

kGBR PreSolo Written Exam

Student Pilot's Name:

Date of Exam Review:

CFI's Signature:

Introduction

FAR 61.87(b) specifies that prior to conducting solo flight, a student pilot must demonstrate satisfactory aeronautical knowledge on a knowledge test that is administered and reviewed by the students authorized instructor and meets the requirements of the section. The test must address the student pilot's knowledge of applicable sections of FAR Parts 61 and 91, airspace rules and procedures for the airport where the solo flight will be performed and flight characteristics and operational limitations for the make and model of aircraft to be flown.

Exam Procedures and Instructions

This pre-solo written exam will be given to a Student Pilot in anticipation of solo flight. This is an "open book" exam. Answers to most questions can be found in either the current FAR/AIM, the Pilots Operating Handbook/Owners Manual for the aircraft to be flown, Airplane Flying Handbook/Pilot's Handbook of Aeronautical Knowledge and various GBR resources that found on our website.

Each of the questions in this exam requires the Student Pilot to supply an answer rather than choose the correct answer as in most FAA tests. Consequently, some research and "digging" will be necessary. After the Student Pilot completes the exam, it will be reviewed with the student's instructor. Any incorrect answers will be discussed and corrected.

This is not a pass/fail exam. All questions address important areas that are critical to safe, legal and enjoyable flying. It is most important that the information be known and understood.

General Questions

1. What personal documents and endorsements are you required to have on you before you fly solo?
2. Who has the final authority and responsibility for the operation of the aircraft when you are flying solo?
3. What aircraft documents and certificates must be on-board when you are flying?
4. What are your visibility and cloud clearance requirements while operating in Class E airspace?
5. As a student pilot, what are your limitations concerning visibility and flight above the clouds?
6. When practicing steep turns, stalls and slow flight, the entry altitude must allow for a recovery to be completed no lower than how many feet AGL?
7. What defines a stabilized approach?
8. When is a Go-Around appropriate and what is the procedure?
9. What factors affect takeoff and landing performance?

10. Early morning you decide to go fly to practice slow flight and stalls, upon inspection you notice a bit of frost on the wings. Can you fly?

11. You were at a party last night, your blood alcohol level is .05% (a good party apparently). It has been 10 hours since you last had a drink. Can you fly?

12. Your logbook has your initial solo endorsement dated on January 5th. It is now April 8th. Can you fly legally?

13. Except when necessary for takeoffs and landings, what are the minimum safe altitudes when flying over congested and other than congested areas?

14. If no altimeter setting is available, what setting should you use before departing? What is the allowable discrepancy between field elevation and local altimeter.

15. Where do you get your weather information prior to flight?

Local Airport and Airspace Specific Questions

16. Can you make solo takeoff and landings at PSF and 1B1?

17. While turning on the base leg of the pattern at GBR, you notice an airplane on a one-mile final, below you and to the right. What do you do?

18. What are the noise sensitive areas to avoid when departing runways 11 and 29?

19. You're doing air work just south of GBR. Upon returning to GBR, you transmit your intention to land but hear nothing back from either GBR or other traffic in the area. You suspect that your radio has failed. What do you do?

20. What is the traffic pattern altitude at? GBR, PSF & 1B1?

21. Coming from the "south practice" area how would you enter the traffic pattern at for runway 11. Assume you are 15 miles out.

22. Are all traffic patterns to the left?

23. As a student pilot, how far from GBR are you allowed to fly?

24. What the frequencies for the following airports: 1B1 CTAF and ASOS; GBR CTAF and Runway Lighting; PSF CTAF and ASOS; ALB Approach ; and the Emergency Frequency?

25. Are touch n' goes acceptable at GBR?

26. What is the approximate distance of east mountain from GBR?

27. What is the approximate distance of the ridge to the west of runway 29?

28. What is the danger of making a u-turn in the middle of the runway after landing?

Aircraft Specific Questions

Aircraft Model:

29. What are the following airspeeds?

Vs
Vso
Vx
Vy
Va
Vfe
Vno
Vne

30. What is the best glide speed of your airplane?

31. List the airspeeds that are color-coded on the airspeed indicator, their color coding and significance.

32. What is the significance of V_x , and V_y

33. What is V_a ? Is V_a on the color-coded ASI? Why? What makes it change?

34. What are the minimum and maximum oil capacities?

35. What is the average fuel burn per hour?

36. What is the total usable fuel capacity?

37. What is the capacity at tabs?

38. List the adverse effects of an aircraft that exceeds its maximum gross weight?
39. List the adverse effects if an aircraft's center of gravity is behind its aft limit?
40. During a magneto ground check, you test the right magneto and get a 60 rpm drop. You then test the left magneto and get no drop. Is this acceptable and what is the possible cause?
41. When do you switch tanks and explain the procedure?
42. During landing the aircraft starts to porpoise. What do you do? Why does this happen?
43. While in flight you notice a small drop in RPM and some engine roughness. What is a possible cause and what actions should be taken?
44. After reducing power and deploying flaps at the beam point on downwind, the engine sputters and then quits. What should you do?

