Biennial Flight Review
General Knowledge Test 4

Name:_____

Written Examination for a Sport Aviation Corp Part 149 Flight Crew Certificate Biennial Flight Review

For today's flight, you will be flying from your home airstrip south of Auckland to the East Coast south of Tauranga. You will require VNC C3/Auckland to answer some of the questions in this test. The recommended sitting time is 30 minutes. You may refer to a NZ AIP Volume IV at any time during the test. Ten correct answers is considered a 70% pass.

1. You are the holder of an advanced certificate and a passenger rating. You wish to take a passenger with you on your flight. Which of the following conditions must have been met before you can take a passenger?

A) Conducted 3 take-offs and 3 landings in the previous 90 days in any microlight.
B) Conducted 3 take-offs and 3 landings in the previous 90 days in a microlight of the same type.
C) Conducted 3 take-offs and 3 landings in the previous 365 days in any microlight.
D) Conducted 1 take-off and 1 landing in the previous 30 days in a microlight of the same type.

2. While conducting a pre-flight inspection you notice that the expiry date on the 'annual condition inspection sticker' has passed. Can you proceed with your proposed flight?

A) Yes, you may continue to fly the aircraft, but without a passenger.
B) Yes, as long as you do not proceed beyond 10NM of the departure point.
C) Yes, but only if the aircraft has flown less than 10 hours since the date of expiry, or less than one month has passed since the date of expiry.
D) No, an annual inspection must be carried out by a S.A.C. Authorised Inspection Officer before further flight.

3. Under what circumstances are microlight aircraft required to carry 406MHz emergency beacons?

A) When flying more than 10nm from their home base
B) When flying beyond gliding distance from land
C) When carrying passengers
D) Microlight aircraft are not required to carry 406Mhz emergency beacons, only aeroplanes registered under CAR Part 47 are required to do so.

4. As you are ready to depart, some morning mist and light rain showers are slowly clearing with visibility improving. Before you can depart on your cross-country flight, which will remain below 3,000 feet AMSL, and in Class G Airspace, what must the minimum visibility be?

A) 1,500 m
B) 5 km
C) 1.5 nm
D) 8 km

You check on an Internet Flight Planning website to get the latest weather information from an airport nearby and the following report is generated for you…

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METAR NZYZ 202130Z AUTO VRB04KT 10KMNDV -SHRA SCT008/// BKN010///
10/09 Q1012=

TAF NZYZ 202000Z 2020/2108
18008KT 15KM -SHRA BKN035
BECMG 2103/2105 6000 RADZ BKN020
2000FT WIND 20015KT
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5. At what time was the latest METAR weather report issued? (New Zealand is on daylight saving time at present)

A) 9:30pm in New Zealand, on the 20th day of the month
B) 9:30am in New Zealand, on the 21st day of the month
C) 10:30am in New Zealand, on the 21st day of the month
D) 9:21am in New Zealand, on the 31st day of the month

6. What is the current visibility situation at NZYZ?

A) 10km, and there are no directional variations to this
B) 10km, the weather station cannot detect any directional variations
C) 15km, in light rain showers
D) There was no detected visibility, but the last known visibility was 10km

7. What is the wind forecast to become later in the day at NZYZ?

A) Variable, at 4 knots
B) 180° Magnetic, at 8 knots
C) 180° True, at 8 knots
D) 008° True, at 18 knots

8. You will be taking off on a grass runway, with the grass quite long and quite damp from the morning rain showers. You will be returning here later in the day too. How will your takeoff and landing performance be affected today?

A) You will require less runway for both take off and landing today
B) You will require more runway for take off, but less runway for landing today
C) You will require more runway for both take off and landing today
D) There will not be any noticeable change in take off or landing performance

9. Because of the short runway, you are a bit concerned about your aircraft performance and want to make sure it is not loaded overweight. Do a calculation based on the amount of fuel you need for the journey to see if you can take any luggage…

Aircraft Empty Weight	320kg
Maximum All Up Weight	544kg
Weight of you and your passenger	180kg
Fuel required	50 litres (at sg 0.72)

A) You may take 8kg of luggage
B) You may take 18kg of luggage
C) Aircraft will be too heavy by 6kg
D) Aircraft will be too heavy by 15kg

10. Many aircraft have a luggage compartment located behind the seats, which if overloaded can lead to an aft-centre of gravity situation. How will an aft centre of gravity situation effect aircraft handling?

A) Elevator control will be much heavier and the nose will not respond to control inputs
B) Elevator control will be sensitive and the nose will have a tendency to pitch up
C) There will be no effect on handling provided the aircraft is not overweight
D) The stall speed of the aircraft will be lower, and the nose attitude lower too.

11. Since leaving your home base, you have been maintaining a compass heading of 100°C while you followed your GPS. Unfortunately, your GPS has been programmed with the wrong coordinates and you now find yourself 5 miles right of course, having travelled 15 of the 75 miles to your destination. Use the 1:60 Navigation rule to find the correct heading to your destination.

A) 065°C
B) 075°C
C) 085°C
D) 090°C

12. With your GPS unreliable now, you rely on map reading to navigate. You place yourself about 15NM North of Hamilton Airport, and with the mist and rain cleared you decide to climb higher. What is the maximum height you may climb to and remain clear of controlled airspace?

A) You are already in controlled airspace
B) 1,500 feet AMSL
C) 2,500 feet AMSL
D) 4,500 feet AMSL

13. Your planned route will take you into the Matamata Mandatory Broadcast Zone (MBZ). On what frequency should you make the appropriate radio calls when operating in this area?

A) 118.80Mhz, calls should be made every 5 minutes
B) 119.10Mhz, normal calls for an uncontrolled airfield should be made
C) 120.00Mhz, calls should be made every 15 minutes
D) 120.00Mhz, calls should be made every 10 minutes

14. As you arrive at your destination, another aircraft is downwind in the circuit for Runway 21, you elect to join via a wide left base leg and the other aircraft will reach the base leg at the same time as you. Who has right of way?

A) You do, as the other aircraft is obliged to give way to aircraft on its right
B) You do, as you were on base leg, and therefore ahead of the other aircraft in the circuit
C) The other aircraft does, as it is already established in the circuit
D) The aircraft that made the first radio call does