



# Pre-Solo Written Test

**For: Blanik L-23 or Schweizer 2-33**

(Circle One)

Full Name: \_\_\_\_\_

Pilot Certificate Number \_\_\_\_\_

Date Issued \_\_\_\_\_

Certificates and Ratings \_\_\_\_\_

Address \_\_\_\_\_

Telephone Contact H \_\_\_\_\_ C \_\_\_\_\_

**Medical Statement: I \_\_\_\_\_ certify that I have no known medical problems or defects which make me unable to pilot a glider.**

Pilot's Signature \_\_\_\_\_ Date \_\_\_\_\_

This pre-solo written test is required by FAR 61.87 and was administered by a CFI-G

CFI-G Name \_\_\_\_\_ Date \_\_\_\_\_

CFI-Signature \_\_\_\_\_

I have received instruction and training on the areas of knowledge that were found to be deficient.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

**This test will be filed with our student records at Miami Gliders**

## **Pre-Flight & Ground Handling**

1. Who is responsible for the airworthiness of the glider?
2. What documents are required to be in the glider?
3. Do you need to conduct a pre-flight on the glider before your first flight?
4. Describe a “positive control check”?
5. How do you lift the glider canopy?
6. What’s the best way to rotate the 2-33/L-23 on the ground?

## **Rules and Regulations**

7. What document(s) must you have on your person while flying a glider?
8. As a student pilot, can you carry passengers?

## **Airspeeds and Limitations**

9. What is the maximum gross weight of the 2-33/L-23?
10. What is the basic empty weight of the 2-33/L-23, no ballast? With ballast?
11. What is the useful load of the 2-33/L-23, no ballast? With ballast?
12. What is the minimum front seat weight for the 2-33/L-23, no ballast? With ballast?
13. Maximum Front Pilot Weight for the 2-33/L-23?
14. Where is the 2-33/L-23 weight and balance information located?
15. What is the typical air tow speed for the 2-33/L-23?

16. What is the maximum air tow speed for the 2-33/L-23?
17. What is the maneuvering speed above which we must exercise caution in the 2-33/L-23?
18. What is the never exceed speed in the 2-33/L-23?
19. What is the maximum demonstrated crosswind component for the 2-33/L-23?
20. What is the effect of flying at minimum sink speed?  
What is that speed in the 2-33/L-23?
21. What is the effect of flying at maximum L/D (best glide)?  
What is that speed in the 2-33/L-23?

### **Systems & Equipment**

22. What is the minimum length of the ground towing rope?
23. What is the approximate length of the aero tow rope?
24. What is the maximum/minimum strength of the aero tow rope?
25. What is the function of the yaw string?

### **Airports**

26. How long are the runways at Homestead General Airport?
27. What radio frequency do they use at Homestead General Airport? What are the two designated glider frequencies?
28. Name some landmarks that help you locate Homestead general airport?
29. What other airport's class D airspace is located just east of Homestead General Airport?

30. Describe the class D airspace of Homestead Airbase?
31. Where is Richard's field in reference to the Miami Glider Club?
32. What is the landing pattern entry altitude at X51 and what is the direction of the traffic patterns?

### **Glider Flight Procedures**

33. What is the pre-takeoff checklist?
34. What is the point of verbalizing "200 feet" during takeoff?
35. If the rope breaks on the runway during takeoff, what do you do?
36. What do you do if the rope breaks below 200 feet?
37. Describe the tow plane's ideal position during air tow?
38. What immediate action should you take if you lose sight of the tow plane?
39. What action would you take (in preferred order) to remove slack from the tow rope?
40. Describe the glider air tow departure pattern?
41. Just prior to release, what action does the glider pilot take?
42. After release which way does the glider turn?
43. How do you maintain approach speed without looking at the airspeed indicator?
44. What does TLAR mean and when do you use it?
45. What is the first thing you must look for after release?

46. If the glider cannot release, what action should the pilot take?
47. Describe what you would do if you had to land with the towrope attached to the glider?
48. If joining a thermal with other gliders, which way should you circle?
49. After a normal touchdown and landing, what do you do next?
50. How do you apply the wheel brake on the 2-33/L-23?
51. When faced with an off-field landing what are the most important considerations?
52. Describe several ways how you can determine which way the wind is blowing?
53. At what altitude do you perform the pre-landing checklist?
54. Where is the IP in reference to the glider traffic pattern?
55. What is the pre-landing checklist?
56. Describe the position of the airbrakes and the landing attitude of the 2-33/L-23 on touchdown?
57. If landing in a crosswind, which wing should be lowered?
58. What do you do once the glider touches down on the runway?

### **Aerodynamics & Weather**

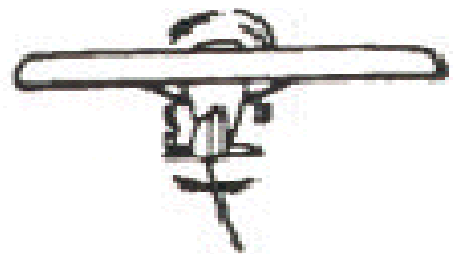
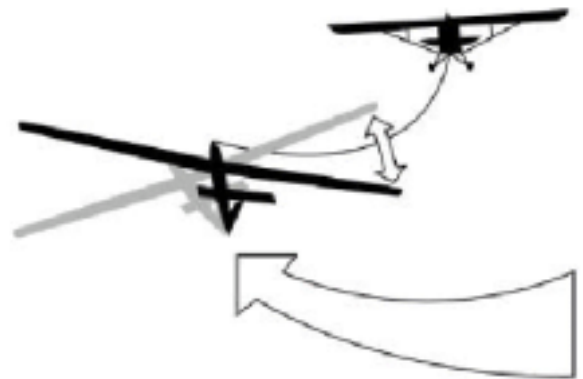
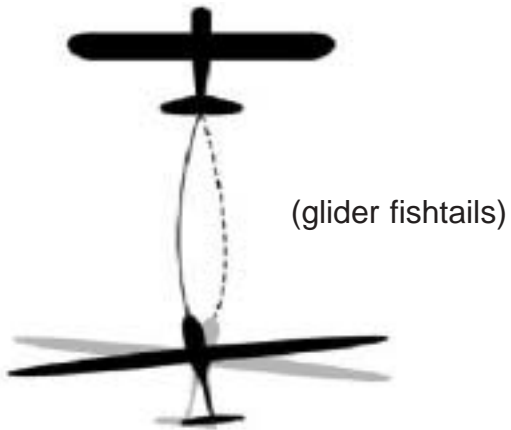
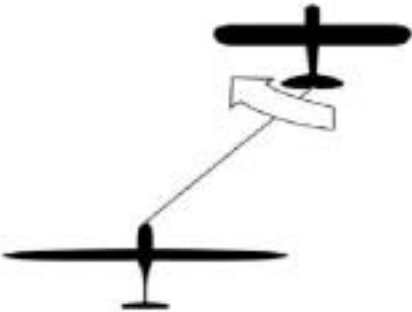
59. What causes a stall?
60. What are six indications of a stall?
61. What control movements effect recovery from a turning stall?

62. What cause a spin?
63. Describe spin recovery.
64. What speed would you fly when circling in a thermal?
65. If you encounter “sink” (descending air), what would you do?
66. How do you determine what speed to fly in the landing pattern?
67. What is the simplified cause of a thermal?
68. What is the sea breeze front?
69. How can you be ‘trapped’ by the sea breeze front?
70. You encounter very strong thermals, then thunder and lightning indicates a building thunderstorm, what must you do?
71. What happens to glider performance in rain?
72. What makes a glider fly safely and precisely?

### **Visual Signals**

73. How do we signal the tow plane that the glider pre-takeoff checklist is complete, and the traffic pattern is clear?
74. Describe three ways to signal the tow plane we are ready for takeoff?
75. During takeoff, what immediate action would you take if you saw the tow plane rudder “fanning” left and right?
76. During air tow, what immediate action would you take if you saw the tow plane wings “rocking” (other than normal turbulence)?

77. Describe what each of the following SSA soaring signals indicates:



waggle rudder