97/1/13

PLS NOTE: SOME QUESTIONS WERE ANSWERED BY PREVIOUS PERSON, BUT IN MANY CASES THEY WERE WRONG! DON'T TRUST PREVIOUS PERSONS ANSWERS!

→ LESS NOISE IN THE EARLY PART OF DAY!

35 (MAKE SURE NO ONE SITS BEHIND YOU SO YOU CAN USE 2 TABLES ~~OR~~ (1 FOR THE CHARTS).

WANTED: MEDICAL, LOGBOOK & FLYING HRS ← DID NOT CHECK BUT YOU MUST SIGN AS [CAN BRING IN FOOD.] OR STUDENT PERMIT. VALID.

(EAR PLUGS!)

AIR LAW:

1) — HEIGHT TO FLY ABOVE UNCONTROLLED AIRPORT TO CHECK WINDS & TRAFFIC?

(4 ~~NOT~~ OBVIOUS ANSWERS LIKE: 1000, 1300, 500, 2000) I THOUGHT ANSWER WAS 1500 BUT IT WASN'T A CHOICE?

2) — LOWEST HEIGHT ~~TO FLY~~ PERMISSIBLE TO FLY ABOVE A BUILT UP AREA (IF NOT TAKING OFF OR LANDING AT AN AIRPORT):

1) LOWEST ALT. THAT DOES NOT POSE A HAZARD TO PEOPLE OR PROPERTY IF AIRCRAFT MUST LAND, ETC.

2) 500 FT

3) 1500 FT.

4) 2000 FT.

3) — WHAT CONSISTUTES MINIMUM VFR IN CONTROLLED AREA: ~~VIS~~ CEILING, VIS & HORIZONTAL DIST FROM CLOUD. (NOTE: DID NOT ASK FOR VERT. DIST FROM CLOUD)

4) — ADVISORY AIRSPACE QUESTION. (IF PILOT SEES ADVISORY AIRSPACE ON CHARTS SHOULD HE:

~~1) [illegible]~~
~~2) [illegible]~~

1) RUN AWAY.
2) NOT GO IN DURING TIMES ON A NOTAMS OR NOTAMS, ETC. ✓
3) ONLY MILITARY AIRCRAFT ALLOWED.
4) SET THE CONTROLS FOR THE HEART OF THE SUN.

5) — WHEN DEPARTING MF AIRPORT, ~~WHAT IS~~ WHEN DO YOU CEASE TO MONITOR MF?

1) AT CRUISE ALT.
2) ~~IN CLIMB~~. ESTABLISHED IN CLIMB.
3) WHEN OUT OF CIRCUIT.
4) ? ~~FOUR~~ BEFORE CRASHING INTO MOUNTAIN WHILE TRYING TO CHANGE RADIO FREQUENCIES.

6) — A LANDING LIGHT IS REQUIRED WHEN?

① (CARRYING PASSENGERS ④ NIGHT), ② AT CONTROLLED AIRPORTS ③ ⑤ UNLIGHTED AIRPORTS, ⑥ WHEN IT'S DARK OUT ⑦ IF YOU'RE AFRAID OF THE DARK!

7) — IN ORDER TO CARRY PASSENGERS YOU NEED ___ TAKEOFFS & LANDINGS WITHIN THE LAST ___ MONTHS. (FUNNY THAT THERE IS NO LIMIT TO THE NUMBER OF CRASHES YOU'VE HAD IN THE LAST 5 MONTHS).

8) — OVER CONSIDER MEDICATION CAN CAUSE GROOVY FREAKOUTS MAN! THE SAFEST THING TO DO WHEN TAKING MEDICATION IS TO:

1) WAIT 24 HRS
2) WAIT 8 HRS
3) WAIT 48 HRS
4) CONSULT A MEDICAL EXAMINER BEFORE FLYING.
5) TAKE LOTS ~~OF [illegible]~~ UNTIL YOU CAN FLY WITHOUT WINGS.

AIR LAW CONT

9) — NOTAM: RUNWAY CLOSURE: WILL RUNWAY BE OPEN WHEN YOU ARRIVE AT X HRS?

10) — FLIGHT ALTS. ARE BASED ON:

1) TRUE TRACK.
2) MAGNETIC TRACK.
3) TRUE HEADING.
4) MAGNETIC HEADING.

11) IF PILOT IS AWARE OF MEDICAL COND. THAT WOULD MAKE HIM UNFIT TO FLY, ETC. ING/SING SHOULD:

1) NOT FLY.
2) FLY BUT SEEK MEDICAL ADVICE AFTERWARD.
3) FLY ANYWAYS - WHO THE HELL IS GOING TO FIND OUT?
4) INFORM THE MINISTER ← SERIOUSLY THIS WAS AN ANSWER! LIKE I'M WOULD CARE! INFORM THE POPE INSTEAD.

12) WHAT IS THE TIME LIMIT TO INFORM FSS OF YOUR ARRIVAL AT YOUR DESTINATION.

1) 30 MINUTES.
2) 60 MINUTES.
3) 12 HRS
4) 24 HRS.

runway lights - night →
→ can you see light moonlight
- no you cannot - runway end
and some lights.
- no approach light.

- What factor contribute to density
pressure
- temp
- altitude

- squall line - relate to cold front

- cold heat during Take
- high octane fuel.

- what factor would contribute to
high oil pressure - too much oil
- too little oil
- viscosity

- if you demand an apology & you receive
  - stop your descent
  - point to the R
  - " " " L
  - do a circle

- at 4500 : aircraft at 12 o'clock

- if you climb — an aircraft coming toward you what you do.

- after a cold front passes in day, what do the winds do

- wind shear — take off climb — with wind shear forward

- turn on left ⊙ - you are on the ground are you turning left.

- what would cause the ac aircraft to pitch downward — turning overhead, downwind

up wind.

Taking – wind on at 20 knots at 5 o'clock, what should you crosshole.

Wheel banning during a crossing takeoff, how do you correct it.

– control column fw.

Snow ice frost on the aircraft, what does it affect.

– wing
– critical areas
– lift
– weight

Taking off runway 07 – turn left

now ~~to the~~ D → VOR

– radial
– bearing

- Flying correct altitude, what do you fly - TT, ~~[illegible]~~ - TH - MH MT.

- MVFR.

- WX ~~[illegible]~~ min or in control zone

- Runway notam - first 1000 ft. runway close

- Peterborough - airport info re data on map. which is true

- abandoned airport.

- Orillia

- over flutter, antenna
  - class of airspace

mobile

Private Pilot Licence Questions Bob Mills January 11/99

Air law

1. Transfer of records in technical log. How many entries must be made in a new technical log from the previous log? PPL study guide TP12880E states "shall make the entries relating to the preceding volume that are necessary to insure that an unbroken chronological record is maintained."
2. Weather information. When a flight itinerary is filed with a responsible person is it necessary for that person to notify FSS, ATC or CARS station on the arrival of the flight to its destination? TP states "insure that the following are **notified if the aircraft is overdue.**
3. Lighting. What is the minimum AERODOME LIGHTING used for night operations? TP states, "two rows of white lights (or retro-reflective markers capable of reflecting aircraft lights) visible for at least two NM for an aircraft in the air. Note: one of the options in question adds red or green lights at the end of the runway, but that requirement is only for major airports.
4. Oxygen equipment and supply. At what altitude is oxygen required? Options up to and including 13,500 in choices. TP states, "flights exceeding 30 minutes at cabin pressure altitudes above 10,000 feet ASL, but not exceeding 13,000 feet ASL."
5. Aerobatic maneuvers. A person may conduct aerobatics maneuvers with passengers? TP states, "not unless PIC has engaged in at least 10 hours dual flight instruction in the conducting of aerobatics maneuvers."
6. Flight altitude. No person shall fly an aircraft over the built-up area of any city, town less than _____ above the highest obstacle within a radius of ____ from the aircraft. TP says 1,000 ft. and 2,000 ft. (CARS 602.14)
7. ELT. In the event of an emergency when should ELT be turned on and how long should it be left on? Options included after aircraft down, immediately, etc. and included turning off and on to conserve the battery. See FGU page 242. Ensure ELT is on immediately and sending a signal and leave on until flight plan expires. Once ELT is on; leave it on until you have been positively located and have been directed to turn it off by the SAR forces.
8. Flight level. An aircraft is in level cruising VFR flight above 3,000 feet AGL in Class E airspace. As the track is 315', the aircraft shall be operated at an? Options include even and odd altitudes as well as same with 500 feet. TP says, "even thousand plus 500 foot altitude."

AERONAUTICS – GENERAL KNOWLEDGE

1. Use of Carb Heat and its Effects on Mixture. While having the carb heat on will have which of the following effect? TP says, "using carburetor heat results in a reduction of power and a more rich mixture because the **warm heated air being sent to the carburetor is less dense.** Watch out on this question because one option is the same answer but states, "more dense."

Other questions include the following sections of study:

1. Surface Heating and Cooling re: fog.
2. Understand when wind veers and backs
3. What is trailing edge of cold front?
4. Wind Shear – types and causes
5. Classification of clouds
6. How long a period is a surface weather map for?
7. What is a squall line?
8. Relative Humidity and dewpoint
9. Pressure Altitude

Final comment: Everyone is different on their approach to exams. I completed the air law, aeronautics and meteorology first so that I had the bulk of time for navigation. One of the best tools to prepare for the exam is to know the answers from the Langley Flying School final test.

(AERO KNOWLEDGE CONTINUED)

9) — IF ~~C~~ C OF G IS TOO FAR AFT: (4 CHOICES DEALING WITH IT'S EFFECT ON SPIN CHARACTERISTICS)

1) FLAT SPIN ~~WILL~~ COULD OCCUR ← MY CHOICE.
2) NO CHANGE IN SPIN CHARACTERISTICS.
3) AIRCRAFT WILL NOT SPIN
4) STUPID ANSWER

10) — FIGURE OF TURN ~~&~~ ~~SLIP~~ KO-ORDINATOR → WHAT IS REQUIRED FOR A COORDINATED RATE ONE TURN: 4 CHOICES (3 INCLUDED ALLERON INPUTS ONLY ONE WAS LEFT RUDDER ONLY).

11) — RUNWAY GROUND ROLL ON GRASS & WITH 27 KT HEADWIND. USE CHARTS, ADD 15% (OR MAYBE 10%) FOR GRASS (SAYS ON CHART IF YOU LOOK HARD ENOUGH) & THEN SUBTRACT 10% FOR EVERY 9 KTS OF HEADWIND. OR 30% TOTAL IN THIS CASE.

12) — C OF G CALC. USING "CGSSNA" TYPE CHART. (MIGHT HAVE BEEN IN NAV. SECTION)

13) — IF ONE MAG GROUND IS DISCONNECTED:

1) ENGINE WILL NOT START
2) ENGINE WILL NOT SHUT DOWN IF "MAGS OFF" SELECTED.
3) ENGINE WILL RUN WITH LESS POWER (?)
4) STUPID ANSWER: ENGINE RUN TOO RICH/LEAN OR SOMETHING.

14) — ~~IF~~ IN IFR CONDITIONS, A PILOT WILL FEEL OR THINK A DECELERATION OF THE AIRCRAFT AS/IS A:

1) TURN
3) CLIMB
3) DESCENT
4) GROOVY FREAK OUT.

97/1/3

PLS NOTE: SOME QUESTIONS WERE ANSWERED BY PREVIOUS PERSON, BUT IN MANY CASES THEY WERE WRONG! DON'T TRUST PREVIOUS PERSONS ANSWERS!

AIR LAW

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4) — ADVISORY AIRSPACE QUESTION. (IF PILOT SEES ADVISORY AIRSPACE ON CHARTS SHOULD HE:
~~1) NOT ENTER~~
~~2) ONLY~~
1) RUN AWAY.
2) NOT GO IN DURING TIMES A OR NOTAMS, ETC. ✓ ON CHART
3) ONLY MILITARY AIRCRAFT ALLOWED.
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7) — IN ORDER TO CARRY PASSENGERS YOU NEED ___ TAKEOFFS & LANDINGS WITHIN THE LAST ___ MONTHS. (FUNNY THAT THERE IS NO LIMIT TO THE NUMBER OF CRASHES YOU'VE HAD IN THE LAST 6 MONTHS).

8) — OVER COUNTER MEDICATION CAN CAUSE GROOVY FREAK OUTS MAN! THE SAFEST THING TO DO WHEN TAKING MEDICATION IS TO:
1) WAIT 24 HRS
2) WAIT 8 HRS
3) WAIT 48 HRS
4) CONSULT A MEDICAL EXAMINER BEFORE FLYING.
5) TAKE LOTS ~~OF YOGA~~ UNTIL YOU CAN FLY WITHOUT WINGS.
6) CHECK INTO BETTY FORD CLINIC. SAY NO TO HOLLOW GRAMMAR.

AIR LAW CONS

9) — NOTAM: RUNWAY CLOSURE: WILL RUNWAY BE OPEN WHEN YOU ARRIVE AT X HRS?

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4) 24 HRS.

① 2.3 Gal. climb
4.5 Gal/HR cruise

Cruise 55 Min. ÷ 4.5 = 4.1
+2.3 Reserve
6.4
.8
7.2

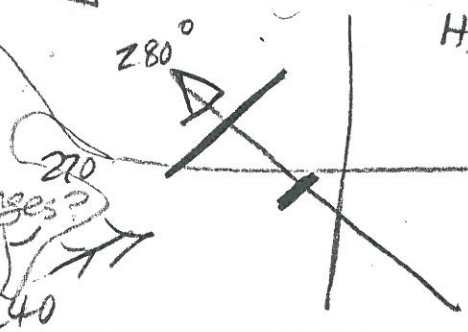
Calc TOT Amt. of fuel req.

Answers:
7.0
8.1

② "Given" of 280° / Flying at 6,500 / A to C

	6,000'	9,000'	
A	28/23	28/22	280°
B	24/24		> 260°
C	24/25	24/25	240°

↑ 23-24 kts



Headwind.
(1) No Dif.
(2) Stronger at C
(3) Gaining Strength if travel thru B.
(4)

- When to Notify ATC if Flight plan changes? (Soon, 20 Min, 30 Min, 60 Min arrival)
- Tracking Pt. A to Pt. B what air space do you go Thru?
- Manouvering Area of aerodrome
- Height to fly above aerodrome w/ & w/out intention of landing.
- Class D reverts to what class after tower closes.
- Procedure to land at uncontrolled airport (joining circuit)
- C.F.S. – Comm. Freq. to contact tower.
  Rwy – Displaced threshold / actual magnetic heading / circuits (right/left)
- VOR – Tracking (To or From)
- Opening & closing angles (Navigation)
- Constant Speed vs. Fixed Prop / Manifold vs RPM-Carb Heat
- Put on Full Carb heat / RPM's ↑ / Why?
- Engine Backfires while cruising: Do you (1) lean mixture (2) enrich (3) Add Throttle (4) Reduce
- E/W Track based on: • True track - Mag. Track • True Heading - Mag. Head.
- Weather:

Metars, TAFS, FA, FD. } Provided – Q's regarding, based on understanding what is happening
(Cloud covers, ceilings, temp/dewpt.'s Altimeter, winds)
(combines w/ Q's RE: VFR Flight Minimums.)

- Cumulonimbus (CB's) – What are They (define) / vs. Cumulus (and know TCU)
- Low Front passes – What will The winds due? veer, back, ↑, ↓, stay same, change Dir.
- Know fronts by symbols on Surface Charts (Squall Line, Warm & cold fronts, occluded, Stationary)
- Flying Through steady rain:
  ↳ Will you encounter turbulance, wind sheer etc.
- Advection / Convection – understand

PRIVATE PILOT EXAM | APRIL / 2000

Advice: KNOW: How to quickly find places given - latitude & longitude!

→ Review: Metars / Tafs / FA's / FD's / Surface Charts (Actual if poss. & understand + issue time/day & Valid period)

→ Culhane - Exams were helpful.

→ Do The Navigation Qs on From the Ground Up (on practice exam in back).

Calc. { • Fuel Useage • Ground Speed • Heading
• Leg Time • Weight & Balance - w/chart & without

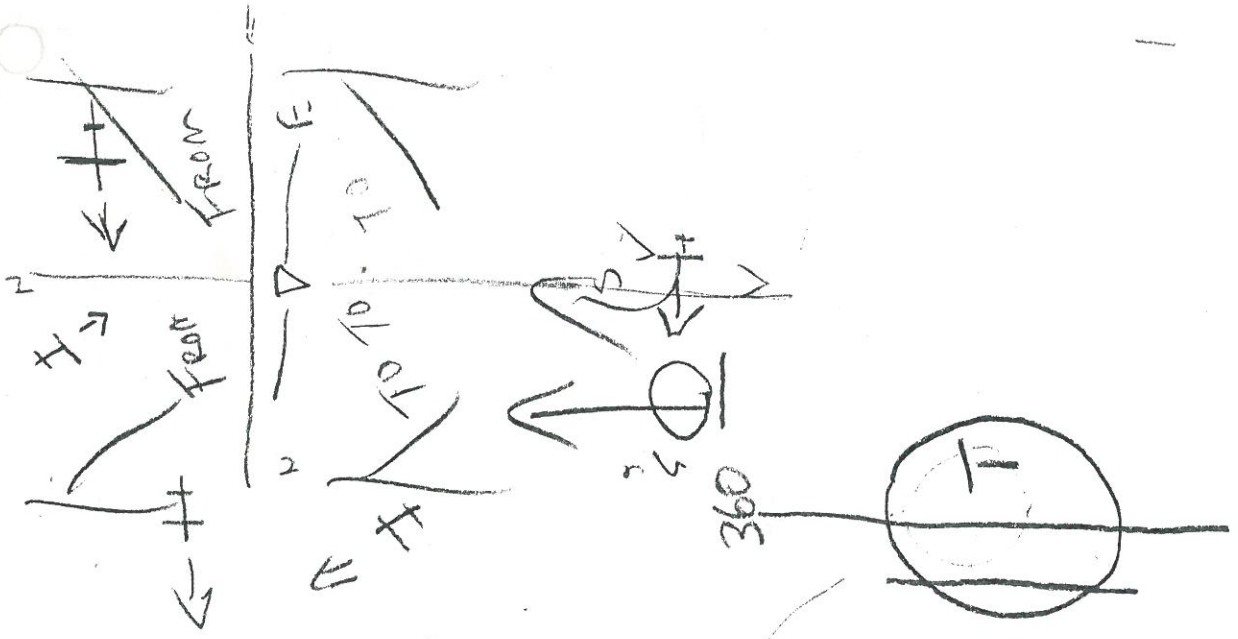
- Runway Numbers of N. end of N/S runway. (36, 18, 360, 180)
- Altimeter Setting in Standard Pressure Region.
- VFR Flight in Class B - what to do if weather min. drop.
- Which Flight instrument is connected to both Pitot & Static
- What speed is at the bottom of the green arc.
- Why does stall speed increase in a turn (Is lift reduced or is there a greater load on wings)
- When told to Squawk - what do you do? (dial in code, press ident, turn to standby)
- Aerobatic flying with passengers (allowed?)
- Landing at night with bright moon, one row of lights at runway - is this approved?
- Altimeter of 29.92 at Airport A (Altitude 500') & 29.52 at Airport B; (Altitude 2,000'
  If take off from A, Altimeter 29.92 & land at B. w/out changing Altimeter - will it read: low, high, same
- Have strong headwind for landing, if sudden change to calm; will airspeed increase & land long or groundspeed increase & decent steepen or?
- How will frost on wings affect airplane on take off? (weight increase, lift decreased etc.)
- Airport with simultaneous movements - can you anticipate; (take off over cross runway w/ Airplane on it / land & hold short of crossing active rwy; land on parallel, t/off on parallel rwy)
- Why can airplane lift off at speed lower than stall speed / not able to climb out at same speed?
- Define Best rate of climb
- Cross wind components: / max degrees angle allowed for given wind speed / Airplane.

- Elevation Q. (Height ASL/AGL) of obstacle
- From Map: Length of Runway / Paved?
  Airport Info. Who to contact / comm. freq.
  # = What (Other Symbols c/b used)
  (Start) Airport Height (AGL/ASL)
- Ground Elev. 282' at airport. (METAR says 3,000' ceiling) – what height will you expect to find ceiling at after taking off?
  - 3,000 ASL
  - 3,300 ASL
  - 2,700 ASL
  - 2,700 AGL

→ NAV. Centered around Toronto / Ottawa / Great Lakes

Small Towns / Cities { Stanton TO
White Lake (Town)

- Measure + Calc. G.S. / Fuel etc.



Brian Marsh
Feb 15, 2001

Private Pilot exam

1. Procedure after taking prescription medications – anti histamines, cold treatments etc
   Consult a CAME
   Read the medication documentation
   Wait
2. How long should one wait before flying after taking local anesthetics?
3. Ground effect
   Reduces cushioning when landing in a high wing aircraft
   Unable to climb after reaching TO speed
   Assists slowing and braking after landing
4. Metar
   Forecast period
   Applicable to specific time
5. Effect of C of G on ???
6. Illusions of drift, turning from down-wind to up-wind
7. Perceived effect of deceleration
   Motion reversal
   Climbing
   Descending
   Turning
8. PAPI's
   Refer to figure to determine approach slope – high, low etc.
9. Turn co-ordinator
   Refer to figure of TC while taxiing, state movement of a/c
10. ASI figure – state relevance of lower limit of green arc
11. Heading 59° required for track of 69° - what heading is required for the return flight
12. Off course 11° to the right after 15 minutes, how long should be flown and on what heading to return to planned track, then what heading to be flown to complete journey along planned track.
13. Over point "A" at time "x", and over point "B" at time "Y" – using VNC chart. Predict new ETA.
14. What frequency should be used to relay updated ETA?
15. Definitions of maneuvering areas
16. Airframe icing affects control surfaces i.e. wings, rotors. From list define the other control surfaces.
17. Principle reason for not using Carburetor heat when taxiing
18. Symptoms of carburetor icing
19. Impact Ice – effect on carburetor and fuel injection systems
20. Triangle of velocities – identify components (as per LSF Exam #10)

21. Flight planning – Stanhope – Bellville – Ottawa International. Highest obstacle (MEA)

22. Scale off latitude and longitude of a town on the above route.

23. Use CFS example; circuit direction, customs available, which quadrant has highest obstacle, ARCO ???

24. List of clouds, starting with cirrus – name weather system that is approaching

25. Line squall indications – i.e. line of thunderstorm clouds

26. Use FD's to compare headwinds from A to B

27. Which set of conditions adversely affect aircraft performance – high/low pressure, high/low temperature, high/low humidity

28. Which is the indicator for formation of clouds – Dewpoint

29. Flotation equipment to be carried when beyond gliding distance over water

30. How long can one fly at 12,500 ft without oxygen.

31. Exemptions for filing a flight plan – i.e. itinerary, with 25nm of base

32. VOR use, flying into Ottawa on radial 220 – TO or FROM and 220 or 40

33. Which instrument would fail if the pitot tube was blocked.

34. How should an ELT be tested i.e. 121.5, turning on

35. Except for the purpose of landing and taking off, the lowest altitude to be flown in a populous area.

36. Definition of night for VFR flights.

37. In the weight and balance calculation, expected to know the weight of Avgas.

38. Best rate of climb – i.e. best wrt time, distance

39. What distance does 1" represent on the 1:500,000 VNC chart

40. What does "VV" mean in the METAR i.e. overcast or obscured at x'

41. when climbing would the magnetic compass:-
1 over-read to the north
2 under-read wrt to north
3 be unreliable

- What is a measure to indicate cloud formation?
  - dewpoint
  - humidity

Private Pilot Exam - written Nov. 30th, 2001

Navigation

- Nav. exercise was in Ontario between Ottawa's Int'l Arpt, a private runway (PPR! There was a question on this), and a smaller Municipal Arpt.
  - one diversion was given, for a passenger drop-off.
  - know diff. btwn. air/flt. time and that total flight time on a flt. plan includes the stop over.
  - speedy E6B skills essential!
  - familiarity which sequence of frequencies (know who you should talk to next i.e. airspace. Watch route of flt. my path was just on the outside of a ctrl. zone and the question asked if I had to talk to them: You don't!).
- know when heights ASL/AGL are used in TAF's, METAR's, GFA's as well as validity periods of each.
- know which frequency to dial up and which radial to fly when using nav. aids.

Meteorology

- cloud types and what kind of wx each is associated with.
- cloud cover (to determine ceiling)
- types of precip. and assoc. dangers (i.e. is sleet more dangerous than ice pellets?)

Best Hints:

his notes follow this page

- steve slode, who wrote in Aug. 96 might have had the same test as myself. He had the same nav. ex. If you read his comments you should get a good general idea of what is expected.
- If you log on to www.aerotraining[redacted].com, Riley Burke has put together 4 complete exams at 4 levels. If you can pass all of these without referring to the books you have nothing to worry about. Many of the questions appeared exactly the same on my exam. I HIGHLY suggest you look over these!

Good Luck!!!

1. Aerodrome Lighting for night?
2. When should an ELT be put on? - Do not think of test.
3. If at 355° - even thousands + 500'
4. What happens in Convergence?
5. What is the upper white limit on the ASI?
6. Blocked Static Port - what instruments fail?
7. What instruments are required for day VFR flight?
8. Radiation cooling causes?
9. High Octane Fuel causes?
10. Use of Carb heat while taxing?
11. Acceleration Compass Errors?
12. When does most serious Carb Heat occur?
13. Trailing Edge of Cold front?
14. Veering and Backing - when does it occur and what happens?
15. Low Level Wind shear - what will happen on take-off
16. Surface Weather Map - 4 x daily, every 6 hours
17. Down Sloped runway appears?
18. Rain on windscreen makes mountains appear?
19. IMVFR requirements
20. SVFR requirements

Barrie → Hanover → London

4500' ASL

- Highest point on path
- range from Hanover → London - Colour of Hypsometric tint
- Class of airspace
- Double track question
- C. of. Gravity + Moment not in allowable portion
- Notam - runway partially closed
- Wake turbulence } Understand these
- Ground Effect }
- Flaps in a spin - when to use
- Closed runway - marked by?
- Documents required on board a private aircraft?
- Height above uncontrolled airport to check winds?
- Way to join right hand circuit at uncontrolled airport?
- Know what skid looks like
  - " " slip

Private Pilot
Transport Canada Exam

Don Krehwe
16 Aug 2002

Meteorology

- Clouds form when moist warm air overruns cold air because the warm air cools as a result of expansion
- How do winds blow around Highs & Lows in the Northern Hemisphere? The Southern Hemisphere?
- Wind Shear hazard associated with drop in strong head wind as an aircraft approaches for landing?
- Definition of air mass
- What is an altimeter setting? Give and explain definition
- Structure & Development of a Thunderstorm
- Pressure Gradient of wind
- Characteristics of stable & unstable air
- Clouds and their associated precipitation and Turbulence
- Characteristics of frontal weather
- Lifting processes - know at least 4 of them
- Differences between land and sea breezes

Air Law

- Forest fire operating restrictions
- Formation flight → when, where allowed / not allowed
- Take-off & landing from aerodromes at night
- SVFR → where, when and minima
- Airport & Aerodrome Operations for controlled & uncontrolled

Nav

- MF reporting procedures on arrival
- Aerodrome operations → Procedures for the prevention of runway incursions
- ~~AR~~ DF steers
- Procedures when lost
- Map Reading, Map Reading, Map Reading

Aeronautics - General Knowledge

- Fuel - Air mix in the Carb
- Methods of engine cooling
- Carb icing → when, where, how, why, what to do about it
- Fuels → types, colours & properties
- Stalls & aircraft performance
- Spin recovery sequence
- Indicated & True Stalling speeds & what effects them
- Stall speed vs. altitude
- AirSpeed indicator and its errors
- Effects of density altitude / humidity
- Aircraft critical surface Ar contamination - icing & frost (hoar)
- Time must wait to fly after General Anaesthetics
- Decision making and factors affecting that
- Toxic hazards to the pilot (Carbon Monoxide)

Transport Canada
Private Pilot License Exam - Debrief
Taken: June 16, 2011 – Greg Booker

It was nice to have water and a banana during the exam. I found it tiring but I'm an old guy.

Q: PA 4000', +20 C, aircraft 1600lbs, dry grass runway, 18kt headwind, using the chart provided your take off roll will be?

Q: You and 3 friends are on a 2 hr VFR flight on 233'M. What is your highest cruise altitude?
ANs: 1) 8500 2) 9500 3) 10500 4) 11500

Q: PA 5500, +2 C, IAS 120 kts. Assuming IAS and CAS are the same what is your TAS?

Q: The greatest reason to issue a SIGMET would be for?
Ans: 1) heavy rain 2) hail 3) high winds 4) poor visibility Are you kidding me? I chose hail because hail = TCU=TS=WS=bad day for flying. ???

Q: Virga describes what occurrence?

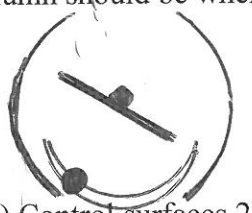
Q: During a high banking turn the control column is abruptly handled, this could result in:
Ans: 1) aircraft stalling 2) airframe designed stress load being exceeded 3) the fuselage twists 4) spiral dive

Q: Applying full flaps on final will? The answers were in multiple groupings. I answered: Increased lift, increased drag, and increased approach angle

Q: A blocked Static Port will affect what instruments? Again, answers were in multiple groupings

Q: The wind during taxiing is at your 10 o' clock, your control column should be where?

Q: This gauge is indicating the aircraft is doing what in flight?



Q: Flying in icing conditions is dangerous because it effects the: 1) Control surfaces 2) Lifting surfaces 3) Critical surfaces 4) aircraft weight

Q: TAF's are given in: 1) ASL 2) AGL 3) ? 4) True elevation

Q: What is hydroplaning?

Two questions on Carbon monoxide poisoning. What are the effects? How long do the effects last?

Q: Wake turbulence is most generated when the aircraft 1) applies full throttle 2) at rotation 3) at lift off 4) on landing

Q: The difference in elevation between two altimeters 29.80 and 28.80?
Ans: 1) 1' 2) 10' 3) 100' 4) 1000'

Q: Approaching an ATF aerodrome. There are no traffic conflicts. How and where would you join the circuit? Ans: multiple combinations

Q: How long do you remain on the MF after leaving an aerodrome?

Q: Visibility in a CZ while flying under 1000'?

Q: Minimum instruments required for class C airspace? Multiple groupings

Q: Stratus cloud is found at? Ans: 1) surface to 6500 2) 6500 to 20000 3) above 20000 4) all levels trick question?

Q: Two aircraft are on descent to land and are in close proximity to one another. The higher aircraft should: Ans: 1) pass on the right 2) pass on the left 3) circle until there is sufficient separation 4) pass over top

Q: You have filed a flight plan. On route you have to divert to another airport due to weather. You notify the FISE of your intentions and land. The weather clears several hours later and you continue on to your destination. You are required to: Ans 1) reopen your original flight plan amending the information, 2) file a new flight plan 3) notify your destination that you are enroute 4) Let the FSS know upon arrival

Q: Flying from a Cold front to a Warm front and you encounter Ice Pellets. If you continue on you can expect to find?

Q: What weather would you experience if you read in a METAR M28/M29 A2983? Ans:1) rain 2) haze 3) fog 4) clear I don't know my eyes are frozen shut!

Q: During taxiing it was determined that there was Carb ice present. On the application of carb heat what will you expect the engine RPM to indicate?

Q: Using an oil with a higher viscosity number than recommended, your engine gauges will show a: 1) higher oil temp, 2) lower oil temp 3) low oil pressure 4) high oil pressure

Q: A benefit of using a rich fuel mixture during climb is?

Q: Using a fuel with an octane number greater than the recommended in the POH will result in? Ans 1) detonation 2) fouling the plugs 3) back firing 4) pre-ignition

Q: A broken magneto grounding wire will result in: (1) poorer fuel economy 2) inability to shut down the engine. 3) drop in engine RPM 4) rough running engine

Q: The Datum line provides you with the: 1) C of Pressure 2) the aircraft Moment 3) the Arm in inches 4) C of Gravity

Q: Where do you find squall lines?

Q: Passing through a Cold Front from the warm side you would expect the winds to?

Q: An Air Mass is where there is: 1) uniform temp and moisture 2) uniform winds and dew point etc

Q: An Isogonal is: 1) a line joining points of zero Variation 2) a line joining points of constant pressure 3) a line joining points of constant deviation 4) a line joining points of equal magnetic Variation

Conclusion: Good experience, take the Primer weekend, it's daunting but kind a fun once your into it. Read the Intel notes. Look at other reading sources as they all have a different teaching approach / perspective. Do the exams at the back of the books provided and review the ground school exams!!!! Have a great day, Good luck, Greg

Q. In Controlled Air space what is the weather MINIMA + what will be the Ceiling?
WHAT 1500 ~~Ceiling @ 1000' — 3 miles visibility~~
~~Ceiling @~~ 500' — "

Q. What is the Signs of CFS Page — Interpreted (Belleville, Stanhouse) OTTAWA

Lighting — Radio controlled ARCAL
Customs —
RWY Procedure —
THE Highest obstruction elevation in S/E
Control Zone Radius —

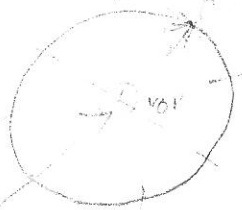
Is there FSS available @ the Aerodrome.

Q. PAPI lights (P) Slightly Lower. VASI (V) RED RED WHITE & RED WHITE

Q. Colour Markings of Airspeed Indicator
- what speed is @ the lower end of the Green Arch. — (Lower Speed)
~~VFE — MAXIMUM FLAP Extension Speed.~~
VSI (Power 30 Stalling Speed with Flaps + Gear UP (Retracted)

Q. VNC Symbols + Information

Q. VOR / CDI. Indications?
- Flying From Belleville to OTTAWA — What heading will you set on OBS + CDI will indicate —
~~227°~~ 047°



Q. When Turning From DOWN WIND TO Into WIND + FROM INTO WIND TO DOWN WIND A PILOT will have illusion of:

SKID + DEC

— DOWN WIND TO INTO WIND — ✓ SKIDDING + Decreased speed!

? — From WIND TO DOWNWIND — SLIPPING + Increased in speed!

Q. Air Craft ~~effect~~ Performance in Ground effect?
- Induced Drag — Decreased
- WING TIP Vortices — Decreased
- Downwash — Decreased.

Q. Characteristics of a SPIN? — (Rearward C of G will make the SPIN easy)

Rearward C of G will give you FLAT SPIN.

Q. VFR CRUISING ALTITUDES —

W — 180° to 359° — Even thousands + 500'

E — 179 to 360 — odd thousands + 500' above 3000'

(Based on Magnetic TRACK IN SDA)

Q. CRUISING ALTITUDES —

- IN SDA cruising altitudes are based — MAG. TRACK
- IN NDA " " " — True TRACK
- Minimum cruising altitudes along an AIRWAY segment is which will permit an Airplane to clear Obstruction by 1000'.

Q. NOTAM FOR CLOSED RWY?

— NEW (N) or Replacing (R) NOTAM is valid untill the time specified in the NOTAM.

— NOTAM WITH "APRX" is valid untill Replacing NOTAM IS ISSUED.

Met. Q. Define a Warm Front.
— Part of the Frontal System along which Cold Air
is Retreating + Colour Red on Weather MAP.
(High Cirrus that thickens to Cirrostratus + Altostratus)

Met. Q. Define a Cold Front?
Frontal System along which COLD AIR IS ADVANCING
Colored Blue on MAP.

Met. Q. SEQuall line (Page 142 of [illegible])

Q.

Q. Wake TURBULENCE AVOIDACE. Behind
a Jet, ?
During take off —
During TAXI —
During Flight —
During Landing —
More Blast Hazard — when jet is running at
Full throttle for take off
600' @ Idle
1600' @ Take off.

Q. When taking Prescription Drugs — Before you
Fly ——. Checked BY AME.

Q. If A Pilot knows about the medical problem
He should —
✓ — Don't Act as a crew member. — [illegible]
[illegible]

? Q. WIND SHEAR Effect (Page 288 of G-U)

Q Collision Avoidance. — Who will give Right of Way

Left [X] ✓ Right [ ]

Q Aircraft Landing light should be on when
— Carrying Passengers ~~at night~~
— To land or To be off @ NIGHT.

Q Over the Counter Drugs used —
— Fly after Checked with Aero Med. Examiner.

Q. WEIGHT & BALANCE GRAPH & Center of Gravity — Is it within CG & Limit & weight limit? (Look at Graph within weight line & LOAD moment line )

Q. WEATHER MINIMUM FOR VFR IN CONTROLLED ZONE?

CEILING 1500'

VISIBILITY 3SM

DISTANCE From Cloud
1SM - HORIZONTAL
500' - Vertical.

Because Circuit height is 1000' + Distance From Cloud 500', So minimum ceiling HAS To be 1500'

Q On CFS page. How can we tell if there is AN FSS @ the Aerodrome? (By looking ~~at the RIGHT~~ Check the Runway section for a FSS letters  .

Q. When OBTAINING Weather Information From Certain Point about Certain Place or flight route — What would be the most appropriate STATION & Frequency to use? (i.e) VOR, RCO, Tower of Airport, Unicom, Ra? FSS

- 10 mls From toPro, Ceiling 900' 5sm

  Proceed or get $ VFR Clearance and From who.

- VFR Fuel Reserve 3min @ Normal cruising speed →
  But why?

- Airport 400' ASL

  Cir. 1500 asl

  Ceiling 1000

  What is circuit Alt?

CHAD DRAKE JANUARY 17/05

NOVEMBER 2004

?Q TURN + SLIP INDICATOR?

(Gyro indicator)

- TURN (+ Turn + BANK TO LEFT (Bank to Horizon)
- Left turn + Bank to RIGHT.

DURING FLIGHT →

- **Needle** → INDICATES Direction + RATE OF TURN (NOT Amount of TURN)
- **BALL** → Indicated Amount of BANK IN THE TURN (SLIPPING or SKIDDING)

Q. THE TURN Co-ordinator / BANK Co-ordinator + TURN + SLIP INDICATOR?

- Turn Co-ordinator shows rate of roll as well as Rate of Turn
- where Turn + SLIP INDICATOR shows only Rate of TURN

(Wings of TURN Co-ordinator will first react to ROLL + then to YAW)

Q. How To Check ELT? (not Test)

- By SWITCHING To Radio Frequency of 121.5 MHz.

?Q Who can Authorize Vehicles on the Maneuvering Area of the Airport? —

(A) Operator of the Airport (B) Person in charge (C) ATC officer
(D) FSS specialist (E) Qualified pilot authorized by — A B C — A B C D

Q Aircraft Performance effected by —

Temp. —

ALTITUDE —

Air Density — Air density decreases with High Altitude (Less Dense Air)

AT High Temp + High Altitude + High Density → An Airplane requires more runway to take off. (Less Dense)

(A) Airspeed will be greater because TAS will be greater than indicated Air speed.

(MOISTURE IN AIR)
Humidity — High Humidity (High water vapour in Air) causes LESS amount of Air available for combustion & results in Engine misfire + Reduced Engine power. (Rough Eng. Running)

Density ALTITUDE — Increases with High Altitude (Elevation)
also + Increases with Temperature.

- DRY AIR, LOW TEMP., LOW ALTITUDE ⟶ BETTER ENG. PERFORMANCE

FSS or FIC — To find Flight Service Station or Flight Information Center which also give FSS — Look in the FLT PLN (Flight Plan section of the CFS page. If it is listed that means FSS or FIC is availd @ the Airport. If there is nothing in this section it means that FSS or FIC is Not available @ the airport.

DIVIDED HGWY —
Primary Road —
Secondary Road —
SINGLE Railway TRACK — (WITH STATION)
Double " " —
NDB —
VOR
VOR/DME —
VORTAC —
TACAN —
RADIO AID —

ABandoned Railway Track — + + + +
LANDING Direction INDICATOR — (LIGHTED / UNLIGHTED)
WIND DIRECTION INDICATOR (Lit) —
LIGHTS Colour — WHITE

PAPI LIGHTS (P) or P_1, P_2, P_3
VASI LIGHTS (V) or V_1, V_2, V_3
(ON RWY) (V) (P)

SCALES

1" on chart = 500,000" on Ground.

VNC Chart — 1:500,000 means 1" = 6.95 NM (8 miles) or 7 NM
Based on Lambert Conformal Conic Projection

WAC Charts — 1:1,000,000 means 1" = 13.90 NM (16 miles) (14 NM)
used for Higher Altitudes + Higher speeds.
Based on L Conform Conic Proje

VTA CHART — 1:250,000 means 1" = 3.5 NM (4 miles)

AIRWAYS Shown on CHART — are in MAGNETIC
i.e. V342 is 342° M (Only True when labelled "T")
To Change from "T" to "M" → ± W/E Isogonic Lines. 44°30'
1 Minute of LATITUDE = 1 NM & 1° Latitude = 60 NM. 44°

TRUE TRACK or True Course is in ° or True to change it to magnetic → use ± W/E Isogonic Lines.

Flying @ 53° Heading

(6) From Belleville To OTTAWA & you FIND your self @ PERTH which is approximately 11° to Right of intended track. To get on track to OTTAWA you will Fly —

31° to left + then 11° to Right, heading of 42° will get you on track to

42° To left + then 5° to Right to get on track
31° to left + then 5° to Right " " "
42° to left ~~+ then~~
31° to left —

(It does not say what method to use, Double Track or Open and closing angle method)

? Both are radial To From

(7) Using OTTAWA VORTAC what will be the OBS SETTING @ the Half WAY From Belleville to OTTAWA?

(047) ~~227°~~ TO needle pointing
047 TO or 227 FROM

? (8) What is your TRACK or True Course from Stanhouse Belleville?

(Magnetic or True?) 134° (measure @ middle From Stanhouse to Belleville.

(9) What ~~Airspace~~ Control Zone OTTAWA ~~Airport~~?
Control Zone "C" topping @ 4000' — 7 NM Arc
or " C topping @ 3700' — 7 NM Arc

(Thumb 10NM)

(10) At Perth what AIR SPACE you are @ 5500' Flying in? "E"

(11) What kind of Air Space are you in when you are flying over Perth?
"E"?

Q. ON VNC CHART What does 1:500:000 mean? 1" = ?
① 5 NM ② 6 NM ③ 7 NM ④ 10 NM.
or (8 miles statute)

Q. CROSS WIND GRAPH — (Because RWY Headings are M° but winds are T)
Winds are given in 270° M AT 20 KTS
if they are given in 270° T @ 20 KTS?
Take off RWY 31 @ Specific Airport — Figure out Headwind + X-wind.

Q. Who will you contact 15 NM North of Bellevue?
- Trenton tower
- Belleville Tower.
- Trenton/[illegible] RCO outlet.

Q. Carb ICING TO MOSTLY BUILT IN?
✓ (A) High Humidity, Low Pressure, +10 °C
(B) High Humidity, High Pressure, −10 °C
(C) LOW ", Low Pressure, −10 °C

Q. What is the cause of High temp. in the cylinder head?
✓ Too Lean mixture, — Too RICH MIXTURE.

Q. DOES C of G effects SPIN? How
- Farther BACK C of G helps for SPIN to Develop easily. (Creates FLAT SPIN)
- Forward location of Centre of G makes it difficult to obtain SPIN.

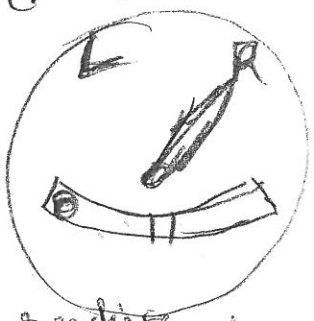
Q. Stall Speed — ① Does not increase with Turn ② Decrease with Turn in climb ③ Increase with X Turn in Descend ④ always increase with turn.

Q. WHEN Turning From IA-WIND To DOWNWIND @ Low ALTITUDE, A PILOT MAY experience an illusion of —
✓(A) SLIPPING AND INCREASING AIR-SPEED (B) Skidding & Decreasing

Q. What Speed is @ the Bottom OF THE GREEN ARCH?
① FLAP [illegible] (VFE) ② NORMAL [illegible] Speed
③ [illegible] Stall Speed. ④ Reduction Speed. VNO

? Q. Airplane performance decreases with?
✓ — High Temp. — High Humidity — Low Pressure
— High Temp. — " — High Pressure.
— High Temp. — Low Humidity — High Pressure
— Low Temp. — High Humidity — Low Pressure

Q. When TAXING what does this turn-coordinator mean —



① Turning to Right
② Turning to Left
③ Going Straight
④ FLYING Fast.

Q. ~~Excess~~ @ ~~Altitude~~ reading 1000' + Altimeter reading is 30.12" Hg. what is the P.A.?
816'

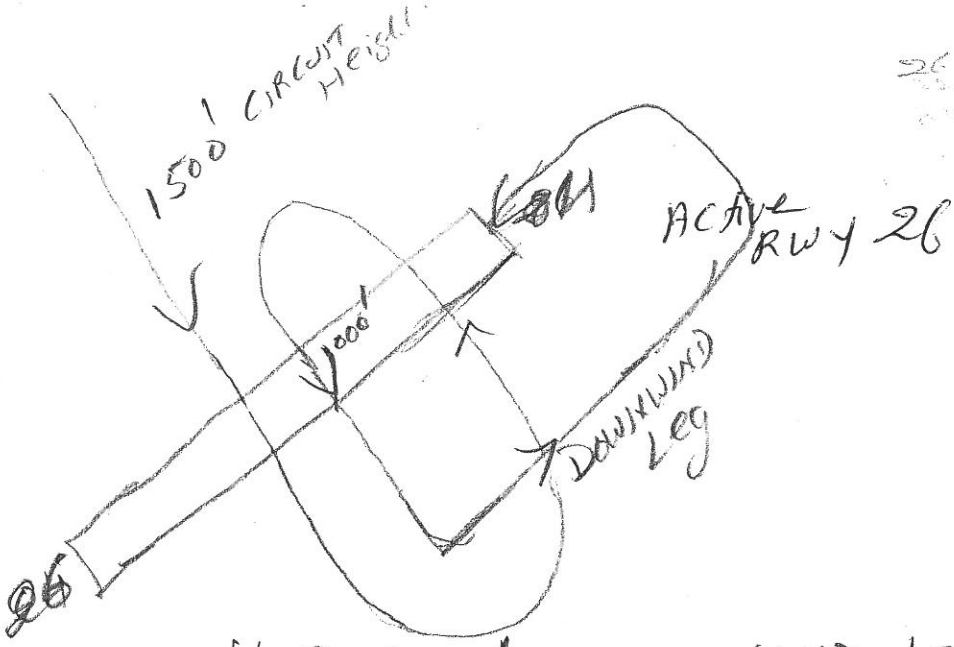
Q. Weight + Balance Q (99) on Langley Exam Book. Page (22)

Q. Decard a FD — @ 6500' what will be the WIND speed going from Point A to Point B @ 280°
① Staying the same
② Increasing.
③ Decreasing.
④ ?

3000' A to B
6000' 7000'
24 25 26 27
25 24

Q. What does this mean? FG VI/030
Fan Meter

Q. What does this mean?
@ a given time,
— cloud @ 2nd
— ceiling @ 3rd



* Enter the circuit @ 1000', DOWNWIND Left.

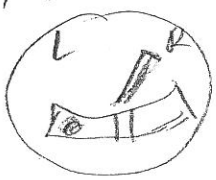
(ATF Airport, NO MF CIRCUIT Procedure APPLIED)

Q. Class "D" control Airspace Reverts to what class after Tower is closed.
— "E" (Empty - NO Tower)

Q. IF Engine backfires while cruising, Do You —
① Lean mixture (Caused by) ② ENRICH MIXTURE ③ Add Throttle ④ Reduce Throttle

Q. East/West TRACKS are Based on — ① True TRACK ② True Heading
③ Magnetic track ④ Magnetic Heading.

Q. HOW TO MAKE Co-ordinated Turn (or what is Required to make Co-ordination)
— ① Left Rudder only,
② Right Rudder only
③ Left Aileron
④ Right Aileron



Q. Deceleration of Aircraft in IFR Condition will show that Aircraft is — ① Turning ② Climbing ③ Descending ④ Propeller Rpm
& Illusions of Accelerating & Decelerating without outside visual references

Q. LANDING Light on Airplane is Required when — ① when there are
② ③ ④ Flying to get clear of traffic.

Q. From Stanhope to Belleville — is this a Sparsely Settled Area — (where services are available)
— To carry ELT on Board (YES)

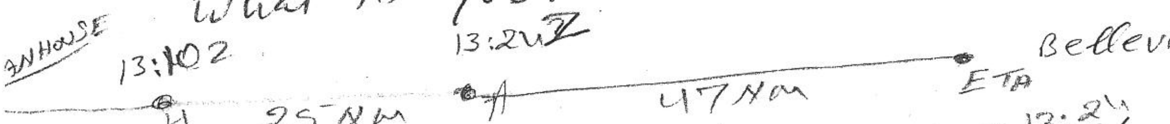
2. CROSS COUNTRY FLIGHT From Stanhouse to OTAWA MACDonald Carter International, Stopping @ BELLEVILLE

(1) WHAT is THE MEF (HIGHEST) On YOUR Route?

2300 (MEF 23) near Stanhouse

CATCH THE track Going through all the Quadrent Ellage From One End to other

(2) @ 13:10 You are @ Abandoned Railway track @ Haliburton. + @ 13:24 you are @ APSLEY. What is YOUR ETA @ Belleville.



13:10
13:24

T = 14M
D = 25 NM
S = 107.1

S = 107.1
D = 47
T = 26:20

ETA = 13:24 + 26 = 13:50

(3) Which Radio Frequency will you use? 126.7 or (122.8)

Tronto Buttonville

* (Check other control zones you flying through your intended track + ALTITUDE through other CZ's.)

(4) Figuring out the Fuel Required @ Take OF — Rate 6.5, Flight time 1:50 MINUTE

2 Gallons TAXI + Take off @ Stanhouse.

2 Gallons " + " @ Belleville.

What will be total Fuel Required to OTTAWA?

30 MINT Reserve

FOR RWY 26

(5) @ Belleville How would you enter the Circuit? (Check Procedure if given on CFS page)

Circuit Height (?), Downwind Left, Crosswind, Base leg, FINAL etc

if Active RWY — Circuit (AGL, ASL)

26

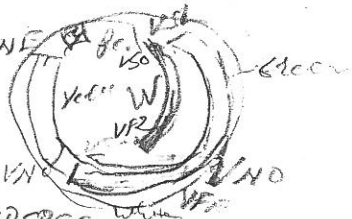
18. Colour Markings of ASI –

Q – What does Lower End of GREEN ~~Barbour~~ Arch indicate? or Higher End of Green Band on ASI indicate?

– BOTTOM LIMIT OR LOWER END MEANS VNE

– LOWER SPEED

– TOP LIMIT OR TOP END MEANS – HIGH END SPEED

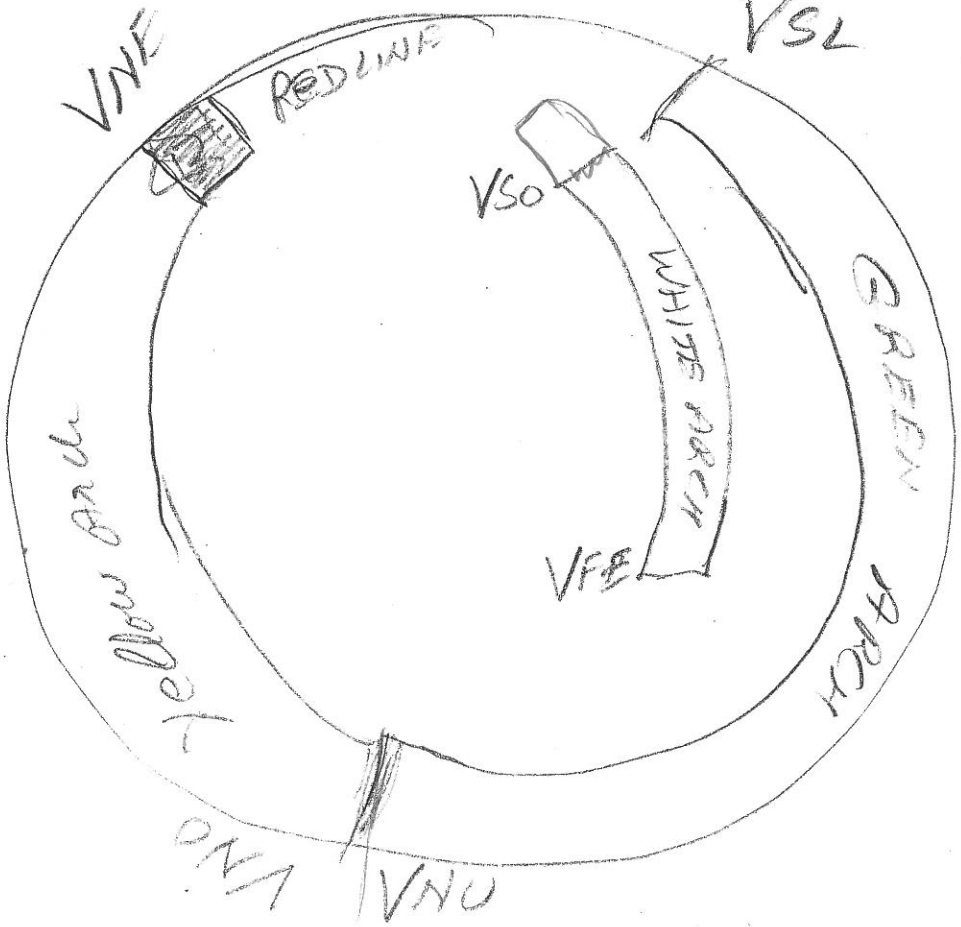


(ie- GREEN ARCH ~~is~~ VSL – LOWER END SPEED, VNO – TOP END SPEED,

2. What is the Cause of Eng. oil Temp. To be Too HOT ?

(1) Too much oil (2) Too Little oil (3) oil of too High Viscosity.

ASI



Q. (1) When taxiing the wind is @ 10 clock Position
Blowing @ 20 KTS. — You will apply the controls —

Front Left. (1) ✓ Left Aileron UP + control in neutral
(2) Left Aileron down + control Pushed in
(3) Right Aileron Down + control Pushed in
(4) Right Aileron UP + control neutral

If from behind control column Forward

(Move the control column AWAY FROM wind Direction)

Page 116

Q. @ 40° Difference with the wind speed of 30 KTS — what is X-wind + head wind components.

(RWY 27, WIND 310° (T) @ 30 KTS

19 KTS XWIND, 23 KTS

(Change the WIND Direction From T To MAG. By using + W − E variation near the Airport.)

Q. Heading + Ground Speed — (From Stanhouse to Belleville.
T. C. = 135
TAS = 110.0 KTS
W DIR = 260
W Spee = 20

144° + 120 KTS

Q. Take off Distance — Temp. 10°C
P.A − 6000'
Ground Roll 1140
obstacle 50' clearance 2085

What will be Ground Roll Distance if head wind 27 KTS + Grass RNWY — Altitude 6000'

Specs — Decrease ground Roll 10% for each 9 KTS head wind
Decrease Distance for Grass RWY 15%

Decrease 30% of G.R. = 342
Increase 15% of G.R. = 171

(1) 627
(2) 900

2. OBSTACLE Clearance Circle:

- SE Quadrant means the highest obstacle height is 2200'ASL (3200 - 1000')
- SW - 2400-1000 = 1400'ASL (Rounded up to next highest 100 foot increment)
- NW - 3800'ASL NE - 1400 - 1000 = 400' ASL

NORTH - IN SDA is MAGNETIC NORTH
IN NDA is TRUE NORTH

CONTROL ZONE - Control Zone is in 5 NM Radius that is ~~ASSIGNED~~ Designated with Class "D" Airspace.

ALTITUDE HEIGHTS - All Heights are IN ASL (Feet ABOVE Sea Level) i.e. Control Zone extends up to 4800'ASL AND 3700' AAE (Above Aerodrome elevation)

Center of Circle - Describes the Center of the Aerodrome.

SHAPE IRREGULAR - means Control Zone is Depart (different) than the standard Cylindrical Shape.

2. Lighting :- ARCAL - Rwy Beacon Lights - are controlled by radio & cycle for 15 MINUTES for one time.

VASI - Visual APPROACH SLOPE INDICATOR LIGHTS - (V) V1, V2, V3 or AV
PAPI - Precision " PATH INDICATOR LIGHTS - (P) P1, P2, P3 AP

2. Entering CIRCUIT @ [Uncontrolled Airports] without MF
[means with ATF (Aerodrome Frequency (A)
- ATF 135.8 MHz
- UNICOM 122.8 with GRN STR
- APPROACH From UPWIND SIDE of RWY & enter CROSSWIND Leg @ CIRCUIT HEIGHT.
OR You MAY JOIN The Circuit Directly on the DOWNWIND Leg

With MF in effect (M) :-
- You may approach STRAIGHT IN @ 45° to the DOWNWIND LEG & Join the Circuit @ Circuit Height
OR MAY APPROACH STRAIGHT IN TO THE BASE LEG OF FINAL APPROACH Legs.

Controlled Airport - Only difference between Uncontrol & Controlled is, You MUST ESTABLISH COMMUNICATION WITH ATC (control tower)
- Joining the CIRCUIT is the same as WITH MF (M) + ATF (A)
- Call ATC 5 MINUTES before entering the Control Zone
- Remain tuned to ATC Frequency till you are at least 10 miles outside the Control Zone

Cleared to Circuit means - JOIN THE CIRCUIT ON THE DOWNWIND LEG @ Circuit Height.

NAVigation + General Knowledge

Q. What Causes the engine head to overheat while Cruising at Certain Altitude?
✓ Lean Air fuel mixture
– RICH mixture.

Q. How would You realize that Your ~~Air speed~~ RPM or Airspeed has decreased? ✓ Started to Descend.
✓ Started to climb.

Q. Hight Octane Fuel will cause the engine? ✓ Fouled Spark Plug.
– Detonation

Q. Fuel injected engine + Carburetor Engine + effects of Carb. ice.
✓ Fuel injected engines are **NOT** effected by Carb. Icing, Fuel Vaporization ICE, But are effected BY THROTTLE ICE, + IMPACT ICE.
✓ IMPACT ICING occurs when ICE builds on the external Airframe including Air-Intake + filtering System.

Q. When Carb. ICE is melted with Carb Heat Engine will RUN — ✓ RPM will Drop. — ~~RPM~~
✓ Engine will Run rough
✓ Engine will loose Power

Q. Carb Icing will cause — or Signs of Carb. Ice are
✓ Checked Carb. ✓ Slow Drop in RPM (Fixed pitch Propeller)
Slow Drop in manifold Pressure. (Variable pitch Propeller)
✓ Slow Drop [illegible] Power LOSS.
✓ Sudden [illegible]

Q. Carb. Heat's effect —
Decrease in manifold Pressure [illegible]
Carb. Heat on without Carb. ICE — ? ✓ Drop in RPM
[illegible]

Q. If there is Carb. ice than with Carb Heat → effect?
✓ Engine Roughness because water from melted ice into induction System.

Q. Effect of ICE, SNOW on WINGS + other controls.
① Stall speed will increase
✓ ② Angle of ATTACK will Decrease
✓ ③ lift will be reduced
✓ ④ Drag will be increased

Q. What are the other Parts of Plane which are called Critical Surfaces —
✓ WINGS, Control Surfaces, ROTORS, Propellers, HORIZONTAL STABILIZERS, Vertical Stabilizers or any other stabilizing Surface of an Aircraft, Top of Fuselage.

Non Critical Surface — LANDING Gear & Fuselage

Q. If one magneto wire is off —
✓ Engine won't shut down.

Q. Flaps down (Extended) created —
✓ lift is increase — ✓ Stall speed is Decreased.
✓ Induced Drag is increased
✓ Angle of ATTACK increased

Q. Stall speed in turns —
Stall speed in climbing turn, —
✓ Increased in climbing turn,

Q. Center of Gravity Location Forward + Rearward & its effect on —

	Forward	Rearward (aft)	Tail heavy
— Stall speed —	Increase	Decrease	Forward Greater Stability
— Lift Required —	Increase	Decrease	Rearward — less stable
— Stability —	Increase	Decrease	Loading

Q. WHAT will AID in SPIN — Forward C of G or Rearward center of Gravity? (Less Stable)
Rearward Center of Gravity Aids in SPIN.

General Knowledge + NAVIGation

Q. Best Rate of climb Provides —
✓ Greatest gain in Altitude over a given Period of TIME.

Q Wheelbarrowing is Caused by ___ ① – Too much weight on the nose gear (During [illegible]) ✓ ② During landing in combination with Full FLAPS + Excessive Speed (in VSO) With Forward control pressure in order to hold up faster than normal Ground Speed [illegible]

X — Main wheels are carrying insufficient weight for Normal steering.

Q. Effects of Temperature on Indicated Altitude V/S TRUE ALTITUDE ?

✓ if Temperature is Colder than STD air — TRUE ALTITUDE (above sea level) will be Lower than INDICATED ALTITUDE.

✓ if Temp is warmer than STD. air — True Altitude will be Higher than INDICATED ALTITUDE

Q. When climbing the Magnetic Compass will read ? Higher or Lower heading ?
✓ NO change climbing or Descending on North or South Heading since [illegible].
– only changes in quick Accel. + Decel. in Turns.

Q. Density Altitude is — Pressure Altitude corrected for [illegible]

Q - Mountain effect error →

INCREASE IN WIND SPEEDS → (causes) Drop in Pressure [illegible] → ([illegible] Difference [illegible] Altimeter Errors) ALTIMETER Reading will be too HIGH (3000')

Airplane in this Situation → will Begin to Descend → Altimeter won't Register Descent (untill Descend level is = ALTIMETER error caused by MTN WAVE) → Pilot ends up Much Less Ground Separation than he expects.

Q. Definitions :—

① INDICATED ALTITUDE — Reading on the Altimeter when it is set to Current Barometric Pressure.

② TRUE ALTITUDE — EXACT HEIGHT Above Mean Sea Level.

③ Pressure Altitude (PA) Reading on Altimeter when it is set to STD Barometric Pressure (29.92" Hg.)

④ Density Altitude — Pressure Altitude (PA) corrected for Temp.

⑤ ABSOLUTE ALTITUDE — Actual Height Above the Earth's Surface (Altimeter set to Field Level Pressure)

Q. Which Indicator is connected to Both Pitot + Static —
Air Speed Indicator.

Q Definitions of Speed :—

① Indicated Air Speed (IAS) — Uncorrected Speed read from the Air Speed Indicator. It is the difference between the Total Pressure + the Atmospheric Pressure in the Pitot STATIC SYSTEM.

② CALIBRATED AIR Speed (CAS) — Indicated Air Speed corrected for INSTRUMENT error + Installation error (in the Pitot Static System)

③ TRUE AIR SPEED (TAS) — Calibrated Airspeed corrected for Air Speed Indicator error [illegible] Density + Temp. [illegible] (Actual Air Speed [illegible] [illegible] air mass)

④ EQUIVALENT Air Speed — (EAS) — Calibrated Air Speed corrected for Compressibility Error.

— IAS is (2% every/1000') Less than TAS. — i.e. @ 10,000', 100 KTS of IAS, True Air Speed will be — 10×2 = 20% More → 100+20 = 120 KTS

Aug/96. STEVE SLODE -

Q — If groundwire from ignition switch to magneto should become disconnected - what is result?
= cannot start, cannot shut off, runs only on left mag, runs only on right mag.

Q — what is best way to prevent water from building up in fuel tank?
- keep tanks full., install quick drain gashotator, . . .

Q - a stall can happen?
- at any time the aircraft is banked, only in climbing turns, only in descending turns, banking doesn't affect stall speed.

Q - climbing to altitude in shortest period of time is?
- best rate, best angle, . . .

Q - ~~under~~ closed section of runway are indicated by what?
- red flags, white or yellow crosses, dumbbells (sic)

Q - minimum flight and ground vis for control zone?
For VFR

Q are cruising altitude orders in effect for?
magnetic track, magnetic heading . . .

Q when can one test an ELT?

Q w/ref to NAV - STANHOPE TO BELLEVILLE - Do we need an ELT?
- no because we aren't in sparsely settled area
- no because we filed a flight plan
-

Q what must we have done to fly w/passengers at night?
- 5 t/o and land in 6mo.

Q who is relieved of responsibility for wake turbulence?

Q. if heavy jet has landed, where do we want to touchdown?

Q. with an infant, what is acceptable seat belting procedure?

Q. how long can one fly at 12,500 Ft without oxygen?

Q. A single engine aircraft operating beyond gliding distance from shore requires what? [+50mi limit not specified]

Q. Aircraft cannot fly less than ____' above an aerodrome except to take off or land.

Q. When two planes converging, who has right of way.

Q. how long after landing does one have to report for closing flight plan?

Q. what documents required on board a private canadian registered aircraft?

- items A, B and ...

Q. At what altitude do we cross over uncontrolled airport for inspection?

Q. what is proper procedure to enter circuit at uncontrolled airport?

Q. For a mandatory frequency airport (uncontrolled) how long do we remain on frequency.

Q. what is cause of wheelbarrowing?

* Q. Picture of 4 PAPI light configurations, which one indicates slightly low?

Q. Density altitude is pressure altitude corrected for?...

Q. Bottom end of green scale on AST indicates what?

Q. If hole on pitot becomes plugged, which instrument fails?

Q. Altimeter set for 30.12 "Hg with 1000' indicated what is pressure altitude?

Q. If thunderstorm is approaching, what should on do?
- don't takeoff, takeoff in other direction, takeoff only if one can see to other side?...

Q. In straight steady climb what does compass do?
underread, overread, ~~steady~~, operate satisfactorily.

Q. If MT is 059° and MH required to maintain is 069° what would MH be if one had to return to Belleville? (180° turn)

Q. For over counter medecines, antihistamines, etc, what should one do before flying?
- wait x hrs, see Aviation medical examiner, read product label...

Q. given airfield conditions (grass runway, headwind, 5000 ft Alt) calculate ground roll from chart.

Q.  what does one do to make turn coordinator indicate coordinated turn.
- use left rudder, use combinations (given) of aileron and rudder.

Q. given a C.G. and moment envelope chart determine if weight and C.G. Fall within envelope.

Q. using an octane rating higher than specified results in?
- Fouled plugs, ...

Q. An excessive rearward C.G. results in?
flat spin,

Q. crosswind component question (from chart)

Q. Total fuel required for leg, revised ETA, drift correction method requested (heading and time and new heading), given rate of consumption calculate fuel required.

Q. Advection cooling.

Q. what can one expect if told a squall line is ahead of an advancing cold front?

Q. lines of equal pressure are called?

Q. Nimbostratus on Flight path - what weather does one expect?
- showers, drizzle, ...

Q. What is the trailing edge of a cold front called?
- occluded front, quasistationary front, warm front, ...

Q. what surfaces are affected by icing?

Q. impact ice affects?
- only turbo engines, only Nat aspirated engines., both.

Exam: PPL (Aeroplane)
Date: 27 May 2010

Be very careful with your E6–B and chart ruler. On many of the navigation questions, the wrong answers were the result of measuring in statute miles, mixing up scales on your E6–B, getting positive and negative temperatures mixed up when calculating density altitude, and so on.

Mark your charts carefully. One question asked about the highest terrain within 5 nautical miles of your ground track. The correct answer was right underneath your flight path. One of the incorrect answers was 6 nm off the flight path.

Pay attention to what is being asked for. In Ground School we almost always start with TAS and determine CAS and IAS. Transport Canada liked to do it the other way around on this exam, determine TAS from CAS.

One question asked about the maximum fuel load for a particular plane to be in utility category. None of the options resulted in acceptable weight and CofG, though one resulted in acceptable weight, with the CofG just slightly out of the envelope. This was the right (least wrong?) answer.

PPL - DEC 03

www.tc.gc.ca/civilaviation/general/exams/menu.htm 5802 [redacted]

Examination questions which are related to the following were answered incorrectly.

- Calculate ETA.
- Calculate ETA.
- Calculate pressure altitude.
- Calculate reciprocal headings.
- Decode a GFA.
- Decode a METAR.
- Decode a TAF.
- Define a warm front.
- Define lapse rate.
- Explain the characteristics of a TAF.
- Explain the implications of a broken magneto ground wire.
- Identify conditions which reduce aircraft performance.
- Identify critical surfaces with regard to aircraft icing.
- Identify the components of a triangle of velocities.
- Identify the hazards of flying with an improper fuel mixture and power setting.
- Interpret CFS.
- Interpret NOTAM.
- Interpret PAPI indications.
- Interpret the CFS.
- Interpret the colour markings on an airpeed indicator.
- Interpret VNC scales.
- Interpret VNC symbols and information.
- Interpret VNC symbols and information.
- Interpret VOR/CDI indications.
- Predict the expected illusions when turning from into-wind to downwind.
- Predict the reliability of a magnetic compass during a climb.
- Predict what illusions may be expected when accelerating or decelerating without outside visual references.
- Recall the definiton of VFR for GFA purposes.
- Recall the effects of carburetor heat.
- Recall the emergency equipment required for flight over water.
- Recall the radio procedures applicable to MF/ATF areas.
- Recall the regulation regarding "Fitness of Flight Crew members".
- Recall the regulatory requirements for flight operations in the vicinity of an aerodrome.
- Recall the requirements for a landing light.
- Recall the requirements for VFR cruising altitudes.
- Recognize the need for proper octane fuel.

PPL - DEC 03

 Rewrite.

Examination questions which are related to the following were answered incorrectly.

- Calculate heading and ground speed.
- Determine heading to destination using the opening and closing angle method.
- Determine the estimated en route time(EET) to enter in a flight plan.
- Interpret the Aerodromes and Facility Legend in the CFS.
- Interpret VNC symbols and information.
- Recall method of measuring track and distance.

Examination questions which are related to the following were answered incorrectly.

PPL
Dec 2003

- Calculate heading and ground speed.
- Calculate take off distance.
- Calculate TAS.
- Calculate VFR fuel requirements.
- Compare the relationship between TAS and IAS.
- Decode a GFA.
- Decode a METAR.
- Decode a TAF.
- Decode an FD.
- Describe the characteristics of map projections.
- Describe the weather reported by a SIGMET.
- Explain how contaminants affect aircraft critical surfaces.
- Explain the hazards associated with virga.
- Explain the relationship between Centre of Gravity location and stall characteristics.
- Identify requirements for filing flight plans.
- Interpret VNC symbols and information.
- Predict the sensory illusions that may occur in a sustained level turn without outside visual references.
- Predict the visual effect caused by rain on the windshield.
- Recall clouds associated with frontal systems.
- Recall en route communication frequencies.
- Recall factors affecting density altitude.
- Recall how the C of G is expressed.
- Recall load factors in turns.
- Recall SVFR requirements.
- Recall the definition of pressure altitude.
- Recall the effects of flaps on landings.
- Recall the effects that carburetor heat has on the fuel / air mixture.
- Recall the formation of squall lines.
- Recall the minimum lighting requirements for night aerodromes.
- Recall the procedures associated with Class C control zones.
- Recall the procedures for transponder operation.
- Recall the regulations concerning collision avoidance and right of way.
- Recall the regulations regarding safety belts.
- Recall the requirements for all types of fog formation.
- Recall the rules that apply to Class F airspace.
- Recall the types of fronts and their movements.
- Recognize when an airplane will stall.

- State the regulation regarding the dropping of objects from aircraft in flight.
- State the requirements for starting a replacement journey log.

Examination questions which are related to the following were answered incorrectly.

- Calculate heading and ground speed.
- Calculate take off distance.
- Calculate TAS.
- Decode a GFA.
- Describe the mimimum equipment list for power driven aircraft in day VFR.
- Determine the estimated en route time(EET) to enter in a flight plan.
- Explain the effect of wind shear during an approach to land.
- Explain the relationship between Centre of Gravity location and stall characteristics.
- Interpret a turn co-ordinator.
- Interpret oil characteristics.
- Interpret the Aerodromes and Facility Legend in the CFS.
- Predict the visual effect caused by rain on the windshield.
- Recall cloud classification.
- Recall correct spin recovery technique.
- Recall factors affecting density altitude.
- Recall load factors in turns.
- Recall method of measuring track and distance.
- Recall oxygen requirements.
- Recall SVFR requirements.
- Recall the definition of pressure altitude.
- Recall the effects that carburetor heat has on the fuel / air mixture.
- Recall the formation of squall lines.
- Recall the procedures for transponder operation.
- Recall the regulations on take-offs and landings in a built-up area.
- Recall the regulations regarding safety belts.
- Recall the requirements for all types of fog formation.
- Recall the types of fronts and their movements.
- State the regulation regarding the dropping of objects from aircraft in flight.
- State the weather changes with frontal passage.

Dec 2003 PPL

PTR for which licence + Endorsements - PPL / Comm / FI ?

incl 300NM X Country + 3 landings ... Not Req for Multi + Aerobatics?

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

- Employ the learning factors of exercise and effect when presenting instruction. — leave the student feeling satisfied?
- Employ visual aids effectively when presenting ground instruction. → Plan lesson and ... assist
- Explain the effect of wind on gliding distance. Increase A/S in strong headwind
- Explain the factors that determine propeller efficiency. Least effective at high speed
- Explain the procedure to change airspeed while maintaining a constant rate of descent. - add Power - Lower Nose?
- Identify the instruments used to recover from an unusual attitude. AI, ASI, VSI +
- Identify the minimum radio navigation equipment required in a flight training aeroplane. VOR+ADF
- Identify who can authorize a solo student flight. Class 4 - ... for Permit / Licence
- Name the condition that causes a temporary loss of vision due to positive G forces. - Black Out
- Recall actions to take during an engine failure. - Establish glide
- Recall admission requirements for the Private Pilot flight test. - Medical - Recommend + ... ID
- Recall aircraft familiarization requirements for instructors at a Flight Training Unit. CFI flight Test?
- Recall fundamental skills involved in instrument flying. ANC - Control A/C, Communicate, ...
- Recall how dihedral affects stability. ...
- Recall instructional techniques for groundschool. → Who can instruct.
- Recall methods to increase night vision. →
- Recall Private Pilot Priviliges. →
- Recall safety precautions for spinning. — Do not add power before pulling up out of dive
- Recall the admission requirements to the commercial pilot flight test. → ID, Licence - letter from Flight Instructor
- Recall the age requirement and validity for a Student Pilot Permit.
- Recall the cause of apparent lag in an airspeed indicator. — NOT FRICTION!
- Recall the flight test performance standards for a steep turn. — 100 ft 10KTS + 10° angle of B
- Recall the flight test performance standards for an engine start and run-up. → Use of Checklist
- Recall the flight test performance standards for the ground preparation of a cross-country flight. 45 MIN
- Recall the flight test performance standards for track error on a navigation exercise. ← 200 ft + 10° Heading
- Recall the guidelines for flying after receiving anaesthetics. 48 hrs 24?
- Recall the regulatory requirements for a recurrent training program. → ...
- Recall the requirements to act as a ground school instructor. - ...
- Recall the requirements to obtain a Class 3 instructor rating. → 100HRS + 3 students / 50% ...
- Recall the requirements to renew an instructor rating. → ... Class 1 letter + Flight Test
- Recall the role of the instructor in Human Factors instruction. Human Factors Pg 3
- Recall the time period prior to the expiry of an instructor rating that a renewal flight test may be conducted. 60 days?
- Recall the validity of a letter of recommendation. 30
- Recall when to lead the roll out when leaving a co-ordinated turn. 3° for 10° of bank / 10 regardless
- Recall why controls are dynamically balanced. - Prevent Flutter
- Recall why it is necessary to conduct a threshold knowledge test. → ...

Class 1 + Class 2 can Supervise Class 4

... Instructor - Knowledge + ... / Instructor to be familiar with ...

Class is Recommendation to be cosigned - within 30 days.

4 Point - Marking Scale - Do correct pre take off checks but not using a checklist - What mark assigned 2 or 1?

Heading corrections on X Country - 10 - 25 mins

→ Verifying position within 15 minutes of ... Hdg

Instrument ... = 15° Hdg ...