

## Section 12.2 Prince George ILS or NDB RWY 15 (GNSS) Approach with Prince Rupert, BC as alternate

**Approach plates and other supporting information for this question are contained in appendix B3.**

Assume that you are en-route to Prince George, BC from the southwest at 15,000 feet in a pressurized single engine aeroplane. You pick up the latest hourly weather for Prince George from Flight Service which reads as follows:

METAR CYXS 180400Z 13012KT 2SM RASH BR OVC005 OVC009 04/02 2985...

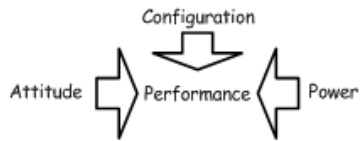
Based on the METAR, you decide to execute the *ILS or NDB RWY 15 (GNSS)* approach into Prince George.

The TAF for your estimated time of arrival at Prince Rupert, should it be necessary to route to your alternate reads as follows:

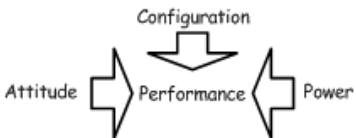
TAF CYPR 180251Z 1803/1815 11015G30KT P6SM +RA OVC006 OVC015 OVC050...

You may assume that you will fly the approach at 100 knots IAS and that you will fly the missed approach at 110 knots with a climb rate of 800 fpm.

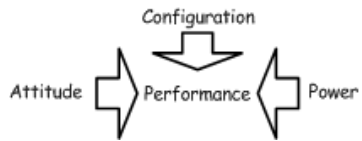
- 1) What are the hours of operation of the Prince George tower?
  - a) 24 hours a day
  - b) 0600 to 1800 local
  - c) 1400Z to 0700Z
  - d) 0700 to 1500 local
  
- 2) At Prince George, ATIS is available on frequency
  - a) 128.725
  - b) 118.3
  - c) On the Prince George VOR, frequency 112.3
  - d) ATIS is not available at Prince George
  
- 3) What are the legal minimums for Prince Rupert to be filed as an alternate?
  - a) 800 – 2 ½
  - b) 800 – 2
  - c) 900 – 1 ½
  - d) 600 - 2



- 4) What navigation equipment do you need to have on board in order to legally execute the approach into Prince George?
- VOR (with LOC capability), DME
  - ADF
  - ILS, DME
  - Choices a) or c) will meet the legal requirements
- 5) How much obstacle clearance does the 100 nm safe altitude on the Prince George approach charts provide? Prince George Airport is within designated mountainous region 1.
- 300 feet
  - 1,000 feet
  - 1,500 feet
  - 2,000 feet
- 6) The 100 nm safe altitude is referenced to \_\_\_\_\_
- The primary approach navigation aid
  - The geographic center of the aerodrome
  - The highest point on the landing surfaces
  - The same point as the MSA 25 nm
- 7) The most efficient routing to begin this approach would be:
- To the Northwood NDB (ZXS 260) and then descend in the hold to 3,700
  - To XIGUP and then join the 18 DME arc from the west
  - To ULEBU and then join the 14 DME arc from the east
  - Directly to VOLES for the straight in approach
- 8) 40 miles back from the Northwood beacon, you are cleared for the approach. At this point you will be able to descend to:
- 6,000 feet
  - 12,800 feet
  - You cannot descend until you reach VOLES
  - 5,700 feet
- 9) Assume that you are routing to Prince George via XIGUP intersection. The minimum altitude after passing XIGUP is:
- 7,600 feet
  - 5,800 feet
  - 4,900 feet
  - 3,700 feet



- 10) Again assuming that you are routing via the 18 DME arc to XIGUP for the localizer approach, determine the descent gradient required from VOLES to the minimum intermediate altitude at Northwood NDB (ZXS 260):
- 370 ft/nm
  - 197 ft/nm
  - 180 ft/nm
  - 787 ft/nm
- 11) In order to get to the localizer MDA at least 1 ¼ miles prior to the missed approach point, a descent rate of at least \_\_\_\_\_ will be required from the Northwood beacon at 3,700 feet
- 407 fpm
  - 678 fpm
  - 471 fpm
  - 604 fpm
- 12) If you are required to execute the missed approach, according to the approach plate, you will need to enter the hold at the Northwood beacon (ZXS 260). The appropriate entry to the hold would be \_\_\_\_\_ assuming a heading of 360° to the Prince George beacon.
- Direct
  - Parallel
  - Offset
  - Parallel or offset will be applicable
- 13) If the temperature at Prince George was -20°C (which it is not), what would the localizer MDA be?
- 2590 ft ASL
  - 2900 ft ASL
  - 2640 ft ASL
  - 2540 ft ASL
- 14) You are inbound prior to reaching VOLES when the Air Traffic Controller (who is an accredited observer) reports that the visibility has decreased to 1 sm. Under these circumstances \_\_\_\_\_
- You are compelled to execute a missed approach
  - You can continue the approach but should probably advise the controller of your intentions in the event that a missed approach becomes necessary
  - You can continue the approach but you will have to execute a missed approach should the visibility not improve by the time you reach the FAF
  - You are required to execute a missed approach as the reported visibility corresponds to an RVR which is below that for an approach ban



- 15) In the event of a missed approach your planned alternate is Prince Rupert, BC. Your minimums would be \_\_\_\_\_ in order to fly the approach to LOC/DME minimums
- 460 - 1
  - 460 - 1 ½
  - 620 - 2
  - 760 - 2
- 16) What will be your maximum allowable speed in the published holding pattern following a missed approach at Prince Rupert?
- 175 KIAS
  - 230 KIAS
  - 265 KIAS
  - 200 KIAS
- 17) When executing the published missed approach procedure, you would be expected to call \_\_\_\_\_ without further instruction from ATC
- As soon as possible after initiating the missed approach, when crossing the Prince Rupert beacon (PR 218) for the first time and when crossing the Prince Rupert beacon for the second time having completed the entry procedure
  - Prior to initiating the missed approach and when crossing the Prince Rupert beacon (PR 218) for the first time to start the hold entry procedure
  - As soon as possible after initiating the missed approach and when crossing the Prince Rupert beacon (PR 218) for the first time to start the hold entry procedure
  - As soon as possible after initiating the missed approach and when crossing the Prince Rupert beacon (PR 218) for the second time having completed the entry procedure

Section 12.2:  
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Question Number	Answer
1	c
2	a
3	a
4	d
5	d
6	b
7	b
8	b
9	c
10	b

Question Number	Answer
11	d
12	b
13	a
14	b
15	a
16	a
17	c