

**Pre-Solo Written for Schweizer 2-33**

**Eagle Sport Aviation**

Student: \_\_\_\_\_

Instructor Approval: \_\_\_\_\_ Date: \_\_\_\_\_

**Note: Currently certified pilots may skip questions 19-35**

1-What is the maximum gross weight of the 2-33? \_\_\_\_\_ Empty Weight? \_\_\_\_\_

2-List the following speeds for the 1-26

Maximum Aerotow: \_\_\_\_\_  
Never Exceed: \_\_\_\_\_  
Best L/D: \_\_\_\_\_  
Minimum Sink Solo: \_\_\_\_\_  
Minimum Sink Dual: \_\_\_\_\_  
Max Spoilers: \_\_\_\_\_  
Stall Speed Solo: \_\_\_\_\_  
Stall Speed Dual: \_\_\_\_\_  
Maneuvering Speed: \_\_\_\_\_

3-What position should the trim lever be in prior to takeoff?

4- Why does stall speed increase in banked flight?

5-If you lose sight of the towplane while on aerotow, what should you do?

- A-Descend very slowly until you regain sight of the towplane
- B-Push the control stick forward briskly until the towplane returns to view
- C-Release the glider from the towline and turn right
- D-Do nothing and allow the towplane to pull the glider back into position

6-If you have a rope break below 200 feet AGL, what is the preferred course of action?

7- If you have a rope break above 200 feet AGL, what is the preferred course of action? Is this action possible in all instances?

8-At what speed should you fly your pattern in the 2-33?

- A-Best L/D speed
- B- Minimum Sink Speed
- C- 60 mph in all conditions
- D- Best L/D Speed plus  $\frac{1}{2}$  the wind velocity and the entire gust factor.

9-What actions would you take if the canopy came unlatched during aerotow?

10-What special use airspace is located near the field? Where can information about it be found?

11- What speed should you use to fly between thermals when seeking lift?

- A-Best L/D Speed
- B-Best Speed to Fly
- C-Minimum Sink Speed
- D-Maneuvering Speed

12- Describe the meaning of the following tow signals:

- A- Towplane wags rudder on the ground: \_\_\_\_\_
- B- Glider wags wing on ground: \_\_\_\_\_
- C- Towplane wags rudder in the air: \_\_\_\_\_
- D- Towplane rocks wings in the air: \_\_\_\_\_
- E- Towplane fishtails in the air: \_\_\_\_\_
- F- Glider rocks wings in the air: \_\_\_\_\_
- G- Glider fishtails: \_\_\_\_\_
- H- Gliders moves to left and rocks wings: \_\_\_\_\_
- I- Glider moves out to the right: \_\_\_\_\_

13-What are the requirements for the breaking strength of the towrope?

- A-Between 80 and 200% of the **maximum certificated weight** of the glider
- B- Between 80 and 200% of the **actual flying weight** of the glider
- C- Between 100 and 200% of the **actual flying weight** of the glider

14- It is allowable to use a rope with a breaking strength greater than 200% of the weight, if:

- A-The total weight of the tow plane is less than 200% of the glider's weight
- B-There is a weak link installed on the glider end of the tow rope
- C-There is a weak link installed on both ends of the tow rope

15-The proper procedure to remove slack from the towline is:

- A-Yaw the glider away from the slack while keeping wings level with the ailerons
- B-Apply dive brakes to add drag and tighten the towline
- C-Climb to reduce speed and tighten the towline
- D-Release immediately

16-What are some ways a pilot can compensate for being too high on downwind?

17-What is the definition of minimum sink speed? When do we use it?

18-What is the definition of Best L/D speed? When do we use it?

19-What documents must you have in your possession as a student pilot to fly solo?

- A-Student Pilot certificate only
- B-Student Pilot certificate and logbook
- C- Student Pilot certificate and logbook and radio license
- D-None of the above

20-What documents must be in the aircraft in order to fly solo?

- A-Registration certificate, Airworthiness Certificate and logbooks
- B- Registration certificate, Airworthiness Certificate and operating limitations
- C- Registration certificate, Airworthiness Certificate and bill of sale
- D- Registration certificate, Airworthiness Certificate, weight and balance and bill of sale

21-Which instruments will become inoperative if the static port is clogged? Choose all that apply.

- Airspeed
- Variometer
- Altimeter
- Compass
- G Meter

22-What are the difference between a spiral dive and a spin? How do you recover from each?

23-When two or more aircraft are approaching an airport for the purpose of landing, which one has the right of way?

- A-The slower aircraft
- B-The lowest aircraft
- C-The glider has the right of way over all other traffic
- D-Whoever arrived first

24- In turning stall recovery, using ailerons to level the wings before unstalling the wing will have what effect and why?

25-What class of airspace do we generally operate in? What are the cloud clearance requirements for this airspace?

26-List the five warning signs of a stall.

27-What does  $V_{NE}$  mean? What is it for the 2-33?

28-Where can the operating limitations for a sailplane be found?

- A- Only in the owner's manual
- B- On the airworthiness certificate
- C- On the registration certificate
- D- In the sailplane's Flight Manual or on a cockpit placard

29- A preflight inspection should be performed by whom and when?

30- When approaching another aircraft head on, each pilot should:

- A-Turn to the left
- B-Turn to the right
- C-The aircraft to the north or east should climb, the one to the south or west should descend
- D-Use the radio to coordinate with the other aircraft

31-Who has final responsibility for determining whether an aircraft is safe for flight?

- A-The Instructor
- B-The Pilot in Command
- C-The aircraft owner

32-Which of the following statements regarding stalls is true?

- A-A glider can stall at any airspeed or attitude
- B-A glider will only stall below minimum sink speed
- C- A glider can only stall if the nose is above the horizon

33-Angle of Attack is the angle:

- A-Between the relative airflow and the horizon
- B-Between the direction of motion and the horizon
- C-Between the airfoil and the relative air flow

34-The primary method of controlling angle of attack is:

- A-The wing shape
- B-The dive brakes
- C-The elevator

35-One problem associated with making a downwind landing is:

- A-the illusion of a higher airspeed
- B-Ineffectiveness of the rudder
- C-Ineffectiveness of the wheel brake
- D-All of the above