9.3(j)]
- SPECI CYVR 021718Z 19014KT 15SM FEW020 FEW053 SCT120 BKN190 10/ RMK SF1SC2AC1AC2=  
METAR CYVR 021700Z 20014G19KT 15SM -RA FEW030 BKN053 OVC075 10/04 A2967 RMK  
SC2SC3AC2 SLP047=**
12. In the 1700Z CYVR aviation routine weather report (METAR) shown above, what type of cloud is at 5 300 ft?  
\_\_\_\_\_. [MET 3.15.3(p)]
  13. What is the ceiling in the 1700Z CYVR METAR shown above? \_\_\_\_\_. [MET 3.15.3(k)]
  14. In the aviation weather reports shown above, why was the aviation special weather report (SPECI) issued at 1718Z? \_\_\_\_\_. (MET 3.15.4)
  15. Flight information service en route (FISE) RCOs will use one of four frequencies. At most RCO sites where one of these four frequencies is used, 126.7 MHz will \_\_\_\_\_. [RAC 1.1.3(a)]

16. The minimum day VFR flight visibility for an aircraft in uncontrolled airspace below 1 000 ft AGL is \_\_\_\_\_ miles for aircraft other than a helicopter, and \_\_\_\_\_ mile for helicopters. (RAC 2.7.3 Figure 2.7, and CAR 602.115)
17. Long-distance telephone calls can be made to a flight information centre (FIC) toll-free at \_\_\_\_\_. (RAC 3.2)
18. A flight itinerary may be filed with a responsible person. A “responsible person” means an individual who has agreed to ensure that an overdue aircraft is reported to \_\_\_\_\_. (RAC 3.6.2)
19. The closure of a flight plan or flight itinerary prior to landing is considered as filing an arrival report, and as such, it will result in \_\_\_\_\_. (RAC 3.12.2)
20. Unless otherwise advised by air traffic control (ATC), pilots [do/do not] require permission to change from tower frequency once clear of the control zone. (RAC 4.2.9)
21. If you have landed short of your destination for reasons other than an emergency and you are unable to advise ATC of your situation, when will a search be initiated: a) in the case of a flight plan? \_\_\_\_\_; b) in the case of a flight itinerary? \_\_\_\_\_. (SAR 3.5)
22. Which transponder code should a pilot select to alert ATC of an emergency situation? \_\_\_\_\_. (SAR 4.4)

**090003 NOTAMN CYXX ABBOTSFORD**

**CYXX SNOWBIRDS ARR SEQUENCE 10 NM RADIUS AD SFC TO 10200 FT MSL NON-PARTICIPANTS SHALL REMAIN CLR OF AREA 0906101900 TIL 0906102030**

23. Based on the NOTAM shown above, should you plan to depart Abbotsford on June 10 at 2000Z? \_\_\_\_\_. Why? \_\_\_\_\_. (MAP 5.6)
24. Where do you find *AIP Canada (ICAO)* Aeronautical Information Circulars (AIC)? \_\_\_\_\_. (MAP 6.1)
25. Until what date is your medical certificate valid? \_\_\_\_\_. (LRA 3.2, CAR 404.04)
26. Prior to carrying passengers, you must have completed \_\_\_\_\_ takeoffs and landings in the same category and class of aircraft within the previous \_\_\_\_\_ months. (LRA 3.9, CAR 401.05)
27. What type of common-use medications have been associated with aircraft accidents and why? \_\_\_\_\_. (AIR 3.12)
28. Is MOGAS more susceptible to carburetor icing than AVGAS? \_\_\_\_\_. (AIR 2.3)

*Aeroplane-Specific Questions (including ultralight)*

29. Descent using an approach slope indicator system should not be initiated until the aircraft \_\_\_\_\_ with the runway. (AGA 7.6.1)
30. Concerning aircraft contamination, what is the “Clean Aircraft Concept”? \_\_\_\_\_. [AIR 2.12.2(c)]

*Helicopter-Specific Questions*

31. With a rotor turning counter clockwise, what hovering turn should be attempted first when flying in a strong wind? \_\_\_\_\_. (Use helicopter references)
32. Why do vortices produced by helicopters create problems potentially greater than the ones created by fixed-wing aircraft? \_\_\_\_\_. (AIR 2.9)

*Gyroplane-Specific Questions*

33. What are the symptoms of a retreating blade stall? \_\_\_\_\_. (Use gyroplane references)
34. The height velocity chart found in the aircraft flight manual (AFM) provides the pilot with guidelines to avoid \_\_\_\_\_ close to the ground. (Use gyroplane references)

*Balloon-Specific Questions*

35. No person shall conduct a takeoff in a balloon for the purpose of day VFR flight unless it is equipped with \_\_\_\_\_; \_\_\_\_\_; and in the case of a hot air balloon, \_\_\_\_\_ and \_\_\_\_\_. (RAC ANNEX, CAR 605.19)
36. Should power-line contact become inevitable, what is the best action for the pilot to take? \_\_\_\_\_. (Use balloon references)

*Glider-Specific Questions*

37. The release hook check is made with the launch cable \_\_\_\_\_ and also under \_\_\_\_\_. (Use glider references)
38. When joining another glider in a thermal, in which direction should you circle? \_\_\_\_\_. (Use glider references)

1. Prior notice required
2. Instrument landing system (ILS) localizer and VHF omnidirectional range (VOR); Automatic direction finder (ADF)
3. The identification of the air traffic services (ATS) unit controlling the RCO; the aircraft identification; the name of the location of the RCO followed by the individual letters R-C-O in a non-phonetic form
4. control towers and flight service stations (FSS)
5. 122.75 MHz
6. QS signifies "quasi-stationary," which means the low-pressure area is moving less than 5 kt.
7. Moderate and severe.
8. A short-term weather advisory intended primarily for aircraft in flight.
9. 1 500; WS
10. On the 11<sup>th</sup> from 1200Z to 1600Z and on the 12<sup>th</sup> from 0300Z to 1800Z.
11. 700 ft.
12. Stratocumulus.
13. 5 300 ft.
14. The rain ended.
15. be retained but will not be active or monitored by the flight information centre (FIC)
16. 2; 1
17. 1-866-WXBRIEF or 1-866-GOMÉTÉO
18. an air traffic control (ATC) unit, a flight service station (FSS), a community aerodrome radio station (CARS), or a rescue co-ordination centre (RCC)
19. the termination of all alerting services with respect to search and rescue notification.
20. do not
21. One hour past the estimated time of arrival (ETA); At the search and rescue (SAR) time specified, or 24 hr after the duration of the flight or the ETA specified.
22. 7700
23. No. You are required to remain 10 NM clear of the aerodrome from 1900Z until 2030Z.
24. On the NAV CANADA Web site.
25. Calculated to the first day of the month following your medical examination with a validity period determined by your licence/permit and age.
26. 5, 6
27. Antihistamines, tranquilizers and appetite reducing drugs such as amphetamines. They can reduce mental alertness.
28. Yes.
29. is visually aligned
30. CARs prohibit takeoff when frost, ice or snow is adhering to any critical surface of the aircraft.
31. A left turn.
32. Because the helicopter's lower operating speeds produce more concentrated wakes than fixed-wing aircraft.
33. Stick shake, erratic stick forces and rotor roughness.
34. a high sink rate
35. an altimeter; a vertical speed indicator; a fuel quantity gauge; an envelope temperature indicator
36. Deflation
37. slack; tension
38. In the same direction as the glider already in the thermal.

**Answers to the 2009 Self-Paced Study Program**

1. J. C. T. Martin, *Transport Canada Aircraft Certification Flight Test, Discussion Paper No. 41, The Adverse Effects of Ice on Aeroplane Operation, Issue 2, 4 July 2006. (Paper which was the basis for Mr. Martin's article "The Adverse Aerodynamic Effects of Inflight Icing on Airplane Operation", published in ASL 1/2007, and available at [www.tc.gc.ca/CivilAviation/publications/tp185/1-07/Feature.htm](http://www.tc.gc.ca/CivilAviation/publications/tp185/1-07/Feature.htm))*
  2. J. C. T. Martin, *Transport Canada Aircraft Certification Flight Test, Discussion Paper No. 50, Takeoff in Conditions of Freezing Drizzle or Freezing Rain (Fixed-Wing Aircraft), Issue 2, 29 September 2006.* ▽
- References:**

In Part II, we will address hazards associated with in-flight operation in SLD icing conditions, and also meteorology measurement criteria forecasting/reporting freezing drizzle and/or light freezing rain vs. FAR 25, Appendix C.

and based on the best information available at this time, also illegal.

Takeoff into known freezing drizzle and/or light freezing rain is outside of the flight envelope for which any airplane currently operating today is certificated. Not only is it unwise to operate in such conditions, it is also unsafe,

**Conclusion**

Other systems that require protection include the pitot-static system, and temperature and angle of attack sensing systems. Although probably adequate, the capability of the IPS to protect in freezing drizzle and/or light freezing rain is unknown.

**Other systems ice protection**

IPS may not be as effective in freezing drizzle and/or light freezing rain. However, there is evidence of engine damage and operating anomalies caused by ground operation in freezing drizzle and/or light freezing rain. Ice can accumulate in inlets and on components at low thrust levels (e.g. ground idle) without any noticeable adverse effect. This ice can subsequently be shed at high thrust levels (e.g. take-off thrust) causing engine operating anomalies and/or damage.