

**CAMPBELL HELICOPTERS OPERATIONS (INDOCTRINATION / RECURRENT) EXAM**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**References:**

1. Company Operations Manual
2. Canadian Aviation Regulations
3. Aeronautical Information Manual
4. Canada Flight Supplement
5. Canadian VNC
6. Land and Sea Emergencies Manual
7. NavCanada Weather Manual [The Weather of British Columbia]

**Reviewed & Corrected to 100%**

By: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**This exam meets the requirements for company indoctrination training in accordance with the COM. Section 6 (6.1.1 and 6.6):**

1. Canadian Aviation Regulations and applicable Standards
2. Air Operator Certificate and Operations Specifications
3. Company organization, reporting relationships and communication procedures, including duties and responsibilities of flight crew members and the relationship of those duties to other crew members
4. Flight planning and operating procedures
5. Fuelling procedures including procedures for fuelling with passengers on board and fuel contamination precautions
6. Critical-surface contamination and safety awareness program
7. Passenger safety briefings and safe movement of passengers to/from the helicopter
8. Use and status of the Company Operations Manual including maintenance release procedures and accident/incident reporting procedures
9. Navigation procedures and other specialized operations applicable to the operator
10. Accident/incident reporting
11. Passenger on board medical emergency
12. Handling of disabled passengers
13. Carriage of external loads
14. Operational control system
15. Weight and balance system procedures
16. Pre-flight crew member briefing

**Meteorology training in accordance with the COM. Section 6****(6.6):** Aircraft icing and other meteorological training appropriate to the area of operations

**COMPANY OPERATIONS MANUAL (WITH REFERENCE TO CARS / CASS)**

1. What is the latest Amendment of the company Ops Manual?
  - a) #31
  - b) #33
  - c) #35
  - d) #30
  
2. The Company Operations Manual (COM) is produced by the Operations Manager and approved by Transport Canada. Must there be a copy in each helicopter?
  - a) Yes
  - b) No
  - c) Yes, it must be kept in reach of the PIC at all times
  - d) No, the master copy back in CYXX explains that a copy does not have to be on board.
  
3. The company PICs are responsible to \_\_\_\_\_ and will ensure a safe conduct of a flight;
  - a) The Chief Pilot
  - b) Ops Manager
  - c) PRM
  - d) Both A and B
  
4. Campbell Helicopters' AMO number is \_\_\_\_\_
  - a) 148-92
  - b) 153-56
  - c) 149-82
  - d) 148-35
  
5. Campbell Helicopters' Operating Certificate number is \_\_\_\_\_
  - a) 6694
  - b) 6345
  - c) 6649
  - d) 6637
  
6. No person shall operate an aircraft within \_\_\_\_\_ hrs of consuming alcohol, or while under the influence of alcohol or while using any \_\_\_\_\_ that impairs a person's faculties to the extent that safety of the aircraft of persons on board the aircraft is endangered in any way
  - a) 6 / device
  - b) 8 / drug
  - c) 12 / device
  - d) 10/ drug
  
7. What are the limitations pertain to operation in the vicinity of a forest fire? No person shall operate an aircraft over a forest fire area or over any area that is located within \_\_\_\_\_ of a forest fire area, at an altitude of less than \_\_\_\_\_; or in any airspace that is described in a NOTAM
  - a) 5NM / 3000 AGL
  - b) 5NM / 2500 AGL
  - c) 3NM / 5000 AGL
  - d) 3NM/ 3000 AGL
  
8. Where two aircraft are approaching head-on or approximately so and there is a risk of collision, the pilot-in-command of each aircraft shall alter its heading to the\_\_\_\_\_
  - a) Up
  - b) Down
  - c) Left
  - d) Right

9. Campbell Helicopters is authorized to carry commercial passengers and cargo in accordance with subpart \_\_\_\_\_ of Part VII of the Canadian Aviation Regulations.
- 701
  - 702
  - 703
  - 704
  - All of the above
10. Campbell Helicopters Accountable Executive is?
- Laura Siemans
  - Bruce Campbell
  - Al Singh
  - Chief Pilot
11. VFR 'over the top' are \_\_\_\_\_?
- allowed
  - prohibited
  - night time only
  - Only with a special operations permit from Transport
12. CARs 702.19 authorized Campbell to carry out what?
- Operate over water
  - Enter or leave a helicopter in flight
  - Minimum Flight visibility
  - Increase in flight time
13. It is Aug 20<sup>th</sup>, and you've been sent out to pick-up 3 passengers (2 men, and a woman) you've never met. What passenger weights would you use to calculate the W&B prior to leaving?
- 185 lbs 155 lbs
  - 200 lbs 165 lbs
  - 210 lbs 180 lbs
  - 206 lbs 171 lbs
14. What does 80.0 US gal of Jet A weigh at 15°C?
- 492 lbs
  - 576 lbs
  - 518 lbs
  - 612 lbs
15. Are passengers allowed onboard, enplaning, or deplaning from the helicopter during refueling operations?
- Yes
  - No
16. How many conditions must be met, before we commence hot refueling operations on our aircraft?
- 5
  - 6
  - 7
  - 8
  - 9
17. Who is responsible for maintaining the Flight & Duty Time monitoring? Who do you contact if your FDT may be exceeded?
- Chief Pilot / Transport Canada
  - PIC / Chief Pilot
  - Chief Pilot / Operations Manager
  - PIC / Operations Manager

18. Which 'Annex' in our COM describes a passenger safety briefing? How many subsections are in this annex?
- a) A / 6
  - b) B / 6
  - c) B / 4
  - d) A / 4
  - e) C / 3
19. What is described in our Annex C?
- a) Passenger safety briefing
  - b) Individual safety briefing
  - c) Briefing of a person other than a crew member
  - d) Flight & Duty Times
20. Is the use of a 2-way radio or cellular phone in flight permitted?
- a) Yes
  - b) No
21. An increase in flight time is authorized by Operations Specification 092. This allows Campbell pilots, for any 6 non-overlapping periods of 30 consecutive days within a 365 consecutive day period, to fly to a maximum of:
- a) \_\_\_\_\_ hours in any 7 consecutive days;
  - b) \_\_\_\_\_ hours in any 30 consecutive days;
  - c) \_\_\_\_\_ hours in any 42 consecutive days;
  - d) \_\_\_\_\_ hours in any 90 consecutive days;
  - e) \_\_\_\_\_ hours in any 180 consecutive days;
  - f) the accumulated 30-consecutive day, 42-consecutive day and 90 consecutive day flight times may be reset to zero if the flight crew member is provided with at least \_\_\_\_\_ consecutive days free from all duty; and
  - g) \_\_\_\_\_ hours in any 365 consecutive days.
22. Increase in Flight Duty Time is increased to 15 hours in accordance with Operations Specification 93 provided:
- a) Min rest increased by 1 hr
  - b) Max flight time does not exceed 8 hrs in 24 hrs consecutive following the 15 hr day
  - c) Require a 10 hr rest period
  - d) No external load operations are permitted during this time
23. The company has an OpsSpec that allows a pilot to work up to 42 consecutive days providing you had how many days off prior to, and after, any duty exceeding 27 consecutive days?
- a) 5 consecutive days off prior to any shift that will exceed 27 consecutive days, and 5 consecutive days off afterwards.
  - b) 3 consecutive days off prior to any shift that will exceed 27 consecutive days, and 3 consecutive days off afterwards
  - c) 5 consecutive days off prior to any shift that will exceed 27 consecutive days, and 7 consecutive days off afterwards
  - d) 3 consecutive days off prior to any shift that will exceed 27 consecutive days, and 3 consecutive days off afterwards



30. All Campbell Helicopters aircraft will carry sufficient fuel to fly to the destination to which the flight is planned and thereafter for a period of \_\_\_\_\_ minutes at normal cruising speed.
- 15
  - 20
  - 25
  - 30

31. Complete the following weather minima table as it applies to Campbell Helicopters:

AIRSPACE		FLT VISIBILITY	DIST FROM CLOUD	DIST AGL
Controlled Airspace				
Control Zones				
Uncontrolled Airspace	1000' agl & above			
	Below 1000' agl			

32. Campbell Helicopters may operate a helicopter in Day VFR flight within uncontrolled airspace at less than 1000 feet AGL when the visibility is one half mile or greater, provided:
- The PIC has \_\_\_\_\_ hours of helicopter PIC;
    - 500
    - 750
    - 1000
    - 1200
  - Helicopter is operated at a \_\_\_\_\_ that will provide the pilot adequate opportunity to see and avoid obstacles;
    - reduced altitude
    - reduced attitude
    - reduced airspeed
    - all of the above
  - Minimum safe flying speed is \_\_\_\_\_ kts for the Bell 212;
    - 30
    - 40
    - 50
    - 55
  - Pilots receive PDM training \_\_\_\_\_ & \_\_\_\_\_.
    - On initial hire only
    - On recurrent flights only
    - Initially and every 2 years thereafter
    - Initially and every 3 years thereafter

- e) Pilots receive initial and recurrent flight training for operations in \_\_\_\_\_ as detailed in COM Section 6.20.
  - a) Reduced light
  - b) Reduced flight
  - c) Reduced speed
  - d) Reduced visibility

33. Where can you find a copy of a specific aircraft’s operational weight and balance and centre of gravity?

- a) Operations Manual in aircraft
- b) SOP Manual
- c) Aircraft POH
- d) Yellow Binder in aircraft

34. What can be utilized in lieu of using an actual weight and balance and under what circumstances?

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35. The specific procedures and limitations for the resetting of tripped circuit breakers (CB) can be found in the appropriate Flight Manual and the Maintenance Manual. As a general rule:

- a) a CB tripped by an unknown cause while on the ground may only be reset:

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- b) a CB tripped by an unknown cause while in the air may only be reset:

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36. Pilots are required to have completed three takeoffs and landings on type in the last 90 days. Pilots who have not maintained this recency qualification but have completed three takeoffs and landings in the last 180 days must undergo the following regaining qualification training:

- a) \_\_\_\_\_
- b) \_\_\_\_\_

37. Define “wide-body helicopter”.

- a) Means a helicopter with an interior cabin width of 1.5 meters or more
- b) Means a helicopter with an interior cabin width of 1.6 meters or more
- c) Means a helicopter with an interior cabin width of 1.8 meters or more
- d) Means a helicopter with an interior cabin width of 2.0 meters or more
- e) None of the above are correct

38. Define “Unforeseen Operational Circumstances”.

- a) Means an event beyond the control of the Air Operator
- b) Means an event beyond the control of the Pilot in Command
- c) Means an event beyond the control of the Operations Manager
- d) Means an event beyond the control of the Airport Operator

39. Flight Duty Time may be extended by up to \_\_\_\_ hours for Unforeseen Operational Circumstances. When Flight or Duty Times are about to be or immediately after being extended the Pilot will report the circumstances and details of the extension to \_\_\_\_\_ who will then ensure that the pilot's rest period, following the day extended is increased by \_\_\_\_.
- a) 1 hr, Client, 3 hrs
  - b) 3hrs, Operations Manager, the amount of the duty day extension
  - c) 3 hrs. Transport Canada, 3 hrs
  - d) 1 hr, Transport Canada, 1 hr
40. In the aircraft logbook, what gets entered, "Air Time" or "Flight Time"?
- a) Air time
  - b) Flight time
41. In your personal logbook, what gets entered, "Air Time" or "Flight Time"?
- a) Air time
  - b) Flight time
42. Hover exit training for aircrew will be conducted
- a) Initially, annually thereafter
  - b) Initially, every 3 years thereafter
  - c) Initial training only
  - d) Initially, and a 90 day recurrency

### **AERONAUTICAL INFORMATION MANUAL**

43. Two aircraft are converging at the same altitudes. Who has the right of way?
- a) the aircraft that has the other on his right shall give way
  - b) the aircraft that has the other on his left shall give away
  - c) aircraft of different categories though, the more maneuverable aircraft will give way to the lessor maneuverable.
  - d) Both A & C
  - e) Both B & C
44. Within Southern Domestic Airspace, the air-to-air communications frequency for use between pilots is \_\_\_\_\_ MHz and in the Northern Domestic Airspace \_\_\_\_\_ MHz has been assigned.
- a) 122.75 123.45
  - b) 123.45 122.50
  - c) 126.70 122.55
  - d) 123.75 122.45
45. At what altitudes does supplemental oxygen in aircraft become required by regulation?
- a) 10,000 ASL
  - b) 12,000 ASL
  - c) Required above 13,000 ASL, with a 30 min allowance between 10,000'-13,000' ASL
  - d) None of these are correct
46. What are symptom(s) of oxygen deficiency (hypoxia)?
- a) Drowsiness
  - b) Euphoria
  - c) Sluggish thinking
  - d) Blue finger nails



47. Overflight of fur and poultry farms, as well as caribou or reindeer herds should be avoided below \_\_\_\_\_ft agl.
- a) 1000
  - b) 1500
  - c) 2000
  - d) 3000
48. What must an aircraft be equipped with in order to operate in Class C airspace?
- a) Mode C transponder
  - b) Mode S transponder
  - c) 2 way communication with ATC
  - d) Both A & C
49. All uncontrolled airspace can be considered Class \_\_\_\_\_airspace.
- a) A,B,C
  - b) B,C,D
  - c) D, F only
  - d) G only
  - e) F only
50. No person shall operate an aircraft in the vicinity of a forest fire below \_\_\_\_\_ft agl within \_\_\_\_\_NM of the limits of the fire as described by a \_\_\_\_\_.
- a) 1500, 2 ATC
  - b) 2000, 5 NOTAM
  - c) 3000, 3 ATC
  - d) 3000, 5 NOTAM
51. To improve general visibility of aircraft the use of landing lights is encouraged:
- \_\_\_\_\_
- \_\_\_\_\_
52. If you were flying along low-level out in the country and saw a building roof or tall pylon marked with chrome yellow and black strips, what should you assume they are marking?
- a) Blasting area
  - b) Fur farm
  - c) Glider Hanger
  - d) UAV operating zone
53. The minimum height for overflying a blasting area is \_\_\_\_\_ft agl.
- a) 1500
  - b) 2000
  - c) 2500
  - d) 3000
  - e) 3500

### **CANADA FLIGHT SUPPLEMENT**

54. Where can every pilot find fuel weights and unit conversion tables?
- a) COM Section 4.2
  - b) AIM 3.3.5
  - c) CFS Section A45 & A46
  - d) CFS Section C34 & C35
  - e) COM Section 3.3

55. How can a Dial-up Remote Communications Outlet be accessed / activated?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

56. The PIC of an aircraft arriving at an aerodrome utilizing a MF shall report;

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_

57. Transponders are required in all Class \_\_\_, \_\_\_ , and \_\_\_ airspace as well as Class \_\_\_ and \_\_\_ that is specified as “Transponder Airspace”.

- a) A,B,C,D,F
- b) A,B,C,D,G
- c) A,B,C,D,G
- d) A,B,C,D,E

58. Control zones are controlled airspace of defined dimensions and extend vertically from the surface of the earth up to and including \_\_\_\_\_ AAE.

- a) 3500
- b) 1500
- c) 2000
- d) 3000

**CANADIAN V NCS**

59. In Canada, what does the symbol **6<sup>8</sup>** mean on a VNC?

\_\_\_\_\_  
\_\_\_\_\_

60. Decode the following – CYD

\_\_\_\_\_

61. What does a box with dashed lines surrounding the name of an aerodrome signify?

\_\_\_\_\_

62. How can you locate the highest elevation on a particular chart?

\_\_\_\_\_  
\_\_\_\_\_

**METEOROLOGY**

**NAVCANADA WEATHER MANUAL**

63. Aircraft icing occurs when super-cooled water droplets strike an aircraft whose temperature is colder than 0°C. The effects icing can have on an aircraft can be quite serious and include:
- a) Increased drag and weight
  - b) Disrupt airflow across rotors causing decreased lift
  - c) Uneven shedding from rotors causing destructive vibrations
  - d) Water can freeze around control surfaces and restrict movement
  - e) All of the above
64. Ice collection efficiency is dependent on three factors:
- a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
65. Ice pellets which reach the surface are a good indication of \_\_\_\_\_ & \_\_\_\_\_ aloft.
- a) Snow and cold air
  - b) Hail and warm air
  - c) Fog and clouds
  - d) Freezing rain and warm air
66. Assuming abundant condensation nuclei, a clear evening sky, and a light wind, what kind of weather phenomenon to develop in the morning?
- a) Rain and mist
  - b) Fog
  - c) Haze
  - d) Mist and Haze
67. The environment in and around a thunderstorm can be the most hazardous encountered by an aircraft. In addition to the usual risks such as severe turbulence, severe clear icing, large hail, heavy precipitation, low visibility and electrical discharges within and near the cell, there are other hazards that occur in the surrounding environment. Identify three main hazards:
- a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_

### **AERONAUTICAL INFORMATION MANUAL**

68. Cloud bases reported in METARS and TAFs are always stated in heights **AGL / ASL** and in GFAs they are reported in **AGL / ASL**.

69. Area Forecasts (GFAs) are normally issued \_\_\_\_\_ minutes before the beginning of the coverage period. Each GFA consists of two charts: one depicting \_\_\_\_\_ and the other depicting: \_\_\_\_\_.

70. If the IFR Outlook section of the GFA indicates VFR, you can expect the ceiling to be \_\_\_\_\_ and the visibility to be \_\_\_\_\_.

- a) > 3000 AGL > 5 SM
- b) >3000 ASL > 5 SM
- c) >1000 AGL >3 SM
- d) >3000 AGL >3 SM

71. Winds reported in a TAF are provided in **TRUE /MAGNETIC**?

72. Define **PROB30** and what is its use restricted to in the TAF?

\_\_\_\_\_

\_\_\_\_\_

73. Identify the following weather codes found in a METAR:

- |             |               |
|-------------|---------------|
| a) PL _____ | d) FU _____   |
| b) GR _____ | e) SHRA _____ |
| c) BR _____ | f) MI _____   |

74. Assess the following:

**SPECI CYYU 012131Z 30010KT 10SM -DZ OVC004 RMK ST8**  
**METAR CYYU 012100Z 31008KT 3SM -DZ BR OVC003 08/08 A2970 RMK FG3ST5**  
**CIG RAG SLP066**

**SPECI CYYU 012051Z 31009KT 3SM -DZ BR OVC003 RMK FG3ST5**  
**METAR CYYU 012000Z 31009KT 1SM -RA BR VV002 08/08 A2968 RMK FG8 VIS**  
**VRB 3/4 - 11/4 SLP059**

**SPECI CYYU 011910Z 33008KT 1SM -RA BR VV002 RMK FG8**

**METAR CYYU 011900Z 30012KT 1/2SM -DZ FG VV002 08/08 A2967 RMK FG8**  
**SLP056**

**TAF CYYU 011941Z 0120/0208 32005KT 1SM -RA -DZ BR VV002 TEMPO**  
**0120/0122 3SM BR OVC004**

**FM012200 32010KT 2SM -DZ -RA BR OVC005 TEMPO 0122/0208 6SM BR**  
**OVC008**

**RMK NXT FCST BY 020200Z**

Is the weather improving or getting worse?

- a) Improving

