

GACE 2015 Ground Test

Materials to be used are 14CFR61, 91, NY Sectional, Aim, FAA.gov, AIM, Advisory Circulars....The questions in the following training module have been drafted to stimulate CFI talking point & questions by the test taker.

1. On a pleasant May morning, you are the PIC in 12S for a Day VFR flight from ISP to PVC in order to board a sail boat to go Whale watching. You have two adult passengers and one small child. As PIC you have already obtained your weather, TFR, ATC delays, etc...and start your preflight. During the preflight, an FAA employee from the Farmingdale FSDO approaches you and identifies himself. What documents must you have in your possession to be PIC? A)_____ B)_____ C)_____ (14CFR 61.3)

2. While the FSDO is checking your documents, he asks if you are sharing this flight with your passengers, you advise in the affirmative. What are the expenses are you sharing? A)_____ B)_____ C)_____ (14CFR 61.113)

3. During the above ramp check, the FSDO asks if you are current to carry passengers in this aircraft for DAY VFR, you advise him of the following_____ & _____ CFI talking point: Does 14CFR 61 require a GA licensed private pilot to possess his/her pilot's log book for this flight?

4. The FSDO requests to know if you are current for NIGHT VFR in case you are delayed on the sail boat or in Provincetown; you advise him in the affirmative that you have completed the following Answer_____ (14CFR 61.7)

5. Which medical certificate appropriate to your age do you submit to the FSDO? Answer_____ (14CFR 61.23)

6. What on-board documents must be on the aircraft? A)_____ B)_____ C)_____ D)_____ (14CFR 91.203)

7. You are asked what inspection(s) are required for 12S to maintain the airworthiness certificate for this flight, your response is? Answer_____. CFI talking point, how to find Ads. (14CFR 91.409)

8. The FSDO requests to know if you as a private pilot can locate the required inspection(s) . You respond in the affirmative and advise him that the VFR inspections are: A)_____ B)_____ C)_____ D)_____ E)_____ & found in the _____, (14CFR 91.207, 91.215, 91.405 & 91.413)

9. The FSDO requests to know what flight time is required to be logged in your log book for this flight. You advise him _____ (14CFR 61.51)

10. You volunteer to the FSDO your preflight actions required by regulation for all flights away from the vicinity of the departure airport. What specific information would this be? A)_____ B)_____ C)_____ D)_____ E)_____ F)_____. (14CFR 91.103) (CFI talking points, should you volunteer information during a ramp check? Should you have a weight & balance calculation sheet with this flight in your possession?

11. What is the Day VFR fuel requirement for this flight? Answer_____ (14CFR 9.151). What is the Night VFR requirement for this flight if you leave PVC after Sunset? Answer_____. (14CFR 91.151)

12. You finally get to take off from ISP to PVC, VFR at a cruising altitude of 5,500'. What altimeter reference should you use if the barometric pressure is 31.00" Hg or less? Answer _____ (14CFR 91.121)

13. Is the choice of the 5,500' cruising altitude correct according to your magnetic course? Answer_____. What is the magnetic rule? Answer_____ (14CFR 91.159)

14. As you approach PVC, what general rules apply concerning Traffic Pattern at this non-towered airport? Answer _____ . (14CFR 91.126) What is the traffic pattern at PVC? Answer _____ . (NY Sectional)

15. What are the different methods you can use to determine the proper runway and traffic pattern at PVC? Answer _____ , _____ , _____ , (AIM 4-1-9, 4-3-4)

16. If it is necessary for you to cross over the runway mid-field to establish the traffic pattern, what altitude should you be at? Answer _____ . (AIM 4-3-3)

17. Explain the illusions that may lead to landing errors. *Runway Width Illusion*, _____ , *Runway & Terrain Slope Illusion*, _____ , *Featureless Terrain Illusion*, _____ , *Atmospheric Illusion*, _____ .
(AIM 8-1-5)

The next seven questions are for IFR rated pilots.

a.) If you are going to be operating under IFR conditions in Club aircraft, what systems must be tested & inspected prior to flying IFR?

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____
(14CFR 91.207, 91.215, 91.405 & 91.413)

b.) What is the requirement for the VOR Equipment Check for IFR flight? _____ days for IFR flight; log in a reliable record the following _____ , _____ , _____ , _____ (DEPS)
(14CFR 91.171, AIM 1-1-3 thru 1-1-8)

c.) What is the currency requirement to file and fly IFR in club aircraft?

1. _____ 2. _____ 3. _____
(14CFR 91.109)

d.) You wish to remain IFR current & ask a fellow GACE pilot to be your safety pilot. Other than this non-IFR rated pilot's currency requirement, what must this safety pilot be qualified in and in his possession?

1. _____ 2. _____ 3. _____ 4. _____
(14CFR 91.109 (b) (1))

e.) When you are filing an IFR flight plan, when will you need an Alternate?

1.) _____ , 2.) _____ , 3.) _____ ,
(14CFR 91.169)

e.) What is your IFR fuel requirement? 1 _____ 2. _____ 3. _____ , 4. _____ . (14CFR 91.151)

f.) Explain the difference between VFR-ON-TOP IFR clearance vs. VFR-OVER-THE TOP.

Answer _____
(14CFR 91.155, AIM 4-4-7, 4-4-10, 5-5-13, P/C Glossary)

g.) You are flying IFR to a non-towered airport on which the IFR approach altimeter setting is based, is not available, you may use the altimeter adjusted to field elevation. TRUE/FALSE. (AIM 5-4-5)

The following section is a FYI for club pilots to be aware of &/or CFI talking points.

14CFR 91.113 lists category and types of aircraft , except for water operations, for right-of-way rules. GACE pilots are used to sharing airspace with emergencies, hot air balloons, parachutist, gliders, blimps, jet traffic & tow planes. Recently the FAA has issued pilot's licenses for Unmanned Aerial Vehicles. Many private companies have petitioned the FAA for certification of freight carrying UAVs, commercial remote control blimps, tethered inflatable wind generators, airplane type wind generators, wind kites, reusable spacecraft vehicles & a GACE pilot may start sharing airspace with more and more motor gliders. (FAA.gov, AOPA/EAA) See and avoid may get more difficult as time goes on.

The FAA has recently brought forward a mandatory equipment change that will effect all GACE pilots. The FAA wants the implementation of a new ADS-B in all aircraft by 2020 (the date may be extended). The ADS-B would have units on the ground and participating aircraft, GACE included. This system is more accurate than RADAR, updates every second and not 12 Seconds for RADAR. It possesses T-CAS in the cockpit; estimates where Traffic is and estimates where it will be in the next two minutes. It also gives the Traffic position, speed, altitude trend, climbing or decending. The average cost per aircraft is approximately \$15,000; although there are less expensive systems for you iPad.

The aircraft transmits information via a ground-based transceiver with a whip antenna for line of sight from the aircraft. A small dish satellite dish transmits to ATC via a satellite. There are no moving parts. Pilots can get ground vectors at tower controlled airports. The ADS-B in fog conditions also shows the location of all vehicles on the ramp. This system will also shorten the distance between aircraft enroute and approaching to land. ADS-B equipped aircraft will be able to electronically "see" each other as well as ATC. (FAA.gov, AOPA/EAA)
Ramp Check, from the FAA Inspector's Handbook: (FAA order 8700.1, Volume 2, Ch 56, Sec 1, para 5(b)

1. The inspector shall always have identification available.
2. An inspector must not board any aircraft without the knowledge of the crew or operator.
3. If the ramp check will delay a flight, the inspector should use prudent judgment whether or not to continue. NOTE: An inspector is NOT authorized to detain you if it means missing an engagement or a flight. They can keep you long enough to check the appropriate paperwork.
4. The inspector should also bear in mind that he or she may not be able to complete all items on every ramp inspection.
5. Pilots should always remain friendly and courteous.

End of 2015 Ground Test