

Pre-solo Written Exam

Name: _____ Date: _____

Airplane Make/Model: _____

Answer the following questions in the space provided, using the FARs, AIM, and POH. If you reference one of these sources for an answer, be sure to note it for your future reference.

1. What type of engine does the Bristell have? _____
2. What is the engine horsepower? _____
3. What type of oil should be used in this engine? _____
4. What type of coolant? _____
5. Please show the speed (in Knots) for each item below, and define in your own words

the significance of each speed and how it is used:

V_R _____

V_X _____

V_Y _____

Best Glide _____

V_{NE} _____

V_{NO} _____

V_A _____

V_{FE} _____

V_{S1} _____

V_{SO} _____

6. How many gallons of useful fuel does the Bristell hold? _____

7. What are the maximum demonstrated crosswind and headwind components?

Crosswind: _____ Kts Headwind: _____ Kts

8. What is the service ceiling? _____

9. What is the takeoff distance to clear a 50 foot obstacle on a standard day? _____

10. What is the landing distance over a 50 foot obstacle on a standard day? _____

11. What is the maximum RPM setting? _____ For how long? _____

12. Please describe the loss of engine procedures.

13. What is the maximum gross weight? _____

14. What is the empty weight? _____

15. What is the useful load? _____

16. With full fuel, how much weight can you carry? _____

17. Why is it important to close the canopy or cover the dashboard anytime the airplane is parked?

18. What preflight actions are required before a flight not in the vicinity of an airport?
Before any flight?

19. List the minimum equipment and instruments that must be working properly in your aircraft for flight.

20. How many hours are required between consuming alcohol and flying? _____
What is the maximum blood alcohol content to legally operate an aircraft? _____

21. What altitude should you fly when operating in level cruising flight to the East?

22. How many fuel sumps does the Bristell have? _____ Why is it necessary to drain fuel from the fuel sumps? _____
When should this be done? _____
23. What type and grade of fuel is used? _____
24. How do you check the oil level? _____

25. Will the engine run with the master switch turned off? _____
Why or why not? _____
26. What is the maximum allowable flap setting for takeoff? _____
27. During a magneto check, what is the maximum RPM drop? _____
How much difference is acceptable between the left and right mags? _____
28. Draw a diagram of the runways at your airport. Label each runway.



29. Draw a runway and a "normal" traffic pattern. Label each leg.



30. Which turn direction is standard for a traffic pattern?_____

What is traffic pattern altitude at your airport? _____

31. How do you enter and exit the traffic pattern at an uncontrolled airport?

32. List the following frequencies at your airport (ADS or FPR):

CTAF/U: _____

Ground: _____

Tower: _____

Approach Control: _____

Emergency: _____

33. Describe, “Wake turbulence”. In which type of aircraft and in which configuration is this most prominent? What is proper procedure to avoid wake turbulence?

34. When are you required to wear a safety belt? Shoulder harness?

35. What must a pilot do before entering each of these airspace classes?

Class A: _____

Class B: _____

Class C: _____

Class D: _____

Class G: _____

36. What is the minimum fuel requirement for VFR day conditions? _____
37. If the altimeter setting is not available at an airport, what setting should you use before departing on a local flight? _____
38. What must you do before performing flight maneuvers? _____
39. When practicing Steep Turns, Stalls, and Slow Flight, the entry altitude must allow a recovery to be completed no lower than _____ feet AGL.
40. When two aircraft of the same category are converging head-on, which way do you turn to avoid the other aircraft? _____
41. Give three situations that would necessitate a go-around.
- a) _____
 - b) _____
 - c) _____

List the procedure for a go-around:

42. What documents and endorsements are you required having in your possession to legally operate the airplane as a student pilot?

43. Do you need your logbook in your possession when you fly solo? _____

Why/Why not? _____

44. What endorsements do you need to have in order to fly solo?

In the pattern: _____

On a cross country flight: _____

45. What are limitations your instructor may place on your solo endorsements? _____

46. What are the limitations of a student pilot, as stated in Part 61.89 of the Federal Aviation Regulations?

Instructor Statement:

I have reviewed this pre-solo written exam with the student and have determined that the answers, as corrected by the student, are complete and correct.

Instructor Signature: _____ Date: _____

Student Signature: _____ Date: _____

SOLO FLIGHT CHECKLIST – per FAR 61.87

- Demonstrate satisfactory knowledge on a Presolo written test, and review all incorrect answers with an instructor.

- Receive and Log training on:
 1. Preflight panning and preparation, powerplant operation, and aircraft systems
 2. Taxiing or surface ops, including runups
 3. Takeoffs and landings, including normal and crosswind
 4. Straight and level flights, and turns in both directions
 5. Climbs and climbing turns
 6. Airport traffic patterns, including entry and departure
 7. Collision avoidance, windshear avoidance, and wake turbulence avoidance
 8. Descents, with and without turns, using high ad low drag configurations
 9. Flight at various airspeeds from cruise to slowflight
 10. Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication as well as recovery from a full stall
 11. Emergency procedures and equipment malfunctions
 12. Ground reference maneuvers
 13. Approaches to a landing area with simulated engine malfunctions
 14. Slips to a landing
 15. Go-arounds

- Demonstrate satisfactory proficiency and safety in the make and model of aircraft to be flown.

- Receive an endorsement(s) in the student's logbook for the specific make and model aircraft to be flown by an authorized instructor who gave the training within the 90 days preceding the date of the flight.