Transport Canada Commercial Helicopter Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What is the minimum flight time required for a pilot to qualify for a Commercial Helicopter License in Canada?

A. 50 hours of pilot in command time

B. 100 hours of pilot in command time

C. 75 hours of pilot in command time

D. 150 hours of pilot in command time

2. What is the total elapsed time noted in the flight plan form if you have planned multiple legs?

A. 1 hour 55 minutes

B. 3 hours 25 minutes

C. 2 hours 40 minutes

D. 3 hours 25 minutes plus 45 minutes for reserve

3. When is the vertical speed indicator most beneficial to pilots?

A. During engine start-up

B. During takeoff and landing phases

C. When adjusting cruise speed

D. During pre-flight inspections

4. What is the significance of the helicopter's center of gravity (CG)?

A. It determines the color of the helicopter

B. It affects speed limits

C. It impacts stability, control, and performance during flight

D. It defines the maximum passenger capacity

5. If you need to adjust the altitude for pressure changes during flight, what do you set your altimeter to?

A. Current barometric pressure at sea level

B. Your aircraft's current altitude

C. 29.92 inches of mercury, regardless of location

D. Altitude as per your local airport setting

6. What does "Category B" in helicopter operations indicate?

- **A. A higher risk of engine failure**
- **B. Operations that require two engines for safety**
- **C. A lower altimeter setting requirement**
- **D. None of the above**

7. If your destination airport has a NOTAM stating circuit height is 1,500 feet ASL and airport elevation is 400 feet ASL, what should your circuit altitude be under overcast conditions?

- **A. As high as possible without entering the cloud.**
- **B. 500 feet below the cloud base.**
- **C. 1,000 feet above the airport elevation.**
- **D. 1,100 feet above the airport elevation.**

8. What is an ATIS report?

- **A. A service providing live air traffic updates**
- **B. Automated Terminal Information Service that broadcasts recorded information for aircraft**
- **C. A system for real-time weather tracking**
- **D. A manual for pilots on airport procedures**

9. Controlled airspace above an airport that extends upward, vertically from the surface to a specified height AGL is?

- **A. Control zone.**
- **B. Always Class D airspace.**
- **C. Controlled airspace along airways above 2200 ft ASL.**
- **D. A control area.**

10. What is the minimum horizontal distance from cloud that must be maintained in a control zone?

- **A. 1 mile.**
- **B. 3 miles.**
- **C. 1000 feet.**
- **D. 2000 feet.**

Answers

1. B
2. B
3. B
4. C
5. C
6. B
7. B
8. B
9. A
10. A

Explanations

1. What is the minimum flight time required for a pilot to qualify for a Commercial Helicopter License in Canada?

A. 50 hours of pilot in command time

B. 100 hours of pilot in command time

C. 75 hours of pilot in command time

D. 150 hours of pilot in command time

For a pilot to qualify for a Commercial Helicopter License in Canada, the regulations set by Transport Canada stipulate that the minimum flight time required is 100 hours of pilot-in-command (PIC) time. This requirement ensures that pilots have substantial hands-on experience and competence managing a helicopter on their own before they are licensed to operate commercially. Having 100 hours of PIC time indicates that the pilot has developed necessary skills and judgment essential for safe and effective operation of a helicopter in various flying conditions. This level of experience prepares pilots for the complexities and responsibilities of commercial flying, which may involve transporting passengers, cargo, or conducting specialized services. The other options reflect lesser amounts of PIC time, which are insufficient for the comprehensive training and experience that the commercial license demands. Meeting the 100-hour threshold not only aligns with regulatory requirements but also helps ensure safety and professionalism within the aviation industry.

2. What is the total elapsed time noted in the flight plan form if you have planned multiple legs?

A. 1 hour 55 minutes

B. 3 hours 25 minutes

C. 2 hours 40 minutes

D. 3 hours 25 minutes plus 45 minutes for reserve

In a flight plan, the total elapsed time is typically calculated by summing the planned flight times for each individual leg of the journey. In this case, if the total elapsed time noted on the flight plan is 3 hours and 25 minutes, this value represents the cumulative duration of all the segments of the flight without additional considerations such as reserve time. For other options, 1 hour and 55 minutes and 2 hours and 40 minutes do not accurately reflect the combined time of all planned legs, indicating either a miscalculation or an oversight in totaling the segments. The last option, which adds 45 minutes for reserve to the 3 hours and 25 minutes, would be a consideration for total time if reserve was required, but since the question specifically asks for total elapsed time noted in the flight plan, the addition of reserve time is not relevant here. Thus, the appropriate answer remains 3 hours and 25 minutes, reflecting just the planned flying time across all segments.

3. When is the vertical speed indicator most beneficial to pilots?

A. During engine start-up

B. During takeoff and landing phases

C. When adjusting cruise speed

D. During pre-flight inspections

The vertical speed indicator (VSI) is a crucial instrument for pilots, primarily useful during the takeoff and landing phases of flight. This is because during these phases, maintaining a precise understanding of the aircraft's rate of ascent or descent is essential for ensuring safety and stability. During takeoff, the pilot needs to monitor how quickly the helicopter is climbing to ensure it achieves the necessary altitude safely and efficiently. Similarly, during the landing phase, the VSI provides vital information regarding the descent rate, helping pilots to control their approach and ensure a smooth touchdown. In contrast, the instrument is less critical during engine start-up, cruising, or pre-flight inspections. During engine start-up, the focus is on verifying engine parameters and systems rather than vertical flight. In cruise, while the VSI can provide information about minor adjustments in altitude, the primary focus is on maintaining a steady flight profile. Lastly, during pre-flight inspections, the focus is on safety checks and ensuring that the helicopter is ready for flight, not on real-time flight performance data. Thus, the vertical speed indicator's most beneficial function is during takeoff and landing, where precise altitude changes are critical for the safety and success of the flight.

4. What is the significance of the helicopter's center of gravity (CG)?

A. It determines the color of the helicopter

B. It affects speed limits

C. It impacts stability, control, and performance during flight

D. It defines the maximum passenger capacity

The center of gravity (CG) of a helicopter plays a crucial role in its flight dynamics. The CG is the point where the weight of the helicopter is balanced, and it significantly influences the helicopter's stability, control, and overall performance. When the CG is correctly positioned, the helicopter exhibits stable flight characteristics, making it easier for the pilot to control the aircraft. If the CG is too far forward or aft, it can lead to undesirable handling qualities, such as increased susceptibility to pitch oscillations or difficulty in entering and maintaining hover. Moreover, the location of the CG affects the helicopter's responsiveness to inputs from the flight controls. A well-managed CG enhances maneuverability and ensures that the helicopter can maintain its intended flight path without excessive effort from the pilot. Additionally, the CG impact reaches beyond operational performance; it can significantly influence load calculations, fuel management, and overall safety. In summary, understanding the significance of the center of gravity is foundational for effectively operating a helicopter, as it directly impacts stability, control, and performance during flight operations.

5. If you need to adjust the altitude for pressure changes during flight, what do you set your altimeter to?

A. Current barometric pressure at sea level

B. Your aircraft's current altitude

C. 29.92 inches of mercury, regardless of location

D. Altitude as per your local airport setting

The correct choice is to set your altimeter to 29.92 inches of mercury, which represents standard atmospheric pressure at sea level. This adjustment is used primarily when transitioning to or from flight levels above the transition altitude. When flying at high altitudes, aircraft operate in a pressure setting where the altimeter is set to the standard pressure of 29.92 inches of mercury. This practice ensures that all aircraft flying at the same pressure altitude are accurately following the standard reference, facilitating safe vertical separation and communication between different aircraft on the same flight level. While adjusting the altimeter to the current barometric pressure at sea level or the local airport setting is important when operating below transition altitude, the standard pressure setting is specifically applied at higher altitudes where a consistent reference is needed for safe operations among multiple aircraft. Using the aircraft's current altitude as a setting is not useful for altitude adjustments in the context of adjusting for pressure changes, as it does not provide a standard reference point; instead, it simply indicates how high you are above sea level. Thus, utilizing the standard atmospheric pressure of 29.92 inches is essential for maintaining correct altitude readings in the flight levels.

6. What does "Category B" in helicopter operations indicate?

A. A higher risk of engine failure

B. Operations that require two engines for safety

C. A lower altimeter setting requirement

D. None of the above

"Category B" in helicopter operations specifically indicates that operations require two engines for safety. This categorization is part of the safety and regulations defined for multi-engine helicopters to ensure a higher level of safety during flight. The rationale behind this requirement is to mitigate the risks associated with engine failure. In the event of an engine failure, having a secondary engine significantly increases the helicopter's ability to maintain control and safely complete the mission or reach a suitable landing area. In this context, the term "Category B" is crucial for outlining the operational limitations and safety protocols that pilots must be aware of when flying multi-engine helicopters. It reflects a proactive approach to safety, ensuring that crews are adequately prepared and equipped for emergencies. Consequently, the other options do not accurately describe the significance of "Category B." The mention of a higher risk of engine failure or lower altimeter setting requirements does not align with the category's requirements and focus on safety through redundancy in engine capability. This understanding is pivotal for safe and compliant helicopter operations.

7. If your destination airport has a NOTAM stating circuit height is 1,500 feet ASL and airport elevation is 400 feet ASL, what should your circuit altitude be under overcast conditions?

A. As high as possible without entering the cloud.

B. 500 feet below the cloud base.

C. 1,000 feet above the airport elevation.

D. 1,100 feet above the airport elevation.

The key to understanding the appropriate circuit altitude under overcast conditions lies in recognizing the relationship between the cloud base and the altitude of your circuit. Given that the NOTAM specifies the circuit height as 1,500 feet ASL, and considering the airport elevation of 400 feet ASL, it's imperative to maintain a safe altitude above the cloud base to avoid the potential hazards of inadvertently entering the clouds. In this scenario, the choice to set the circuit altitude at 500 feet below the cloud base is based on the requirement to remain clear of any cloud formation while also being at a safe altitude for circuit operations. The NOTAM indicates that the circuit altitude should be at 1,500 feet ASL; however, if the weather conditions indicate an overcast, the key is to interpret "below the cloud base" accurately. For a cloud base at 1,500 feet ASL, being 500 feet below means you would be at 1,000 feet ASL, which also accommodates a safety buffer when flying near clouds. In summary, maintaining a circuit altitude of 1,000 feet above the airport elevation ensures safety while complying with the NOTAM directives under the stipulated weather conditions. This altitude effectively keeps you clear of the clouds

8. What is an ATIS report?

A. A service providing live air traffic updates

B. Automated Terminal Information Service that broadcasts recorded information for aircraft

C. A system for real-time weather tracking

D. A manual for pilots on airport procedures

An ATIS report stands for Automated Terminal Information Service. It is a system used at airports to provide pilots with essential, up-to-date information about the airport environment. This includes details such as weather conditions, runway usage, available instrument approaches, and any other pertinent information relevant for aircraft operation approaching or departing from the airport. This broadcast is typically automated and recorded, allowing it to be repeated at regular intervals, thus ensuring that pilots have access to the latest data without the need for verbal communication with air traffic controllers. Understanding this service is crucial for pilots as it helps them prepare for their arrival or departure in a timely manner, ensuring that they are fully informed about the current operational conditions at the airport. Pilots can listen to the ATIS report prior to contacting air traffic control, which leads to more efficient operations and less congestion on communication frequencies.

9. Controlled airspace above an airport that extends upward, vertically from the surface to a specified height AGL is?

A. Control zone.

B. Always Class D airspace.

C. Controlled airspace along airways above 2200 ft ASL.

D. A control area.

The controlled airspace above an airport that extends upward from the surface to a specified height above ground level (AGL) is known as a control zone. Control zones are established to protect aircraft operating in the vicinity of an airport, especially in the approach and departure phases of flight. They help ensure safe and efficient air traffic operations by segregating various types of traffic and providing air traffic control services. Control zones serve a crucial role in maintaining safety and order around busy airports, typically involving general aviation, commercial traffic, and sometimes military aircraft. The specifics of the dimensions and altitudes of control zones can vary based on the airport and are defined in aviation regulations. The other options relate to different categories of airspace. For instance, while control zones often coincide with Class D airspace, they can also include segments of airspace classified differently depending on the specific operations surrounding individual airports. However, Class D is specifically defined by its operating regulations and does not encompass all control zones universally. Similarly, controlled airspace along airways or control areas have different definitions and operational regulations that do not specifically refer to the structure around an airport, making control zone the precise and correct choice in this context.

10. What is the minimum horizontal distance from cloud that must be maintained in a control zone?

A. 1 mile.

B. 3 miles.

C. 1000 feet.

D. 2000 feet.

The correct minimum horizontal distance from cloud that must be maintained in a control zone is 1 mile. This regulation is based on Visual Flight Rules (VFR) which are designed to ensure that pilots maintain visual reference to the ground while also providing adequate separation from clouds to maintain situational awareness and avoid potential conflicts with other aircraft. In a control zone, maintaining this distance allows pilots to navigate safely and effectively, ensuring that they can see and avoid other traffic as well as have clear ground references for navigation. This requirement is particularly essential in areas with higher aviation traffic and where cloud formations can create visibility challenges. The other distances provided are greater than what is required within a control zone, reflecting regulations for environments with different visibility or meteorological conditions rather than the specific requirements within controlled airspace.