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# *THRUST FLIGHT*®

## Archer Presolo Written Test

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<u>WRITTEN BY</u> TM	DOCUMENT NUMBER		REVISION 1.0
<u>APPROVED BY</u> LB	DOCUMENT NAME	Archer Presolo Written Test	1 of 7

# Archer Presolo Exam

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Name:

Date:

## Airplane Make/Model:

Answer the following questions in the space provided, using the FARs, AIM, Chart Supplement, 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 Archer have?
2. What is the engine horsepower?
3. How many gallons of usable fuel does the Archer hold?
4. What type of oil should be used in this engine?
5. Please write the speed on the Archer (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

$V_{NE}$

$V_{NO}$

$V_A$

$V_{FE}$

$V_{S1}$

$V_{S0}$

6. What is the maximum demonstrated crosswind component for the Archer?
7. What is the service ceiling of the Archer?
8. What is the takeoff distance to clear a 50 foot obstacle on a standard day?
9. What is the landing distance over a 50 foot obstacle on a standard day?
10. What is the maximum RPM setting?





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19. What altitude should you fly when operating in level cruising flight to the East at more than 3,000 feet agl?
20. How many fuel sumps does the Archer have?\_\_\_\_\_Why is it necessary to drain fuel from the fuel sumps?
21. When should this be done?
22. What type and grade of fuel is used by the Archer?
23. What is the acceptable operating range for oil quantity in the Archer?
24. Will the engine run with the master switch turned off?  
Why or why not?
25. What is the maximum allowable flap setting for takeoff in the Archer?
26. During a magneto check, what is the maximum RPM drop?  
How much difference is acceptable between the left and right mags?
27. Draw a diagram of the runways at your airport. Label each runway.



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28. Draw a runway and a “normal” traffic pattern. Label each leg.
29. Which turn direction is standard for a traffic pattern? \_\_\_\_\_ What is traffic pattern altitude at your airport?
30. How do you enter and exit the traffic pattern at an uncontrolled airport?
31. List the following frequencies at your airport:
- ATIS:
  - Ground:
  - Tower:
  - Approach Control:
  - Emergency:
32. Describe, “Wake turbulence”. In which type of aircraft and in which configuration is this most prominent? What is proper procedure to avoid wake turbulence?



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33. When are you required to wear a safety belt? Shoulder harness?
34. What must a pilot do before entering each of these airspace classes?  
Class A:  
Class B:  
Class C:  
Class D:  
Class G:
35. What is the minimum fuel requirement for VFR day conditions?
36. If the altimeter setting is not available at an airport, what setting should you use before departing on a local flight?
37. What must you do before performing flight maneuvers?
38. When practicing Steep Turns, Stalls, and Slow Flight, the entry altitude must allow a recovery to be completed no lower than
39. When two aircraft of the same category are converging head-on, which way do you turn to avoid the other aircraft?
40. Give three situations that would necessitate a go-around.  
a)  
b)  
c)
- List the procedure for a go-around:
41. What documents and endorsements are you required to have in your possession to legally operate the airplane as a solo student pilot?



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42. What are limitations your instructor may place on your solo endorsements?
43. 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 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.

