



BOEING EMPLOYEES' FLYING CLUB

PRE-SOLO EXAM

Student: _____ **Instructor:** _____
Date: _____ **Aircraft type:** _____

This exam is not intended to reflect all of the skills and knowledge required to fly solo. It is intended to examine the student pilot's understanding of some of the procedures and limitations to be used while flying solo. This is an open-book exam, and assistance may be provided by the flight instructor.

All questions must be answered correctly to pass the exam. There is no limit on the number of times a student may repeat the exam. The flight instructor shall review all questions with the student.

After the exam has been reviewed with a passing score, the student pilot and the flight instructor shall sign the exam. The flight instructor shall keep a copy and submit the exam to the Safety Officer.

Flight instructors are encouraged to ask additional questions of their students.

Instructions: Answer each question in the space provided, using the FARs, the AIM, the Airport Facility Directory, and the pilot's operating handbook.

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

- Vs _____
- Vso _____
- Vx _____
- Vy _____
- Va _____
- Vfe _____
- Vno _____
- Vne _____

2. What is the airplane's best glide speed? _____ KIAS When is it used? _____

3. List the procedures to respond to an in-flight engine failure: _____

4. List the procedure to respond to an engine fire on the ground while starting: _____

5. What are the indications of carburetor ice? What action do you take, how will it act? _____

6. List the procedure for loss of a communication radio: _____

7. List the procedure for loss of a communication radio when arriving at an airport with an operating control tower: _____

8. List the procedure for a go around, or balked landing: _____

9. While flying in the pattern with other aircraft what actions could you take to keep proper spacing? _____

10. Give three examples of aircraft right of way: _____

11. What preflight action is required of a pilot prior to a flight? _____

12. Define an aerobatic maneuver. _____

13. Generally describe the engine in your airplane. _____

14. What is the minimum amount of time a pilot is required to wait after the consumption of alcohol? _____

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

16. List and describe each of the light gun signals available from air traffic control:

SIGNAL	ON GROUND	IN FLIGHT
Steady Green		
Flashing Green		
Steady Red		
Flashing Red		
Flashing White		
Alternating Red and Green		

17. Will the engine still run if the master switch is turned off? _____ Why? _____

18. What are wing-tip vortices (wake turbulence)? With which aircraft are they greatest? Describe proper avoidance. _____

19. How could wake turbulence be an issue on the ground? _____

20. What three documents must you have in your possession to solo an aircraft as a student? _____

21. During runup, what is the maximum allowable rpm drop? _____ What is the procedure if it is exceeded? _____

22. Draw an airport traffic pattern, labeling each leg and the proper entry and departure procedure.

23. Which turn direction is standard for an airport traffic pattern? _____

24. What is the total fuel capacity of your plane? _____ Gal. How much is usable? _____ Gal.
When can I use the unusable fuel? _____

25. What is the authority and responsibility of the pilot in command? _____

26. When are you required to wear a safety belt? _____

27. When are you permitted to deviate from an ATC instruction? _____

28. What grades of aviation fuel are available for use in this aircraft? What color is each? _____

29. When an aircraft is approaching another head-on, each pilot should alter his or her course to the _____.

30. A(n) _____ on the runway indicates that the runway is closed.

31. Draw the pavement markings for a "HOLD" line? Is it directional? _____ What does it mean?

32. When is dropping objects from an airplane permitted? _____

33. The _____ of two aircraft on approach to the same runway has the right of way.

34. What must a pilot do before entering Class C airspace? _____

35. What is the minimum safe altitude anywhere? Over congested areas? _____

36. List the day-VFR weather minimums in the following airspace:
 Class D _____
 Class E _____
 Class G _____

37. List the documents that must be aboard the aircraft at all times: _____

38. When must the aircraft's navigation lights be on? _____

39. What are you, as a student pilot, required to have before operating in Class B airspace? _____

40. What is the minimum fuel requirement for day VFR operations? _____

41. Fill in the following Frequencies for Wichita Mid-Continent :

ATIS	Departure East (main)
Clearance Delivery	Departure West (main)
Ground Control	Emergency Frequency
Tower	Unicom at Control Tower airports*

*For Ramp Service

42. Fill in the information on the airport you will use for first solo:

TPA	Left or right hand pattern
Unicom Freq.	AWOS

43. List each step of a "GUMPS" check, and then explain it's purpose:

G _____
U _____
M _____
P _____
S _____

44. What is the minimum ceiling and visibility for you to go solo (Set by your instructor)? _____

45. What are the wind and crosswind limits for you to go solo (Set by your instructor)? _____

46. Are you allowed to go solo at night (Set by your instructor)? _____

Instructor's Comments: _____

Member's Signature

Date

Instructor's Signature

Date