

Name _____

2024 OSCI Safety Quiz

This year's safety quiz comprises operational questions that you should be able to quickly answer as an OSCI PIC flying the club's L-23. If a question is not applicable since you're a solo student just put N/A or elaborate why you can't do something. If you haven't soloed – do your best, we'll go over it at the meeting.

Scenario 1 – You're preparing for your OSCI Safety flight and have reviewed our L-23 (N258BA) - POH and Weight and Balance information under the OSCI Website → Members Tab → Training Material

1. The L-23's airspeed indicator reads in (circle one): mph kph knots
2. What's the L-23's speed at stall with and without spoilers? About _____, and about _____
3. What's the L-23's speed at minimum sink? _____
4. What's the L-23's speed at best L/D? _____
5. What's the L-23's best pattern speed? _____
6. What's the L-23's maneuvering speed? _____
7. What's the L-23's never exceed speed? _____
8. You've been blown downwind facing a 25-knot headwind. What speed should you fly? _____
9. What is a practical definition of V_a ?
10. Landing with a 20-knot headwind – what should your approach speed be? _____
11. What is N258BA's maximum useful load? _____
12. What is the minimum front cockpit weight if flying solo? _____
13. In still air – using a factor of safety of 2 what is the minimum altitude required (rule of thumb – ROT) to travel 1 NM? _____ →See *** next page if necessary.
14. In a 25-knot headwind – using a factor of safety of 2 what is the minimum altitude required (ROT) to travel 1 NM? _____ →See *** next page if necessary.

Scenario 2 - You're flying the L-23 early in the season. A friend of yours is going to meet you and you estimate that your friend weighs about 250 lbs. There is a beautiful broken layer of CU at 7000 msl and winds are out of 270 @ 20 knots on the ground. You've completed your OSCI Safety flight on the first day of OSCI flight ops the previous day and also got one additional solo flight in.

1. In order to assess your own fitness before flying you've used the FAA's IMSAFE found in the AIM. What does each letter stand for?
2. Do you have to have your FAA Certificate, Logbook and photo identification with you in the L23?
3. Are you legal to fly with your friend? _____ If not, what's required?
4. Who's responsible to pre-flight the L-23 and brief the tow pilot?
5. Who's responsible to determine if the correct rope is used?
6. OSCI uses two ropes one yellow, one white. What are the strengths? _____
7. Your friend brought his 5-year-old son and has requested that you take him for a flight. You've been previously checked out to fly from the rear cockpit. Can the child ride in front? Y/N Why?
8. You want to give your friend the best view of Omaha so you'll fly close to Class C airspace. You don't want to worry TRACON – so you turn the transponder off. Good idea? - Y/N Why?
9. What code should the transponder in N258BA be set to? _____ or, where is it listed? _____
10. What are the cloud clearances required for today's flight (above, below, horizontal)?
11. Describe (how close) Class C airspace to KBTA?
12. Can you take N258BA above Class C? Explain:
13. What is the only thing you should be doing S-E or directly E of KBTA?

***Rule of thumb (ROT) calculation: (assume 25 knot headwind)

*Published L/D is 28:1 @49 knots. *Speed to fly is $49+13=62$ -knots. *Ground speed is $62-25=37$ -knots

*Effective glide ratio is $37/62(28) = 17:1$ *6000'per NM/ $17=352'$ /NM *Round up to 400'/NM

*Now include F/S of 2. → $400 \times 2 = \sim 800'$ /NM

***Rule of thumb in still air (ROT) is easier → $6000/28=214'$ /NM times 2 = $\sim 400'$ NM