



TRAMMELL AVIATION GROUP

Formerly Tulsa Aviation Group

Pre-Solo / Checkout Written Exam

PRE-SOLO / CHECKOUT WRITTEN EXAM

Student / Renter Name			Date	
Grade		Graded By		
Aircraft	Make: _____	Model: _____	Tail No.	

EXAM PURPOSE / REGULATORY BASIS

For a student pilot, this exam is intended to satisfy the aeronautical-knowledge test requirement of 14 CFR 61.87(b). The test must address applicable portions of Parts 61 and 91, airspace rules and procedures for the airport where solo flight will be performed, and the flight characteristics and operational limitations of the make and model to be flown. The student's authorized instructor must administer the test and review every incorrect answer with the student before authorizing solo flight. Solo authorization is entered in the student's logbook; this test alone does not authorize solo. The student must also meet the applicable flight-training, proficiency, and endorsement requirements of 14 CFR 61.87. Questions used for a certificated renter checkout are a Trammell Aviation Group operational requirement and are not the FAA student-pilot pre-solo knowledge test requirement.

Current reference basis: 14 CFR 61.87, 61.89 and 61.93; applicable Part 91 rules; and FAA AC 61-65K. The FAA does not prescribe a specific passing percentage, but all incorrect answers must be reviewed before solo authorization.

AIRCRAFT KNOWLEDGE & LIMITATIONS

1. Define and list the following speeds for the selected aircraft:

Vs: _____
Vx: _____
Va: _____
Vno: _____

Vso: _____
Vy: _____
Vfe: _____
Vne: _____

2. What is the airplane's best glide speed, and when is it used?

3. What is the maximum gross weight of the airplane in the Normal Category? _____

4. What is the total fuel capacity and usable fuel capacity? Total: _____ Usable: _____

5. What is the maximum RPM of the engine? _____

6. How much horsepower does the engine produce? _____

7. What are the POH and TAG maximum/minimum oil quantities?

POH Max: _____ POH Min: _____ TAG Max: _____ TAG Min: _____

8. What would happen to the fuel indicators if all electrical power in the airplane was lost?

9. Why is it necessary to drain fuel from the sumps after refueling and before the first flight of the day?

10. Will the engine still run if the battery and alternator are turned off in flight? _____

AIRCRAFT KNOWLEDGE & LIMITATIONS - CONTINUED

11. During the run-up magneto check, what is the maximum allowable RPM drop and maximum difference between magnetos?

Maximum RPM Drop: _____ Maximum Difference: _____

12. What grade(s) of aviation fuel are approved for use in this aircraft, and what color is each?

13. What position must the fuel selector valve be in for takeoff and landing? _____

14. When is carburetor heat used?

15. How do you determine that the aircraft is within its maximum gross weight and approved center-of-gravity range before flight?

16. What is the published maximum demonstrated crosswind component for this aircraft, if published? Is it an operating limitation? What is your current TAG/CFI solo crosswind limit?

AIRCRAFT EMERGENCY & OPERATING PROCEDURES

17. List the emergency procedure for ENGINE FAILURE DURING FLIGHT:

18. List the emergency procedure for ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF:

19. List the procedure for a BALKED LANDING / GO-AROUND:

20. List the POH procedure for SPIN RECOVERY:

REGULATIONS

21. Under 14 CFR 91.3, who is directly responsible for, and is the final authority as to, the operation of an aircraft? _____
22. Under 14 CFR 91.103, what preflight action is required before beginning a flight? _____
23. Define an aerobatic maneuver under 14 CFR 91.303. _____
24. What conduct is prohibited by 14 CFR 91.13? _____
25. Under 14 CFR 91.17, what is the minimum time after consuming alcohol before a person may act or attempt to act as a crewmember? _____ hours
26. Under 14 CFR 91.123, when may a pilot deviate from an ATC clearance or instruction? _____

REGULATIONS - CONTINUED

27. When aircraft are approaching each other head-on, each pilot should alter course to the: _____
28. Under 14 CFR 91.119(a), what is the minimum safe altitude requirement that applies anywhere? _____
29. What is the minimum altitude over a congested area, city, town, settlement, or open-air assembly of persons? _____
30. What aircraft certificates/documents and operating limitations must be aboard or available in the aircraft before flight? Refer to 14 CFR 91.9 and 91.203. _____
31. What is the minimum VFR fuel reserve for an airplane during daytime operations? _____
32. Under 14 CFR 61.89, list five limitations that apply to a student pilot acting as PIC on a solo flight. _____
33. Under 14 CFR 61.87, where must the specific make-and-model solo endorsement be entered, and how long is that endorsement valid before it must be renewed or updated? _____
34. Does a solo endorsement for one make/model authorize solo flight in a different make/model? Explain. _____
35. Does a current local solo endorsement under 14 CFR 61.87, by itself, authorize a solo cross-country flight? What additional requirements apply under 14 CFR 61.93? _____

AIRPORT / TRAFFIC / ATC PROCEDURES

36. List and describe each light-gun signal available from ATC:

37. With which aircraft are wake-turbulence vortices greatest? Describe proper avoidance procedures. _____

38. Draw an airport traffic pattern, labeling each leg and the proper entry and departure points.

39. Which turn direction is standard for an airport traffic pattern unless otherwise indicated? _____
40. List the traffic pattern altitude, direction of turns, and CTAF frequency for the following airports:

Airport	TPA	Turns	CTAF
Claremore Regional (KGCM)	_____	_____	_____
Pryor Field (H71)	_____	_____	_____

AIRPORT / TRAFFIC / ATC PROCEDURES - CONTINUED

41. What runway marking indicates that a runway is closed? _____

42. Draw the runway holding-position marking and indicate which side requires you to stop before entering a runway.

AIRSPACE & WEATHER MINIMUMS

43. What must you do prior to entering Class C and Class D airspace? For Class C, what transponder/ADS-B equipment requirements apply, as applicable?

44. What are the basic VFR weather minimums for Class D airspace? Visibility: _____ Clouds: _____

45. What are the basic VFR weather minimums for Class E airspace below 10,000 feet MSL? Visibility: _____ Clouds: _____

46. What are the basic VFR weather minimums for Class C airspace? Visibility: _____ Clouds: _____

47. For an airplane in Class G airspace during the day, state the VFR weather minimums: (a) 1,200 feet AGL or less; and (b) more than 1,200 feet AGL but below 10,000 feet MSL.

INSTRUCTOR REVIEW OF INCORRECT ANSWERS

In accordance with 14 CFR 61.87(b)(2), all incorrect answers must be reviewed with the student before solo flight is authorized.

Incorrect answers reviewed: YES / N/A	Instructor Initials: _____	Date: _____
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INSTRUCTOR CORRECTION / REVIEW NOTES