

Eagle Sport Aviation Club

Cub Refresher Written Exam

Closed Book

Name: _____ Date: _____

Instructor: _____

This exam is designed to test your knowledge of the Piper J-3 Cub, Eagle Sport Aviation Club policies pertaining to J-3 Cub operations and aerodynamics and flight characteristics specific to tailwheel aircraft. Successful completion of this exam is required prior to reinstating your PIC privileges. All questions must be answered correctly to the satisfaction of your instructor. All incorrect answers must be addressed by your CFI and corrected to be considered a "GO". Your completed test will remain on file with the Eagle Sport Aviation Club.

Policy

1. How do you stay current to fly the ESA J-3 Cub?
2. When does a flight need to be entered into MyFBO?
3. Upon return from a flight, what are your responsibilities?
4. If there is a maintenance issue with the J-3 Cub, what is the name and phone number of the person you MUST call?

Operational

1. What is the minimum number of qualified persons required for starting? Who can handprop? Who can hold the brakes?
2. What is the maximum taxi speed? What do you do if you realize you are taxiing too fast?
3. Describe the taxi procedure you will use when taxiing with a right quartering tailwind.

4. Describe the taxi procedure you will use when taxiing with a left quartering headwind.
5. If you have just finished a solo flight and are at the fuel farm, how do you ensure the Cub will not weathervane while you are fueling?
6. In the event of an engine failure, describe (in order) your actions to ensure a safe landing

Best Climb speed:	Total fuel capacity:	Max oil capacity:
1 G stall speed:	Fuel burn (gal/hr):	Max engine RPM:
Vne:	Approved oil grade:	Max time that max RPM may be used:
Approved fuel grades:	Min oil capacity:	

Aerodynamics/Stability and Control

1. Thoroughly describe the technique used for taxiing a tailwheel aircraft. When should the brakes be used? What will happen if you lock up the brakes while traveling at excess speed?
2. If you land a tailwheel airplane with the brakes engaged, what will happen?
3. Thoroughly explain why having the C.G. behind the main wheels causes a tailwheel airplane to be directionally unstable on the ground.

The next set of questions refers to the following situation:

A pilot performs a takeoff roll in the cub with no crosswind corrections. The wind is strong and from the left. Please fill in the following blanks: The Cub will start to turn _____ (away from, into) the wind due to _____ (dihedral effect, weather vane stability, scuff effect). This turn is due to lack of proper _____ (elevator, rudder, aileron) control.

As a result, the cub will be on the _____ (upwind, downwind) side of the centerline.

The
Proper placement of the ailerons when on this side of the centerline would be _____ (towards the centerline, away from the centerline, into the wind, downwind). The effect that can further aggravate this yawing situation is _____ (dihedral effect, adverse yaw, spiraling slipstream). The airplane will tend to roll _____ (away from, towards) the wind due to _____ (dihedral effect, adverse yaw, weather vane stability).

Having the down wind wing down in a tailwheel airplane is _____ (stable, unstable).

The proper correction for this situation would be _____ (downwind, upwind) rudder and ailerons _____ (towards the centerline, away from the centerline, into the wind, downwind). The worst thing that can be done in this situation is to apply

(downwind, into the wind) ailerons.

Touching down with the longitudinal axis not parallel to the centerline is _____ (safe, unsafe). Touching down with any drift to the left or right is _____ (safe, unsafe). The proper correction for either of these problems is to _____ (go around).