

Name/Signature \_\_\_\_\_

Date \_\_\_\_\_

## LET L-23 Super Blanik Operations Quiz

This 2-Part quiz requires the pilot transitioning to the LET L-23 to review the POH, and the Weight and Balance information for the Omaha Soaring Club's aircraft N258BA (SN 938018). Most answers will be contained in the POH for this particular aircraft found on the OSCI Website →Members Tab→Training Material→N258BA Flight Manual. The original copy of the POH is contained in the aircraft behind the rear seat and the W&B chart(s) are found in both seat pockets.

\*\*Note – the most current weight and balance information is located at the very end of the POH – page 64 of 65.

Tip →Parts of this document will be easier to complete after a cockpit checkout and review of N258BA with an OSCI CFG. Other parts will be easier to complete after a few dual flights with an OSCI CFG.

This document shall be completed and turned into a Club CFG at which time an appointment to review the answers shall be scheduled. Please make a copy of this document for your own files and notes, the other copy will be retained by OSCI.

### ● PART 1

1. The L-23's airspeed indicator reads in (circle one):      mph      kph      knots
  
2. What are the following maximum speeds:
  - a. Never exceed (Vne) \_\_\_\_\_
  - b. Maneuvering (Va) \_\_\_\_\_
  - c. Max aerotow (Vt) \_\_\_\_\_
  - d. Max demonstrated x-wind component \_\_\_\_\_
  
3. What is the practical definition of Va?
  
4. What are the following performance speeds?
  - a. Minimum sink \_\_\_\_\_
  - b. Best L/D \_\_\_\_\_
  - c. Speed to fly if variometer reads 6 knots down \_\_\_\_\_
  - d. Minimum approach speed range in calm conditions \_\_\_\_\_ no less than \_\_\_\_\_
  - e. Approach speed in 20-knot headwind \_\_\_\_\_ no less than \_\_\_\_\_
  - f. Stall speed without spoilers (about) \_\_\_\_\_
  - g. Stall speed with full spoilers (about) \_\_\_\_\_
  - h. Best aerotow speed range (about) \_\_\_\_\_ to \_\_\_\_\_

5. What are the following weights for N258BA?
  - a. Empty weight \_\_\_\_\_
  - b. Maximum gross weight \_\_\_\_\_
  - c. Useful load \_\_\_\_\_
  - d. Minimum front seat weight for solo flight \_\_\_\_\_
  - e. Allowable range in the back seat if you're in front \_\_\_\_\_ to \_\_\_\_\_
  - f. Allowable range in the front if you're in the bak \_\_\_\_\_ to \_\_\_\_\_
  
6. What options are available if the solo pilot's weight is less than required?
  - a.
  - b.
  
7. What kind of tow hook does the L-23 use? (circle one)      Schweizer      Tost
  
8. What color/strength (OSCI) rope should be used for aerotow?    Yellow 1000#    or    White 1500#
  
9. What are the units and scale on the variometers?
  
10. Describe the location and color of emergency canopy release handle?
  
11. Describe the location and color of the tow line release handle?
  
12. Describe the location and operation of the mechanical wheel brake?
  
13. Describe the location/operation of the front rudder pedal adjustment?
  
14. Describe the location, operation, and lock detent of the airbrake handle?
  
15. Describe the location, operation and color of the trim knob?
  
16. Describe the proper trim setting for most operations prior to takeoff?
  
17. T/F – The tailwheel is susceptible to damage if an approach is made too slow and the tailwheel touches first.
  
18. Can the L-23 be landed with full airbrakes Y/N. Should it be landed with full airbrakes Y/N Explain?
  
19. What should the transponder code be set to in N258BA? \_\_\_\_\_
  
20. RESERVED SPACE

21. The L-23 has a factory claimed L/D of 28:1 at 49 knots.

- a. 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 \*\*\* below if necessary.
- b. In a 25-knot headwind – using a factor of safety of 2 what is the minimum altitude required (ROT) to travel 1 NM? \_\_\_\_\_ → See \*\*\* below if necessary.

\*\*\*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

## AIRCRAFT/COCKPIT CHECKOUT

### ● PART 2

#### 1. Prerequisites:

- a. Completed OSCI Operations Quiz
- b. Current Flight Review and OSCI Safety flight.
- c. Minimum 5 dual flights in L-23, and one PT3
- d. Signed off for solo by OSCI CFG

#### 2. Preflight with OSCI CFG including:

- a. Connections – and positive control check
- b. Static and pitot port locations
- c. Total energy probe and connection to variometer.
- d. Seat positions – including rudder pedal adjustment
- e. Documents (AROW)
- f. Seat ballast – location, installation, types available.
- g. Wheel strut (main) – proper extension
- h. Tailwheel – and care of, if pushing the aircraft backward (generally not recommended)
- i. OSCI Staging

3. Cockpit checkout:
  - a. Canopy positive latching and emergency ejection handle/location/operation
  - b. All instruments.
  - c. Vario operation
  - d. Radio operation
  - e. Transponder operation and code
  - f. Dive brake latching and operation. View handle position at full, half and cracked condition.
  - g. Wheel brake and operation.
  - h. Tow release – handle operation – full out and full in.
  - i. Trim
  - j. Seat belts and operation
  - k. Canopy cautions – base ball cap button is PROHIBITED
  - l. Control stick – discuss takeoff positioning
  - m. Tost ring – view proper connection – safety. Which ring is inserted.
  
4. Flight characteristics including:
  - a. Normal and crosswind takeoff.
  - b. Downwind takeoff.
  - c. On tow – normal and crab.
  - d. Performance speeds.
  - e. Stalls and recovery.
  - f. Spins and recovery. (discuss)
  - g. Normal and crosswind approach and landings.
  - h. Left traffic, right traffic.
  - i. Pattern Initial Points.
  
5. Operating from KBTA
  - a. Airport environment
  - b. Airspace to include locations of Class C, E, and G.
  - c. Premature termination of tow PT3 – options and best options.
  - d. Glider and power aircraft separation
  - e. Sharing airspace and best practice at KBTA.
  - f. Glider staging efficiency and safety practices.
  - g. Flight line safety and sharing the workload.
  - h. Landmarks from ground and air discussion.

Name/Signature OSCI Pilot \_\_\_\_\_

Reviewed by OSCI CFIG \_\_\_\_\_

Date: \_\_\_\_\_