

# Commercial Pilot Cross Country Briefing

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1. Explain the weather product you would use to obtain the most current weather condition at your destination?
2. What is the meaning of code "9900" found on a winds aloft forecast?

## Use the appropriate POH for questions 3-8

3. Compute the density altitude based on the following condition:
  - Field Elevation = 4,500 feet
  - Temperature = 24 degrees Celsius
  - Altimeter Setting = 30.55
4. Using the data from the previous question, determine the distance required to takeoff and clear a 50-foot obstacle assuming maximum take off weight and a 10-knot headwind.
5. Determine your time, fuel, and distance needed to climb from a field elevation of 2,000 feet to a cruising altitude of 7,500 feet. Assume standard conditions and calm wind.
6. Based on a standard cruise altitude of 7,500 feet and standard conditions, determine the true airspeed and fuel flow at approximately 70% power.
7. Using data from the previous question, what is the maximum range of the aircraft with full fuel.

- 8.** Based on the following conditions, determine the distance required to land over a 50 ft obstacle:
- Field elevation = 3,300 feet
  - Temperature = 24 degrees Celsius
  - Altimeter Setting = 29.61
  - Wind = Calm
- 9.** What are the basic VFR weather minimums? What are they in a traffic pattern in controlled airspace?
- 10.** What is a special VFR clearance? Can you request on at night? What visibility and cloud clearances apply? In what airspace can you request a special VFR clearance?
- 11.** What are the pilot and equipment requirements to fly at or above 18,000 feet MSL?
- 12.** What is the purpose of Class E airspace when it surrounds a non-towered airport?
- 13.** What are the effective altitudes for Class E airspace in the vicinity of an airport?
- 14.** Name the various types of special use airspace and explain the restrictions.
- 15.** How can you tell when the control tower is in operation at part-time locations?
- 16.** Is Class D airspace depicted on sectional or WAC charts?
- 17.** What is an airport advisory area? How can you tell where one exists?

18. Explain what operations require a Mode C transponder.
19. If you have a functioning transponder when must you use it?
20. What are the pilot and equipment requirements to operate within terminal areas designated as Class B and Class C airspace?
21. What is the difference between primary radar and secondary radar?
22. What are the main advantages of secondary radar over primary?
23. What are the three classes of VOR's? What are their standard service volumes?
24. What basic restriction affects VOR signal reception?
25. Generally, how accurate is VOR course alignment?
26. How can you verify that a VOR is unusable?
27. What are the different methods for conducting a VOR check?

**To answer questions 28-36, look at a New York VFR Sectional Chart**

28. What is the minimum altitude for a northbound flight to cross over the Green State Airport in Providence, RI (KPVD) Class C airspace without having to contact ATC?

- 29.** At what altitude does the Class C airspace begin over Quonset State Airport (KOQI) south of Providence?
- 30.** What does the magenta colored flag at the Newport State airport (KUUU) indicate?
- 31.** If you have established two-way radio contact with Providence Approach Control but haven't yet received clearance to enter the Class C airspace yet, what should you do?
- 32.** Assume you are operating in the Providence Class C area under VFR and ATC issues a clearance that would cause you to enter a cloud. Should you comply with the clearance? Explain.
- 33.** What does the "H" in the upper right corner of Providence VORTAC facility box indicate?
- 34.** According to the Green State ATIS, the ceiling is 800 feet overcast with a visibility of two miles. Can you land at KPVD under VFR?
- 35.** Assume the same weather as in the previous question and clear skies above the ceiling. Can you legally operate above the Class C airspace within the Lubbock terminal area, without obtaining VFR clearance?
- 36.** What minimum weather conditions must exist for you to enter the Providence Class C airspace without requesting Special VFR?

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