

p1. Are the pilot credentials and experience adequate to complete the flight and comply with the regulations?

- a. No, the pilot needs a flight review
- b. No, the pilot's medical certificate has expired
- c. Yes
- d. Answer A and B

Answer C is correct. Though the pilot has not had a flight review, her participation in the wings program meets the flight review requirement.

2. Based on the logbook information, has the aircraft received the required inspections to be legal for the flight?

- a. No, the aircraft has not had a 100-hour inspection
- b. No, the aircraft has not had an altimeter check
- c. Yes
- d. Answer A and B

Answer C is correct. This VFR trip does not require a 100-hour inspection or an altimeter check.

3. You are planning to arrive at VGC 30 minutes before your planned departure time of 1730Z. Can you expect the airport to be attended when you arrive?

- a. No, the airport is not attended at all
- b. No, the attendant will not be present yet
- c. Yes
- d. Answer A and B

Answer C is correct. According to the AFD, the airport is attended 1400-2200Z

4. Based on the wind reports, which runway provides the most headwind for takeoff from VGC?

- a. Runway 17
- b. Runway 35
- c. Runway 24
- d. None- the wind is a direct crosswind

Answer A is correct. The wind with reference to true north at VGC is 140@12g19, or 152@12g19 with reference to magnetic north. The runways available are 17 and 35, so runway 17 has the best headwind.

5. The temperature at VGC is 19 degrees C. At what speed should you lift off as you depart VGC?

- a. 44 MPH
- b. 46 knots
- c. 49 MPH
- d. 54 knots

Answer B is correct. The Takeoff Distance Chart lists a liftoff speed of 46 knots (or 53 mph) indicated for 2000 pounds.

6. How much runway should you use for the ground roll portion of the takeoff at VGC?
- a. about 592 feet
 - b. about 635 feet
 - c. about 213 meters
 - d. about 7200 inches

Answer A is correct. The elevation is close to 1000 feet. The 2000 pound numbers at 20 degrees indicate that the roll will be 665 feet. The headwind without the gusts is about 11 knots, which means a credit of about 11%, or about 73 feet. These variables reduce the takeoff distance to somewhere around 592 feet.

7. As you depart VGC, what is the appropriate procedure for exiting the traffic pattern?
- a. Maintain runway heading until 2100 feet MSL
 - b. Turn left at 400 AGL and proceed southwest
 - c. Turn right at 400 AGL, continue climb to 2100 feet on the downwind, turn right on course
 - d. None of the Above

Answer A is correct. The VGC AFD says "Noise abatement procedures in effect; all acft dep maintain rwy heading until 2100 ft MSL before making turn out."

8. Takeoff from VGC at 1730Z means arrival at N66 at:
- a. 13:30
 - b. 13:40
 - c. 13:50
 - d. 14:00

Answer C is correct. See chart- 20 minutes and 13 seconds makes an arrival time of 1750Z, or 13:50 local.

9. How much fuel will remain in the tanks upon landing at N66?
- a. 30 gallons
 - b. 190 pounds
 - c. 36 gallons
 - d. 230 pounds

Answer C is correct. See chart- 4 gallons is the total burn, out of 40 gallons for a new total of 36 gallons or 216 pounds

10. Which of the following wind indicators are available at N66?
- a. One wind cone
 - b. Two wind cones
 - c. One wind cone and a tetrahedron
 - d. Two tetrahedrons

Answer B is correct. The AFD airport diagram shows two wind cones- one near the parking area and one across the runway by the power line.

11. When you arrive at N66, aircraft are in the pattern for runway 24, so you also land on 24. Which of the following applies to your turn off of the runway?

- a. Turn off on the left side of the runway near the end
- b. The turnoff is on the right side, and it will be available after a turnaround and back-taxi
- c. The parallel taxiway is closed per NOTAM
- d. Not enough information is available to answer this question

Answer A is correct. The turnoff is at the end on the left, as you can see in the AFD picture.

12. Upon landing at N66 you spend a few minutes visiting and preparing for departure. You will lift off at 1820Z. Based on the wind reports, which runway provides the most headwind for takeoff from N66?

- a. Runway 6
- b. Runway 24
- c. Runway 35
- d. Either runway, the crosswind is direct

Answer B is correct. The wind with reference to true north at N66 is 170@10, or 182@10 with reference to magnetic north. The runways available are 6 and 24, so runway 24 has the best headwind.

13. What is the takeoff weight after adding your passenger?

- a. 1961 pounds
- b. 2034 pounds
- c. 2104pounds
- d. 2156 pounds

Answer D is correct. See chart section for details.

14. What is the highest VFR altitude available for cruise on the leg from N66 to 1F6?

- a. 3500 feet
- b. 4000 feet
- b. 4500 feet
- c. 5500 feet

Answer A is correct. Since the heading is eastbound, an odd+500 altitude is appropriate. Overcast clouds at 4900 feet eliminate 5500 as an option, so 3500 is the only one left.

15. How long will it take to reach that cruise altitude?

- a. 10:00
- b. 6:00
- c. 3:40
- d. 3:15

Answer C is correct. See chart section for explanation

16. How much fuel will you burn during the cruise segment of the flight from N66 to 1F6?

- a. 0.8 gallons

- b. 1.2 gallons
- c. 5.2 pounds
- d. 8.4 pounds

Answer B is correct, 1.2 gallons=7.2 pounds. See chart section for explanation

17. What is your arrival time at 1F6?
- a. 1800Z
 - b. 1828Z
 - c. 1832Z
 - d. 1836Z

Answer D is correct. See chart section for explanation

18. According to the AFD, which of the following should you be prepared to encounter at 1F6?
- a. Deer
 - b. Personnel and Equipment Adjacent to the Runway
 - c. Cracks and Spalling in the Pavement Surface
 - d. Radio Control Airplanes

Answer D is correct. The AFD notes: "Radio control airplanes invof rwy throughout the year."

19. Using the steady winds in the RME METAR provided, which runway at 1F6 provides the most headwind for landing?
- a. The runways aren't numbered at a grass airport
 - b. Runway 11
 - c. Runway 29
 - d. Runway 24

Answer B is correct. Runways 11 and 29 are available, and the winds are 140@12g19 with reference to true north, or 152@12g19 with reference to magnetic north. Runway 11 provides the most headwind.

20. How much runway should you use for your rollout at 1F6, assuming that the winds are 140@12?
- a. 570 feet
 - b. 513 feet
 - c. 744 feet
 - d. 1325 feet

Answer C is correct. The elevation is very close to 1000 and the temperature is 19 degrees. The 20-degree rollout is 570 before corrections for headwind and grass. The 9-knot headwind requires a 10% reduction, which makes for 513. The grass requires an increase of 45% of the ground roll figure. 45% of 513 is 231, and 513+231=744.

21. For calculation purposes, use the RME weather for 1F6, including the temperature of 19 degrees C. After landing at 1F6, your passenger prepares the airplane that he is picking up. It only has a few gallons of fuel, and he thinks he would like to have more. You know from your preflight preparation that fuel is not available at the airport, but you have access to a 5-gallon can to transfer fuel out of your airplane

and into his. If you put 5 gallons into a can that weighs 1 pound empty, how much will the full can weigh?

- a. 31 pounds
- b. 37.5 pounds
- c. 40 kilograms
- d. 68 kilograms

A is the correct answer. 6 pounds per gallon at 5 gallons = 30 pounds + 1 = 31 pounds=14 kilograms

22. This whole idea is starting to sound a little bit fishy. You want to be sure that you'll have enough fuel to get back to VGC with one hour of fuel remaining (8 gallons). What is the most that you can spare and still meet those requirements?

- a. Less than one 5 gallon can
- b. No more than one 5 gallon can
- c. No more than two 5 gallon cans
- d. No more than three 5 gallon cans

Answer D is correct. The total fuel burn for the legs is 12.6 gallons. Add 8 gallons to get 20.6. Subtract from 40 to get 19.4. 4 cans would be 20 gallons, so three is the maximum.

23. Notwithstanding the above calculation, you drain one can out of the left tank and one out of the right and decide to keep the rest. What will be your ramp weight once you are ready to go?

- a. 1768 pounds
- b. 1818 pounds
- c. 1911 pounds
- d. 1938 pounds

Answer C is correct, 1911. See chart section.

24. Will this takeoff be in the normal category, or the utility category?

- a. The aircraft is above the utility category weight
- b. The aircraft is loaded aft of the utility category limit
- c. Answer A and B are correct
- d. The aircraft is loaded within the utility category limits

Answer D is correct. 80.86 and 2040 is in the utility category.

25. What is the takeoff distance at 1F6? Disregard the wind gusts and use the steady wind at RME.

- a. 683
- b. 634
- c. 592
- d. 567

Answer A is correct. See chart section for explanation

26. You finally depart 1F6 at 2130Z. While enroute from 1F6 to VGC, what change should you apply to your heading as you accelerate to cruise speed?

- a. None-the true course doesn't change

- b. Turn left 10 degrees for gyroscopic precession
- c. Turn right 6 degrees
- d. Turn right 16 degrees

Answer C is correct. See chart section- MH changes from 243 to 249.

27. What is the ground speed in cruise on the leg from 1F6 to VGC?
- a. 102 knots
 - b. 96 knots
 - c. 90 knots
 - d. 84 knots

Answer D is correct- 84 knots.

28. On the leg from 1F6 to VGC, how many miles are you from VGC when you cross the first charted railroad?
- a. 15 miles from VGC
 - b. 26 miles from VGC
 - c. 26 KM from VGC
 - d. There are no railroads between 1F6 and VGC

Answer B is correct: 26 miles from VGC is the first charted railway crossing, near the town of Mohawk.

29. What are the cloud clearance requirements in the airspace 1000 feet above VGC in the daytime?
- a. 500 feet below, 1000 feet above, and 2000 feet laterally.
 - b. 500 feet above, 1000 feet below, and 2000 feet laterally.
 - c. Must remain clear of clouds.
 - d. 1000 feet below, 1000 feet above, and 1 mile laterally.

Answer A is correct- cloud clearance requirements for class E airspace apply.

30. One of your partners wants to fly the airplane this evening at 6:00pm. Will you have it back in time for his flight?
- a. No, scheduled arrival is 6:16pm
 - b. No, arrival time is 6:05pm
 - c. Yes, arrival time is 5:54pm
 - d. Yes, arrival time is 5:40pm

Answer C is correct. You will arrive at 2154Z, or 17:54 local.

31. As you approach VGC, you notice how much larger the runway seems when compared to 1F6. How wide is the runway at VGC?
- a. 100 feet
 - b. 75 feet
 - c. 50 feet
 - d. None of the above

Answer B is correct, 75 feet.

32. Are there any NOTAMs that apply to VGC?
- a. No, the NOTAMs provided only apply to Buffalo
 - b. Yes, the ground based transceiver is out of service.
 - c. Yes, the navigation function of the GBT VOR is out of service
 - d. No, the NOTAMs provided only apply to the VGC VOR

Answer B is correct.

33. The AFD for VGC mentions windmills north of runway 35. What is the highest windmill in that area?
- a. 2154 MSL
 - b. 2369 MSL
 - c. 2500 MSL
 - d. Not enough information is provided to answer this question

Answer A is correct- the box on the sectional chart says that the highest windmill is at 2154 MSL

34. If you were to have been delayed, would you have been legal to land at night?
- a. Yes, but only because you are the sole occupant of the aircraft
 - b. Yes, the logbook shows adequate recent experience to fly at night
 - c. No, the pilot does not have adequate recent experience to fly at night
 - d. No, the aircraft is not equipped for night flight

Answer B is correct

35. Was the aircraft within the weight and balance limits for the entirety of this flight?
- a. Yes
 - b. No, the aircraft was out of weight and balance limits at takeoff from VGC
 - c. No, the aircraft was out of weight and balance limits at takeoff from N66
 - d. No, the aircraft was out of weight and balance limits at takeoff from 1F6

Answer A is correct, see chart section

36. Which segment of the flight (excluding takeoff and landing) encountered the lowest ground speed?
- a. Cruise between 1F6 and VGC
 - b. Initial climb out of VGC
 - c. Initial climb out of N66
 - d. Initial climb out of 1F6

Answer D is correct, see chart section

37. If you will pay \$55 per hour for your flight today, how much do you owe? Base your calculation on calculated flight time, and add 10 minutes per leg for taxi, takeoff, landing, etc.
- a. \$56.24
 - b. \$83.68
 - c. \$98.29
 - d. \$124.83

Answer B is correct. Total time was 61:17, plus 30 minutes = 91:17, or 1.52 hours, or \$83.68

38. When you get back to VGC, you start to fill out your logbook. Can you log this flight as “cross country” experience?

- a. Yes, with no reservations
- b. Yes, but it can't be applied to the aeronautical experience requirements of a commercial pilot certificate or instrument rating.
- c. No, the flight wasn't long enough
- d. No, the flight did not use VOR or GPS navigation

Answer B is correct- see part 61.1

39. How much of the flight can your passenger legally pay operating expenses for?

- a. Half of the leg from N66-1F6
- b. Half of the entire trip
- c. All of the expenses
- d. None of the trip, pilot is private only

Answer A is correct. The passenger may pay his pro-rated share of the leg for which he was on board and no more.