# 2020-2021 TC Flight Crew Recency Requirements Self-Paced Study Program

*Refer to paragraph 421.05(2)(d) of the* Canadian Aviation Regulations *(CARs), which is designed for pilots to update their knowledge on subjects such as human factors, meteorology, flight planning and navigation, and aviation regulations.*

*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 51. In addition:*

- *aeroplane pilots are to answer questions 52 to 57;*
- *ultra-light aeroplane pilots are to answer questions 58 to 67;*
- *helicopter pilots are to answer questions 68 to 69;*
- *balloon pilots are to answer questions 70 to 71*
- *glider pilots are to answer questions 72 to 78; and*
- *gyroplane pilots are to answer questions 79 to 80.*

*References are listed after each question. Amendments to these publications may result in changes to answers and/or references. Many answers may be found in the following sources:*

- *Transport Canada Aeronautical Information Manual* (TC AIM)
- NAV CANADA *AIP Canada* (ICAO)
- NAV CANADA Collaborative Flight Planning Services (CFPS)
- *Canadian Aviation Regulations* (CARs)
- NAV CANADA *VFR Phraseology*
- *The Canadian NOTAM Operating Procedures*
- NAV CANADA Flight Planning
- Transportation Safety Board investigations and reports
- Weather manuals and documentation
- NAV CANADA Blog - Safety

# 2020-2021 TC Flight Crew Recency Requirements
# Self-Paced Study Program

## GEN–General

1. How do you subscribe to receive e-mail notifications for the *Aviation Safety Letter* Electronic Bulletin (ASL e-Bulletin) (TP185)? _____

**Reference:** TC AIM GEN 2.2.4 *Safety Promotion*

## AGA–Aerodromes

2. At flight service stations and remote advisory services equipped with direct wind reading instruments located at the aerodrome, what does it mean when a Flight Service Specialist says "Runway 03" ?
_____

**Reference:** NAV CANADA Blog - Safety and TC AIM RAC 1.1.2.2

3. If you see this taxiway sign, what does it mean and where is the threshold of Runway 16?_____


**Reference:** TC AGA 5.8.3 *Mandatory Instruction Signs*

4. What is the wind speed when the dry standard wind direction indicator is 5º below horizontal?
_____

**Reference:** TC AIM AGA 5.9 *Wind Direction Indicators*

5. On approach to land, the PAPI (P1,P2, P3) indicates you are _____.

**Reference:** TC AIM AGA 7.6.3 *Precision Approach Path Indicator* (PAPI) and Abbreviated PAPI (APAPI)

6. How long does aircraft radio control of aerodrome lighting (ARCAL) remain illuminated once activated? How do you reset the timing cycle? _____

**Reference:** TC AGA 7.14 *Aircraft Radio Control of Aerodrome Lighting* (ARCAL)

7. On landing, when would you expect Aircraft Rescue and Fire Fighting (ARFF) vehicles to be in position adjacent to the landing runway? How long will they remain? _____

**Reference:** TC AIM AGA 8.4 *Aircraft Rescue and Fire Fighting (ARFF) Standby Request*

# 2020-2021 TC Flight Crew Recency Requirements Self-Paced Study Program

## COM–Communications

8. Aeronautical radio communications are restricted to communications relating to: a) the safety and navigation of an aircraft; b) the general operation of the aircraft; and c) the exchange of messages on behalf of the pilot.

   Pilots should:

   a) send radio messages _____and _____using _____ _____ whenever practical;

   b) _____ the content of the message before _____; and

   c) _____ _____ before transmitting to avoid interference with other transmissions.

   **Reference:** TC AIM COM 1.10 *Standard Radio Telephony*

9. In communications checks, the readability scale 2 and strength scale 1 mean _____ and _____.

   **Reference:** TC AIM-COM 1.11 *Communications Checks*

10. In the *Canada Flight Supplement* (CFS) the abbreviations RCO, FISE, and RAAS stand for:

    _____ _____ _____,_____ _____ _____ _____, ,_____ _____ _____ _____, and they permit communications between _____ and either a _____ or a _____for the provision of FISE or RAAS.

    **Reference:** TC AIM-COM 1.9.2 *Ground Stations*

11. Can you use visual flight rules (VFR) global navigation satellite system (GNSS) receivers for primary navigation to replace current charts?

    _____

    _____.

    **Reference:** TC AIM-COM 5.11 *Proper Use of Global Navigation Satellite System* (GNSS)

12. Why it is not reasonable to rely on your moving map hand-held device for navigation into marginal weather? _____

    **Reference:** TC AIM-COM 5.11 *Proper Use of Global Navigation Satellite System* (GNSS)

13. For definitions of terminology and phraseology used in aviation in Canada, refer to the_____, which is available on TC's Web site. Another valuable resource available is NAV CANADA's VFR Phraseology Guide, which is available on NAV CANADA's Web site.

    **Reference:** TC AIM COM 1.3 *Language*

14. What is a "MEDEVAC" flight?

_____

_____

**Reference:** TC AIM COM 1.9.1.4 *Medical Evacuation Flight* (MEDEVAC)

15. During visual flight rules (VFR) flight in low-level airspace, the pilot should adjust the transponder to reply on the following unless otherwise assigned by an air traffic services (ATS) unit:

a) _____

b) _____

Note: Pilots of aircraft equipped with a transponder capable of Mode C automatic altitude reporting should adjust their transponder to reply on Mode C when operating in Canadian airspace unless otherwise assigned by an ATS unit.

**Reference:** TC AIM COM 8.4 *Visual Flight Rules (VFR) Operations*

## MET–Meteorology

16. Advisories will be disseminated through the aeronautical fixed service (AFS) if civil aviation is affected by space weather phenomena, notably with respect to GNSS positioning and navigation. Increases in the total electron content (TEC) of the ionosphere lead to an increase in the transit time of the GNSS signal, producing _____ in GNSS receivers.

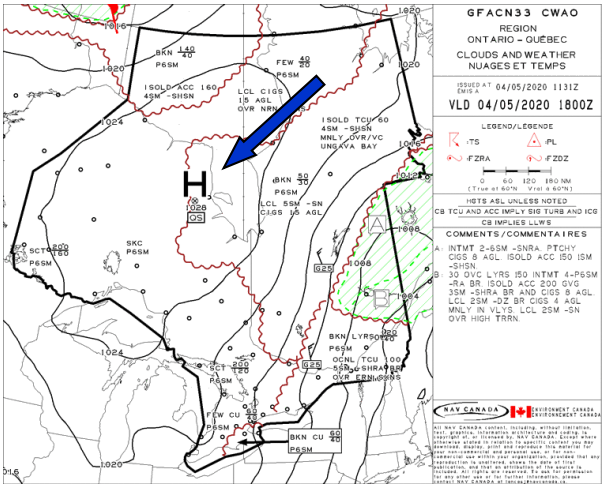
**Reference:** TC AIM MET 14.1 *Introduction* and 14.2 *Nature of the Disturbances*

17. When wind sensors are not functioning at a human aerodrome routine meteorological report (METAR) site, the wind speed and direction will be estimated, and which remark will be added to the report?

_____.

**Reference:** TC AIM MET 8.3 *Sample Message*, (f) *Wind* (iii)

18. Please provide the meaning of the abbreviation "SXNS" found in the following graphic area forecast (GFA) weather information below.




_____

_____

**Reference:** *Manual of Word Abbreviations* (MANAB)

19. Where can you find the suggested format for pilot weather reports (PIREPs)?
_____

**Reference:** TC AIM MET 1.1.6.1 *Pilot Weather Reports* (PIREPs)

20. Which regulation from the CARs requires the PIC to be familiar with the available weather information that is appropriate to the intended flight? _____

**Reference:** TC AIM MET 1.1.9 *Pilot Responsibility*

21. **METAR CYOW 211300Z 15006KT 6SM -SN BKN014 OVC020 01/M01 A2920 RMK SC6SC2 SLP894=**

**SPECI CYOW 211246Z 18009G15KT 4SM R32/5000VP6000FT/U R07/5500VP6000FT/U -SN BKN014 OVC025 01/M01 A2921 RMK SC6SC2 SLP898**

How much has the ceiling changed from the SPECI to the METAR in the sample message above? _____ feet (ft)

**Reference:** TC AIM MET 8.3 *Sample Message*, (k) *Sky conditions*

22. Are the winds reported as true or magnetic in a METAR? _____

**Reference:** TC AIM MET 8.1 *The Aerodrome Routine Meteorological Report (METAR) Code*

23. **METAR CYOW 211100Z 09013KT 15SM BKN087 00/M05 A2924 RMK AC7 PRESFR SLP908=**

In the above METAR, the abbreviation "PRESFR" means? _____

**Reference:** *MANAB*

24. **SPECI CYOW 211220Z 10007KT 8SM -SN OVC029 02/M05 A2923 RMK SC8 SLP902=**

Please decode the above SPECI.

_____
_____

**Reference:** TC AIM MET 8.3 *Sample Message*

25. **TAF CYOW 211138Z 2112/2212 09012G22KT 6SM -SHSN OVC030 TEMPO 2112/2114 11/2SM -SHSN OVC020 PROB30 2112/2114 6SM –SNPL**

Please decode the above aerodrome forecast (TAF). _____

**Reference:** TC AIM MET 7.4 *Sample Message*

## RAC–Rules of the Air and Air Traffic Services

26. Pilots intending to fly in Class F advisory airspace are encouraged to monitor an appropriate frequency, to broadcast their intentions when _____ and _____ the area, and to communicate, as _____, with other users to ensure flight safety in the airspace. In a Class F advisory uncontrolled airspace area, _____MHz would be an appropriate frequency.

**Reference**: TC RAC 2.8.6 *Class F Airspace*

27. What are the three methods to compute passenger weights? 1._____ 2._____ 3._____

**Reference:** RAC 3.4.7 *Computation of Passenger and Baggage Weights*

28. When should you use actual passenger weights? What should the weight figure include?

_____

**Reference:** RAC 3.4.7 *Computation of Passenger and Baggage Weights*

29. What is the requirement to file a flight plan between Canada and the U.S.?

_____

**Reference:** RAC 3.5.3 *Flight Plan Requirements—Flights Between Canada and a Foreign State* and RAC 3.14.3 *International Civil Aviation Organization* (ICAO)

30. Unless otherwise advised by ATC, pilots do (require/not require) permission to change from tower frequency once clear of the control zone and (should /should not) request release from this frequency or report clear of the zone when there is considerable frequency congestion.

_____

**Reference:** TC RAC 4.2.9 *Release from Tower Frequency*

31. Where no mandatory frequency (MF) procedures are in effect, aircraft (should/should not) approach the traffic circuit from the (upwind, downwind, base, final) side. Alternatively, once the pilot has ascertained without any doubt that there will be no _____ with other traffic entering the circuit or established within it, the pilot may join the circuit on the _____ leg.

**Reference:** TC RAC 4.5.2 *Traffic Circuit Procedures—Uncontrolled Aerodromes; Flight Training Manual (FTM),* Joining the circuit, page 102

32. **METAR CYQT 281700Z 24013G22KT 20SM BKN013 OVC025 14/12 A2987 RMK SC7SC1 SLP120=**

Using the weather information provided above, determine the altitude above ground at which an aircraft should fly when joining the circuit in a control zone.

_____

**Reference:** CAR 602.114(c)

33. What procedures can be used to enter the circuit at an uncontrolled aerodrome not within an MF area?

_____

_____

**Reference:** TC AIM RAC 4.5.2 *Traffic Circuit Procedures—Uncontrolled Aerodromes,* (a) *Joining the Circuit*; and VFR Circuit Procedures at Uncontrolled Aerodromes

34. At what altitude do you enter the circuit? _____

**Reference:** CAR 602.114(c), TC AIM RAC 4.5.2(a), and VFR Circuit Procedures at Uncontrolled Aerodromes

35. When overflying an aerodrome at which you are not intending to land, you must be no lower than what altitude? _____.

**Reference:** CAR 602.96(4)

36. If it is necessary to cross over the aerodrome prior to joining the circuit, or after departure, it is recommended that the crossover be made at what altitude? _____

**Reference:** *VFR Circuit Procedures at Uncontrolled Aerodromes (TP11541)*

37. No person shall operate an aircraft over a forest fire area, or over any area that is located within _____ nautical miles (NM) of a forest fire area, at an altitude of less than _____ ft AGL.

**Reference:** CAR 601.15(a)

38. No person shall act as a crew member of an aircraft within _____hours (hr) after consuming an alcoholic beverage.

**Reference:** TC AIM RAC Annex and CAR 602.03

39. How long must a pilot wait after cannabis use prior to exercising duties as a crew member? _____

**Reference:** CAR 602.02 and 602.03 and guidance to the policy on cannabis legalization

## SAR–Search & Rescue

40. What are the primary sources of information used by search and rescue (SAR) to ensure detection and rescue from an emergency locator transmitters (ELTs)? _____

**Reference:** TC AIM SAR 2.1 *General*

41. As soon as information is received that an aircraft is overdue, operators or owners should immediately: _____ _____.

**Reference:** TC AIM SAR 2.2 *Request for Search and Rescue (SAR) Assistance*

42. If an ELT signal is heard in-flight, notify the nearest ATS unit of:

a)_____

b)_____

c)_____

d)_____

**Reference:** TC AIM SAR 3.4 *Emergency Locator Transmitter (ELT) Operation Instructions (Normal Use)*

43. If an ELT becomes unserviceable, the aircraft may be operated according to the operator's approved minimum equipment list (MEL). Where no MEL has been approved, the aircraft may be operated for up to 30 days, provided:

    a)_____

    b)_____

    c)_____

**Reference:** TC AIM SAR 3.9 *Schedule of Requirements*

## MAP–Aeronautical Charts & Publications

44. Where can NOTAMs be found? _____

**Reference:** TC AIM MAP 3.5 *NOTAM Distribution*

45.

NOTAM
CYND

```
(K1115/20 NOTAMN
A) CYND B) 2004211244 C) 2004281200
E) PAPI 27 U/S

FR:
PAPI 27 U/S)
```

In the above NOTAM, when does the PAPI lighting for runway 27 become unserviceable? When does it return to service? _____

**Reference:** TC AIM MAP 3.0 *NOTAM*

46.

NOTAM
CYND

```
(K0871/20 NOTAMN
A) CYND B) 2003241000 C) 2005011200EST
E) HR OF SVC 1200-2200, OTHER TIMES PNR
819-743-8883 WITH FEES

FR:
HR DE SVC 1200-2200, AUTRE TEMPS PNR
819-743-8883 AVEC FRAIS)
```

In the above NOTAM, what is meant by "EST" in line "C)"? _____

**Reference**: TC AIM MAP 3.0 *NOTAM*

## LRA–Licensing, Registration & Airworthiness

47. A 39 year-old and a 40 year-old, who each hold a private pilot licence, both renewed their medical certificates on July 29, 2020. How long are their medical certificates valid for? By what date must they each renew? _____

**Reference:** TC AIM LRA 1.9.1 *Medical Validity Periods* (Table 1.8), CAR 404.04

48. The Minister shall extend the validity period of a medical certificate for a period of not more than 60 days beginning on the day on which the certificate would otherwise expire, if:

    a) _____

    b) _____

**Reference:** CAR 404.04(10)

## Canada Flight Supplement (CFS)

49. Where can you find the crosswind chart? _____

**Reference**: CFS General

50. Where do you find the direction of the circuit pattern? _____

**Reference:** CFS

51. What is the circuit direction at Grande Prairie (CYQU), Abbottsford (CYXX), and Chilliwack (CYCW)? _____

**Reference:** CFS PRO

## Aeroplane-specific questions

52. A VFR approach is considered stabilized if, on the final approach flight path:

- Briefings and _____ are complete;
- The aircraft is in the proper _____ _____ appropriate for the wind and runway conditions;
- The appropriate power settings are applied;
- Maximum sink rate of 1 000 ft per min;
- Speed within _____ of the reference speed;
- Only small _____ and _____ changes required;
- Stable by _____ AGL.

**Reference:** *TP13723—Flight Test Guide—Private Pilot Licence—Aeroplane*

53. When on a VFR stable approach, what is the lowest minimum altitude recommended for you to conduct a go-around procedure? _____

**Reference:** *TP13723—Flight Test Guide—Private Pilot Licence—Aeroplane*

54. When should you do your after-landing checklist? _____

**Reference:** FTM, Flight Instructor Guide—Aeroplane (TP 975) Exercise 18, aircraft flight manual (AFM) / pilot operating handbook (POH), checklist

55. On a VFR cross-country you become disoriented while in low visibility. You note a rapid increase in airspeed. What is the correct procedure to follow to ensure a safe recovery?

_____

_____

_____

**Reference:** FTM Exercise 24—Instrument Flying—Unusual Attitudes and Recoveries

56. With reference to the previous question, why is it crucial to level the wings prior to applying back elevator pressure? _____

**Reference:** FTM Exercise 14—Spirals

57. Complete the following flight planning, human factors and navigation exercise based on the aircraft you fly for any flight or your next flight by responding to these questions:

Plan and use appropriate and current aeronautical charts and publications including the POH/AFM and the CFS/CWAS to extract, record, and calculate pertinent information. Get a weather package from NAV CANADA Collaborative Flight Planning Services for your flight including GFAs clouds & weather, icing, TAFs, METARs, upper winds, NOTAMs, PIREPs, and significant meteorological information (SIGMETs). Individual answers will be unique to you, your aircraft, and your flight. Know your limits!

a) What are your routing, minimum visibility, and weather requirements for the flight?
_____

b) What are your personal weather limits? _____

c) What are the predominant airspace and terrain features?_____

d) When is official night on the day of your flight? _____

e) Are services available at your destination? _____

f) What contingencies should you consider for your route, destination, runways, and weather?
_____

g) What are your estimated headings, appropriate power settings, ground speed, fuel requirements, and time en route for your trip? (A navigation log or electronic flight bag [EFB], as appropriate) _____

h) Complete an ICAO VFR flight plan. _____

i) Complete weight and balance computations. _____

j) Answer the following:
   i. Normal approach speed in landing configuration? _____
   ii. What configuration/speed adjustment would you make in gusty conditions? _____
   iii. What is the aircraft's crosswind limitation? _____
   iv. What is your personal crosswind limitation? _____

k) Using the POH (aircraft flight manual), calculate the:
   i. take-off distance required to clear a 50-ft obstacle on departure _____
   ii. landing distance required to clear a 50-ft obstacle on arrival _____
   iii. Describe your aircraft configuration while conducting both of the above.
   _____

l) Describe the engine failure procedure for your aircraft?
   1. _____
   2. _____
   3. _____

m) Describe the engine fire procedure for your aircraft?
   1. _____
   2. _____
   3. _____

## Ultra-light-specific questions

58. What shall every applicant for, and every holder of, a pilot permit—ultra-light maintain? _____

**Reference:** CAR 401.08 (1)

59. The holder of a student pilot permit—ultra-light may act as a PIC of an ultra-light if the flight is conducted under the _____ and _____of a person qualified to provide training toward the permit.

**Reference:** CAR 401.19(1)(d)

60. If the ultra-light aeroplane has no restrictions against carrying another person, what does the holder of a pilot permit—ultra-light have to be endorsed with to carry one other person on board an ultra-light aeroplane? _____

**Reference:** CAR 401.56

61. What are the three situations in which a second person may be carried on board ultra-light aeroplane?

(i) _____,

(ii) _____, or

(iii) _____.

**Reference:** CAR 602.29(4)(b)

62. The holder of a flight instructor rating—ultra-light aeroplane may operate an ultra-light aeroplane with one other person on board if the holder has not less than _____ hr of ultra-light time as a pilot of an ultralight aeroplane with the same control configuration and the flight is conducted for the purpose of providing _____ instruction.

**Reference:** CAR 401.88 (a)

63. What is the validity period of a medical certificate for a pilot permit—ultra-light if the pilot is: a) under 40 years of age? b) 40 years of age or older? _____

**Reference**: CAR 404.04(6)

64. What category of medical certificate is required for the student pilot permit or the pilot permit—ultra-light aeroplane? _____

**Reference:** CAR 404.10(4)

65. What do you need to carry for each person on board if you are conducting a takeoff or landing on water in an ultra-light aeroplane or operating an ultra-light aeroplane over water beyond a point where the ultra-light could reach shore in the event of an engine failure? _____

**Reference:** CAR 602.62 (1)

66. No person shall operate an ultra-light aircraft in VFR flight within uncontrolled airspace unless the aircraft is operated with _____.

**Reference:** CAR 602.115(a)

67. Every owner of an ultra-light aircraft who transfers title of an aircraft airframe, engine, propeller, or appliance to another person shall, at the time of transfer, also deliver to that person_____ that relate to that aeronautical product.

**Reference:** CAR 605.97

## Helicopter-specific questions

68. TSB investigation report A19O0026 states the following concerning night visual flight rules: "Night flying over featureless terrain, such as bodies of water or remote wooded terrain, is particularly difficult. These conditions are commonly described in the aviation community as a _____ _____, which refers to not having visual reference to the ground due to the _____ ___ _____. Under these conditions, it can be difficult or impossible for a pilot to discern a horizon visually, potentially leading to spatial disorientation and _____ ____ _____."

**Reference:** Air Transportation Safety Investigation A19O0026 (night visual flight rules)

69. TSB investigation report A18Q0016 states the following: "Humans have the ability to discern the orientation of their body (lying down, standing, leaning, etc.) when they are in physical contact with the ground. Humans are not accustomed to the _____ environment of flight, and _____ may arise between the senses and illusions that make it difficult or impossible to maintain spatial orientation. Spatial disorientation is defined as the _____ of a pilot to correctly interpret aircraft attitude, altitude, or airspeed in relation to the Earth or other points of reference."

**Reference:** Air Transportation Safety Investigation A18Q0016, 1.15.1.3 *Spatial Disorientation*

## Balloon-specific questions

70. What are the four qualifications and currency requirements for a balloon pilot to carry fare-paying passengers (tethered or not)?

    (a) _____;

    (b) _____;

    (c) _____; and

    (d) _____

**Reference:** CAR standard 623.21

71. When may a person conduct a landing in a balloon within a built-up area of a city or a town at a place that is not located in an airport, heliport, or military aerodrome? _____

**Reference**: CAR 602.13(4)(a)

## Glider-specific questions

72. Where would you find information on the sport of soaring? _____

**Reference:** The Soaring Association of Canada (SAC) website

73. Where would you find safety information on soaring? _____

**Reference:** SAC Safety and Training Web site

74. In order to carry a passenger in a glider, CAR 401.24 requires the PIC have his or her personal log endorsed by a _____ who must specify the method of _____and have completed at least _____ previous solo flights.

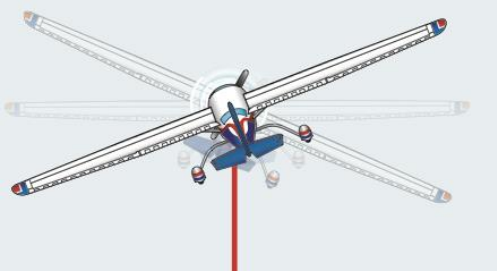
**Reference:** CAR 401.24

75. On takeoff, you are taking up slack and you notice a knot in the rope. What should you do?

    _____

**Reference:** Soar and Learn to Fly Gliders

76. When on tow you see the tow aircraft waggles the wings steadily in a rolling motion. What must you do? _____



**Reference:** Soar and Learn to Fly Gliders—Emergency Aerotow procedures

77. What does the acronym SOAR for pilot decision making mean? _____

**Reference:** Soar and Learn to Fly Gliders—Pilot decision making

78. At what speed should you fly the approach to a landing? _____

**Reference:** Soar and Learn to Fly Gliders—Final Approach and Wind Gradients

## Gyroplane-specific questions

79. If Pilot Induced Oscillation (PIO) in flight is encountered, _____ power and place the cyclic in the position for a _____.

**Reference:** Rotorcraft Flying Handbook—For Gyroplane Use Only (FAA-H-8083-21), page 20-12 and 20-13

80. What is the recovery manoeuvre if a high rate of descent occurs due to not having kept the flight speed above the minimum? _____

**Reference:** Rotorcraft Flying Handbook—For Gyroplane Use Only (FAA-H-8083-21), page 21-2

**Name:** _____ **Licence #:** _____ **Date:** _____

# Answers to 2020-2021 flight crew recency requirements self-paced study program

1. Readers can subscribe to the *Aviation Safety Letter* (ASL) (TP185) e-Bulletin notification service to receive e-mails that announce the release of each new issue by going to the Transport Canada Civil Aviation e-Bulletin page and following the step-by-step instructions.
2. Runway 03 is the determined runway for use. The new Flight Service Specialist runway determination allows Flight Service Specialists to determine the runway with clearer and more concise phraseology. This change will take effect only at flight service stations and remote advisory services equipped with direct wind reading instruments located at the aerodrome. See the following chart:

| ✗ OLD PHRASEOLOGY | ✓ NEW PHRASEOLOGY |
|---|---|
| "PREFERRED RUNWAY XX" | "RUNWAY XX" |
| "ACTIVE RUNWAY XX" | |
| "ROGER RUNWAY XX, ACTIVE RUNWAY XX" | "RUNWAY XX, [TRAFFIC]" |
| (PILOT ADVISES USE OF A RUNWAY, WITH ANOTHER RUNWAY MORE SUITABLE FOR OPERATIONS)<br>"ROGER RUNWAY" | "ROGER RUNWAY XX (ADVISORY), RUNWAY XX IS AVAILABLE" |

3. It identifies runway designations, holding positions, NO-ENTRY areas, and obstacle-free zones, where pilots must receive further ATC clearance to proceed. At uncontrolled aerodromes, pilots are required to hold at points marked by these signs until they have ascertained that there is no air traffic conflict. The threshold of Runway 16 is to the right.
4. 10 knots (kt).
5. slightly low
6. Each activation will start a timer to illuminate the lights for a period of approximately 15 minutes (min). The timing cycle may be restarted at any time by repeating the specified keying sequence.
7. When an emergency is declared by a pilot, the airport ARFF unit will take up emergency positions adjacent to the landing runway and stand by to provide assistance. The ARFF unit will remain at the increased state of alert until informed that the pilot-in-command (PIC) has terminated the emergency. After the landing, ARFF will intervene as necessary and, unless the PIC authorizes their release, escort the aircraft to the apron and remain in position until all engines are shut down.
8. a) clearly, concisely, standard phraseology

   b) plan, transmitting

   c) listen out
9. readable now and then; bad
10. remote communication outlet; flight information service en route; remote aerodrome advisory service; aircraft; flight service station (FSS); flight information centre (FIC)

11. No. Use VFR GNSS receivers only to supplement map reading in visual conditions, not as a replacement for current charts.
12. Resist the urge to fly into marginal weather when navigating VFR. The risk of becoming lost is small when using GNSS, but the risk of controlled flight into terrain (CFIT) increases in low visibility. VFR into IMC is dangerous and illegal.
13. *Glossary for Pilots and Air Traffic Services Personnel* (AC 100-001)
14. A MEDEVAC is a flight responding to a medical emergency for the transport of patients, organ donors, organs, or other urgently needed life-saving medical material.
15. a) Mode A, Code 1200 for operation at or below 12 500 ft above sea level (ASL); or

    b) Mode A, Code 1400 for operation above 12 500 ft ASL.
16. position errors
17. WND ESTD.
18. sections
19. The back cover of the CFS and the *Canadian Water Aerodrome Supplement* (CWAS)
20. CAR 602.72
21. 0
22. Wind direction is always given in degrees (true)
23. pressure falling rapidly
24. Aerodrome Special Meteorological Report / Ottawa airport on the 21st of the month at 12:20 UTC / Winds from 100º true at 7 kt / Visibility 8 statute miles (SM) / Light snow / Sky condition—overcast at 2 900 ft / Temperature plus 2 and dew point minus 5 / Altimeter setting 29.23 / Remarks: stratocumulus at 8 oktas / Mean sea level pressure 902 Hectopascals.
25. Aerodrome Forecast for Ottawa Airport, issued on the 21st of the month at 11:38 UTC / validity period 21st of the month at 12:00 UTC to the 22nd of the month at 12:00 UTC / Surface wind from 090º true at 12 kt, gusting to 22 kt / Visibility greater than 6 SM with light snow showers / Sky condition—overcast at 3 000 ft / Temporarily between the 21st of the month at 12:00 UTC and the 21st of the month at 14:00 UTC / Visibility one and a half miles in light snow showers / Sky condition—overcast at 2 000 ft and 30% probability between the 21st of the month at 12:00 UTC and the 21st of the month at 14:00 UTC of visibility 6 SM in light snow and ice pellets.
26. entering; leaving; necessary; 126.7
27. actual weights, standard weights, and segmented weights
28. For aircraft with a passenger seating capacity of less than five. The weight figure includes: the total of the person's weight, personal clothing, and carry-on baggage. (The use of actual weights provides the greatest accuracy in calculating the weight and balance of the aircraft; therefore, the use of standard or segmented passenger weights is not recommended.)
29. Flight plans for international flights originating in, or entering, Canada shall be filed in the ICAO format. "Advise customs" (ADCUS) notification is **no longer accepted** on flight plans for transborder flights departing from Canada to the U.S. or from the U.S. to

Canada. Pilots are required to file a flight plan to **an acceptable customs destination** in the U.S. and are also required to **contact U.S. Customs and Border Protection (CBP)** to make customs arrangements prior to their flight. Failure to do so may subject the pilot to a penalty.

30. not require; should not

31. should; upwind; conflict; downwind

32. 800 ft above ground level (AGL)

33. Aircraft should approach the traffic circuit from the upwind side. Alternatively, once the pilot has ascertained without any doubt that there will be no conflict with other traffic entering the circuit or established within it, the pilot may join the circuit on the downwind leg.

34. 1 000 AGL unless otherwise specified in the CFS and as weather permits.

35. No less than 2 000 ft over the aerodrome.

36. 500 ft above circuit altitude

37. 5; 3 000

38. 12

39. The CARs require fitness for duty. No person shall act as a crew member of an aircraft while using or under the influence of any drug that impairs the person's faculties to the extent that aviation safety is affected. The 28-day policy is based on existing CARs which require pilots, flight engineers, and air traffic controllers to be fit for duty and free of the effects of any drugs or medications.

40. Flight plan and Flight itinerary

41. Alert the nearest joint rescue coordination centre (JRCC) or any air traffic service (ATS) unit, giving all known details.

42. a) position, altitude, and time when signal was first heard;

    b) ELT signal strength;

    c) position, altitude, and time when contact was lost; and

    d) whether the ELT signal ceased suddenly or faded.

43. a) the ELT is removed at the first aerodrome at which repairs or removal can be accomplished;

    b) the ELT is promptly sent to a maintenance facility; and

    c) a placard is displayed in the cockpit stating that the ELT has been removed and including the date of removal (see CAR 605.39).

44. NAV CANADA Web site

45. Unserviceable at 1244 UTC on April 21, 2020

    Serviceable at 1200 UTC on April 28, 2020

46. EST after the date and time should be used when the end time is not known with certainty. EST means estimated or approximate. When the end time is reached, if there is no human intervention, the NOTAM will remain intact. Therefore, the NOTAM must be revised (NOTAMR) or cancelled (NOTAMC) before the time is reached.

47. 39 year-old: 60 months, July 1, 2025

    40 year-old: 12 months, July 1, 2022

48. (a) the application for extension of the certificate is made while the **certificate is still valid;** and

    (b) the applicant demonstrates that there has been no reasonable opportunity to undergo a medical examination within the 90 days before the day on which the certificate would otherwise expire.

49. CFS CROSS-WIND LANDING LIMITATIONS–LIGHT AIRCRAFT–A81

50. In the PRO section of each aerodrome/airport

51. CYQU: left circuit; CYXX: left circuit, except for right circuit on RWY 07 & 01; CYCW: left circuit on 25 and right circuit on RWY 07

52. checklists; landing configuration; +10/-5 kt; heading; pitch; 200 ft

53. If stability is not established by 200 ft AGL, an overshoot will be executed

54. after well clear of the runway

55. 1. Reduce power to prevent excessive airspeed and loss of altitude.

    2. Level the wings by applying co-ordinated aileron and rudder pressures to centre the turn needle and ball.

    3. Apply smooth back elevator pressure to return to level flight.

    4. When the airspeed stops increasing, you are at or near level flight; stop the back elevator pressure.

56. An excessive load will be placed on the aircraft, which could lead to structural damage or a high-speed stall.

57. N/A

58. a personal log

59. direction; supervision

60. A passenger-carrying rating

61. (i) the flight is conducted for the purpose of providing dual flight instruction;

    (ii) the pilot is a holder of a pilot permit—ultra-light aeroplane endorsed with a passenger-carrying rating and the aeroplane has no restrictions against carrying another person; or

    (iii) the other person is a holder of a pilot licence or permit, other than a student pilot permit, that allows them to act as pilot-in-command of an ultra-light aeroplane.

62. 10; dual

63. a) 60 months; b) 60 months

64. 1, 3, or 4

65. life preserver, individual flotation device, or personal flotation device

66. visual reference to the surface

67. all of the technical records

68. black hole; absence of lighting; loss of control

69. 3-dimensional; conflicts; inability

70. a) be at least eighteen years of age;

    b) hold a balloon pilot licence issued by the Minister;

    c) hold a medical certificate, category 1 or 3; and

    d) have accumulated a minimum of 50 hr of flight time in untethered balloons or be the holder of a Canadian balloon licence with a valid flight instructor rating—balloon category.

71. The landing is necessary to avoid endangering the safety of the persons on board.

72. The Soaring Association of Canada (SAC)

73. SAC Safety and Training Web site

74. glider flight instructor; launch; three

75. Pull the release and stop on remaining runway.

76. The glider pilot should release immediately.

77. Situation, Options, Act, Repeat.

78. The speed specified in the flight manual. If it is not specified, the speed should be 1.3Vs + wind velocity.

79. reduce, normal climb

80. Slightly lower the nose of the gyroplane, to trade altitude for airspeed.