

IFR Flight Test Ground Questions

General

- Approach Ban
 - When it exists (RVR)
 - Conditions when in effect
- Explain DH & MDA (Be Specific)
- GPS Overlay Approaches (Bold Italics)
- 100nm Safe Altitude
 - Point of Origin (center of airport)
 - How much clearance from obstruction is there
- Where would we find Civilian Equivalents to PAR Approaches (CAP Gen).
- Can start climb portion of Missed Approach anywhere on final but must not turn until passing the MAP.
- Identify DME symbol on plate.
- Identify Lat/Long on approaches with GPS overlay indicating runway threshold.

Airports

Victoria

- Advisory Visibility
 - Is it governing
 - Why is it higher on Runway 09 than on 27 (lighting intensity)
 - Where can we locate definitions for lighting notation (CAP Gen)
- LB-257° - Lead Bearing
 - What fix does it originate from?
 - The purpose of it is?

- Intermediate Fix
 - Black vertical bar on Waypoint indicating IF Fix.
 - Purpose of IF fix (No PT required)

Smithers

- Advantage of DME for Approach
 - To identify the IF Fix (7.7 DME) to allow for a straight in approach (DME not required for the approach)
- Identifying the restriction on circling west
- When should you switch from the “TK” to the “YP” beacons when tracking inbound
 - Midpoint (see coffin Corner)

Terrace NDB/DME NDB A Approach

- Which profile do we follow on the DME approach (Solid one)
- How do we identify the MAP (timing on both approaches)
- Primary use of the DME is to identify the step down fix at 3 DME to 2100'
- “NDB A” & “NDB B” indicating that two separate circling approaches are authorized at the same airport.
- Night Circuit Procedures
 - Published “informally” to provide organized climb procedure for departure.
 - Obtain frequency for “TB” from CFS not published in CAP

Nanaimo

- Note on how GPS approach gets you lower than terrain on the Missed Approach procedure
- Lead Bearing on ARMAC transition.

Instrument Transport

6/10/2011

1) departure procedures to assure obstacle clearance

2) GPS accuracy, availability, integrity

3) circling approach procedures

4) minimum fuel emergency

5) contact approach (requirement)

6) requirement to plan an alternate using GNSS
Approach

7) thunderstorm penetration procedure

8) visual procedure

10) on the enroute chart black spaced line is
(RNAV route) T680

calculate

11) ~~the~~ the Alternate minima

12) communication failure ~~during~~ ~~procedure~~ 5 min after a SID

ATPL QUESTIONS

1. Medical requirement for a 43 yrs old pilot
2. Max Flight hours 300 in 90
3. PPC Check requirement (someone who hasn't had a PPC in a year.. can he be PIC or SIC)
4. Def. Of a Large Aircraft (the 12,500 thing)
5. Hi Altitude training requirements for pressurized aircrafts
6. Ground training – company written test
7. Commuter pilot recency = 3 T/O and Lnd in 90 days
8. Airline VFR fuel requirements (45 min thing)
9. CVR inop (the best answer was continue flights till end of itinerary)
10. ALT ALERT inop (best answer was “PPC Check or training flight”)
11. Pilot requirement VFR night air taxi with PAX
12. Aircraft requirements single engine night with passengers
13. TODA and TORA (it was about clearway – is it a part of TORA or TODA)
14. LDA in flight plan commuter for a large turbo prop aircraft (have to stop within a distance not to exceed 60 or 70 or 100 or 115%)
15. A/C able to maintain with 1 ENG inop how far can it fly offshore without having ANY survival equipment available on board
16. When can you disturb an accident scene (extricate a person, prevent fire, etc..)
17. What airspace do you enter when you leave the southern boundary of the Arctic Controlled Airspace on a southbound flight
18. Control Area Extension in High Level Airspace (that was the answer, can't remember the question)
19. Airline Flights in Mountainous region (2000-5)
20. Advise ATC of speed changes w/in +-5%
21. In the Standard Pressure Region. You are flying at 240 and was cleared to descend to 180 and hold. When do you set your ALT to local airport setting
22. MNPS NAT 285-420
23. CMNPS reporting requirements (LONGS and LATS)
24. ASI indications when Static Port blocked (over read and under read)
25. How do you improve HF reception (SSB thing)
26. PSR, SSR and TSR which one doesn't require an airbourne x-ponder and is Wx det. capable
27. EPR (turb disch tot press vs comp inlet tot press)
28. Compressor bleeds = to prevent stalls
29. Free turbine eng = not true that the power turbine is connected to the compressor shaft
30. Balanced Field definition with a bunch of answers I couldn't remember
31. What safety component prevents the aircraft altitude from exceeding the cabin alt
32. Best CG for Long stab about the Lat axis is it far AFT of CP, near CP or FWD of CP

33. Canard design means..... can't remember the answers but I think it was about a forward air foil
34. ILS beam width 1.4 (glide path total width)
35. RNAV enroute 1 Dot = $\frac{1}{2}$ NM
36. LOC reliable range at 10 NM 35° either side of front course
37. Dynamic hydroplaning when the A/C lifts up and rides on a film of water
38. One question on 3 bar VASIS without a diagram. I think it goes.. a pilot of an aircraft with EWH of less than 25' should refer the Upwind, Middle and Downwind indication (in that effect)
39. One question on PAPIS with a diagram
40. RWY upslope + Rain = illusion of being high with potential of crossing threshold with speed higher than normal and lower than normal
41. The least vortices are caused by a fast clean aircraft
42. Winglets increase form drag and decrease induced drag
43. A question on Mcrit and shockwave
44. Type I de-icing fluid – degree of protection against re-freezing and further accumulation (and they use terms like good, very good and not so good)
45. ICE – effect on lift and drag (the 30-40 thing) 30% reduction in lift, 40% increase in drag.
46. 3 practical W&B questions identical to your questions from the workbook on CG, ARM, %MAC, and MAX PAYLOAD using the diagrams on page 5-9, 5-10 and 5-11
47. 1 CRFI question on max allowable x-wind from a certain direction to the runway bearing in mind the aircraft max allowable x-wind is 20kts – using the same diagram on page 5-13
48. a weight shift question straight forward $w/W=d/D$
49. a question on PNR Dist and time $Time\ to\ PNR = \frac{ExH}{0+H}$; $Distance\ to\ PNR = \frac{Ex \cdot 0 \cdot H}{0+H}$
50. a question on CP Dist and time
51. MET started with 7-8 weird questions I have never seen anywhere
52. Why is water vapour important
53. What kind of wx you expect when unstable air – typical flying day conditions – the choices included a combination of = rain - updrafts and downdrafts – vertical cloud development - poor visibility – turbulence – I can't remember what was the exact wording
54. What does moisture to air masses
55. ONLY 2 QUESTIONS ON GFA's one was about how many charts in a GFA (3 and 3) and the other was = where do expect ice in a flight from point C and the answer was SFC and it was very obvious because nothing else was around on the chart. !!!
56. NO COMPLEX LOW QUESTIONS WHATSOEVER
57. 2 questions on CAT and polar and tropical jet stream
58. VIRGA is an indication of a dry microburst — results in intense temp cooling
59. W/Shear on ILS requires power inc and nose up then lower than normal
60. Lenticular clouds found further down from the wave crest
61. Attenuation is caused by intense precip like rain

flooded runway

* →
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Examination questions which are related to the following were answered incorrectly:

- Calculate landing weight.
- Calculate maximum payload
- Compute the critical point.
- Decode a METAR.
- Identify hydroplaning properties.
- Identify the components of a turbine engine.
- Interpret upper level winds chart.
- Recall flight plan alternate requirements.
- Recall tailplane stall symptoms.
- Recall the emergency equipment required for flight over water.
- Recall the flight duty time regulations for a commercial air service.
- Recall the requirements for applying cold temperature corrections.
- Recall what affects GPS accuracy, availability and integrity.

IATRA

Meteorology

What do ice pellets indicate encountered by an aircraft flying in the cold air mass below the clouds of an upcoming warm front?

- Freezing rain aloft
- ?

What does the presence of VIRGA indicate?

- Mechanical turbulence
- High humidity
- ?

Covered time period of FAs (not really clear if the outlook period is considered part of the coverage)

- self explanatory

Surface Prognostic Charts show the weather pattern

- at time of issue
- 36 and 40 hours in the future
- ?

Which type of fog is unlikely to disappear quickly with rising temperatures/ sunshine during the day?

- Radiation fog
- Upslope fog with strong winds
- Fog over large bodies of water
- ?

Navigation

Based on a VFR flight from St. John's, NF to St. Anthony, NF with a stopover at Deer Lake, NF., later being rerouted to Springdale, NF. As an alternate instead of Deer Lake.

Including time, distance, ground speed calculation, wind correction (you have to decide, which of the 2 correction methods to apply, but only opening/closing angle method matches the answer options), relative bearing question (fixed card ADF), intercept Radial (find MH considering 70 deg. intercept angle, wind condition (given in magnetic as departure wind, so it's easy, but don't apply any variation calculation),

You are given a certain position relative to a radial and a OBS setting - you have to determine CDI position and TO/FROM indication.

You have to determine with 4 given NOTAMS if you can use Springdale as an alternate (NOTAMS refer to snow on the runway with an "approximate" expiry time, radio aids u/s and lighting u/s).

You are asked about the true obstacle height indicated in the obstacle quadrants of the CFS for Deer Lake.

With the appropriate formula you have to determine the reception range of a VOR for a given altitude, you are asked how LORAN - C works and what the most critical time of the day is for NDB reception (night or dawn/dusk).

Frequency to contact Springdale.

62. 8-10 questions on TAFS like:
 - how do they call for WIND CALM in TAFS
 - Winds True or Mag
 - Ceilings and Wx at certain hours
 - When do you expect the next forecast
 - Vertical Visibility
 - Ground layers
63. 6 questions on METARs – 2 of them on SLP - very easy to decode –
64. the exact same LADY FRANKLIN – COPPERMINE and BR-22 question
65. 2 questions on ACAS TCAS about x-ponders
66. 2 VOR navigation questions
 - you are on the 160 radial inbound with the needle cent. What indication would you get if you turn your OBS to 170 what indication would you get.
 - Check tolerance on the ground
67. Cruise performance question on the diagram on page 5-22 asking for time and landing weight. The problem with this question is that they give you a laminated chart and thick red and blue pens and there are 2 answers that are ridiculously close together. I am not even sure I got it right.
68. Most of the practical questions had at least 2 very close answers. I think they do that on purpose. They don't want you to score high, no matter how hard you work...

- C) 5,6
- D) 10,12

28. WHAT SPEED IS FOR RETRACTED FLAPS?

29. GROUND EFFECT?

30. CROSS WIND CALCULATION BY THE CHART

31. WHAT IS THE CONTROL ZONE AT OTTAWA CARLINGTON?

32. BEYOND GLIDING DISTANCE

X) LIFE JACKET

33. GROUNDROLL DISTANCE
AT 27 KTS LEVEL GRASS

10% PER 9 KTS DECREASE
15% INCREASE FOR GRASS CODITION FROM TABLE

34. FORMATION OF THUNDERSTORM

35. NIMBOSTRATUS

36. BY THE CHANGE OF CLOUDS WHICH FRONT IS APPROACHING

37. SLAIGHT LINE

wieght + Balance

Mult-engine Flight test
ground portion.

Trip for two hours

your wieght

3 other people (Summer)

120 lbs baggage

Fuel for two hours

Take off

~~landing~~ distance 50 ft obstacles

Landing distance with total weight of 4104 lbs. (Bob)

→ I told that I would not land with this condition.

because the weight was over maximum $\frac{1}{3}$ weight (4000 lbs)

And he gave me another weight (4000 lbs).

Aircraft documents needed on Aircraft for flight.

Speeds of Aircraft.

- V_{SO} , V_{SL} , V_{IE} , V_{IR} , V_{SSE} , V_{YSE} .

VMC - what is VMC

How is it determined. - he said full Rudder deflection.

IN FLIGHT

- Alternator failure (Right) with left ENG failure -
- cross feed lines.
- Emergency procedures.