



Pilot: _____

Licence #: _____

Instructor: _____

Date: _____

Questions were derived from the Flight Training Supplement and the Aircraft Operating Instructions for SportStar Light Sport Aircraft, current weight and balance figures, applicable Service Bulletins, Aircraft Data Sheet and the aircraft checklist.

Airspeeds:

1. Fill in the following V speeds and define each:

V _{so}	_____	_____
V _{s1}	_____	_____
V _{LOF}	_____	_____
V _X	_____	_____
V _Y	_____	_____
V _{BEST GLIDE}	_____	_____
V _{FE}	_____	_____
V _A	_____	_____
V _{NO}	_____	_____
V _{NE}	_____	_____

Maximum Demonstrated: _____

Speed of wind for Airplane Operation:	_____	KTS
Crosswind for Take-Off and Landing:	_____	KTS
Tailwind Take-Off Limit:	_____	KTS

Powerplant:

2. Engine Model is: _____ it produces _____ Horsepower.

3. For this airplane, what are the Engine Limitations for take-off?
_____ RPM for _____ minute max continuous _____ RPM

4. By what means does the propeller rotate slower than the engine RPM?

5. Describe the propeller: _____

6. The engine oil is contained in a: _____

7. Engine oil capacity is: Minimum: _____ Maximum: _____

8. The correct oil level should fall within the _____ on the dip stick.

9. During the first preflight of the day, if the oil level is below the proper level on the dipstick, what procedure should be used to ensure you do not overfill the oil?

10. Approved Oil API classification: _____
11. Approved Oil Type and Weight: _____
12. Engine cooling is accomplished two ways, _____ are cooled by a mix of anti-freeze and water, _____ are cooled by air.
13. If liquid coolant requires replenishing, where is it added? _____
Up to what level? _____

Fuel System:

14. Describe the fuel tanks: _____
15. What is the total fuel capacity? _____ gallons
14. What is the total unusable fuel? _____ gallons
17. It is not recommended to fully fuel the tanks due to thermal expansion. How much free space is recommended? _____ gallons
18. Where are the fuel tank bleed vents located? _____
19. What are the approved fuel grades for this airplane? _____
20. When should the auxiliary electric fuel pump be on? _____
21. Why is the left fuel tank considered as a **primary** tank to be switched to for take-offs & landings?

Flap System:

22. How many degrees of flap for each position?
a. First Click: _____
b. 2nd Click: _____
c. 3rd Click: _____
23. Recommended Flap settings:
a. Normal landing: _____ degrees
b. Short field landing: _____ degrees
c. Short field take off: _____ degrees
d. Downwind landing: _____ degrees

Electrical:

24. The electrical system includes a: _____ volt, _____ amp hour battery & a _____ watt alternator.
25. What type of indicators displays the status of the electrical system?
and _____
26. What is the first indication a failure of the alternator or the battery discharging?

27. What precautions should the pilot take to avoid overloading the electrical system?

28. To protect certain equipment, what electrical switch should always be turned off when starting or stopping the engine?

Weight & Balance:

29. What is the maximum gross weight of this airplane? _____ LBS
Basic empty weight? _____ LBS

30. Using the current Weight & Balance worksheet, what is the maximum weight allowed for pilot and passenger with fuel tanks half full? _____ LBS

31. What is the maximum amount of weight that can be placed in the baggage area?
_____ LBS

Unique Operations

32. If the choke was used to help start the engine, what should you do, and how, as soon as the engine is running smoothly? _____

33. Immediately after engine start, if the oil pressure rises above 6.0 - 7.0 or below 2.0 bars on the oil pressure gauge, what procedure should be observed?

34. Oil pressure should indicate within _____ seconds after engine start, if not, you should shut the engine down.

35. If the engine was started at a cold temperature, keep the rpm between 2000 and 2200 RPM to allow the engine to warm up for _____ to _____ minutes to achieve a smooth run. Then the engine rpm can be increased to achieve the minimum run-up and take-off oil temperature.

36. Engine warm up is achieved for take-off when the oil temperature and cylinder head temperatures reach _____ degrees.

37. Carburetor heat is normally turned _____ when on final approach.

38. Describe the operation of the parking brake.

Performance:

39. Describe the recommended (and slightly unique) take-off procedure for this airplane:

40. What final approach airspeed would you use for a normal landing at max gross weight and with the second notch of flaps? _____ KIAS

41. Describe the recommended power and flap setting, speed, and procedure for beginning the normal landing roundout: _____

_____ KIAS

43. What is the best balked landing climb speed with 50 degrees of flaps on a standard day and max gross weight? _____ KIAS

44. What maneuvers are approved for this airplane?

45. What are the maneuvering load factors? Positive: _____ Negative: _____ G's

46. What is the take-off distance on a concrete runway under standard conditions with 15 degrees of flaps and a 5-knot tailwind? _____ feet

47. If you are taking off on Boundary's runway 12 and the wind is 300 at 12 knots, what is the crosswind component? Approx. _____ knots

48. What is the landing distance over a 50-foot obstacle on a standard day with max gross weight to a dry surface runway using full flaps? _____ feet

49. At max gross weight and a standard altitude of 3000', what is our rate of climb?

50. What engine rpm would be required at a standard altitude of 6,000 feet to maintain an indicated airspeed 91 knots? _____ rpm

51. For a cross-country flight, you plan to cruise at 5000 feet and you plan to fly with an indicated airspeed of 93 knots. You plan to take-off with half fuel.
What will be your approximate true airspeed? _____
How long can you fly before refueling? _____
What is your range with day reserve? _____

➤ **Evektor SportStar Type Exam Completed Satisfactorily**

Flight Instructor's Signature

Date

Pilots's Signature

Date
