

Check Out

PA28-180

Phase 1: Pre-Flight

Valley Fliers

1402 Auburn Way North, #223
Auburn WA 98002

Name: _____

Certificate Number: _____

Instructor: _____

Certificate Type: _____

Ratings: _____

Check Out Date: _____

Total Flight Time: _____ Last 90 Days: _____

Club check out is in two phases: Phase 1 – Pre-flight. Phase 2 – Flight.

This is an open book check out. The aircraft's documentation will be required to complete the Phase 1 check out. Read the question and the possible answers, then print the letter of the most correct answer on the line next to the question.

1. _____ The maximum take-off weight of N5163S in the normal category is:
 - a. 2300 pounds
 - b. 2400 pounds
 - c. 2250 pounds

2. _____ The empty weight of N5163S is:
 - a. 1457.3 pounds
 - b. 1328.3 pounds
 - c. 1412.4 pounds

3. _____ The useable fuel capacity of N5163S is:
 - a. 45 gallons total, 36 gallons to tabs
 - b. 36 gallons total, 36 gallons to tabs
 - c. 50 gallons total, 36 gallons to tabs

4. _____ What is the total engine oil capacity and, except for an extended flight, when should oil be replenished?
 - a. 6 qts, 4 qts minimum, fill to 6 qts.
 - b. 8 qts, 6 qts minimum, fill to 7 qts.
 - c. 6 qts, 4 qts minimum, fill to 5 qts.

5. _____ The maximum allowable weight that can be placed in the baggage area in normal category operations is:
 - a. 200 pounds
 - b. 135 pounds
 - c. 120 pounds

6. _____ Each fuel tank has an individual quick drain located at the inboard rear corner of the fuel tank. Where is the fuel strainer drain located?
 - a. Under the belly
 - b. Under the engine
 - c. On the front lower left of the firewall

7. _____ N5163S has a modified fuel selector valve cover. Selection options are Left tank, Right tank and Off. How is the selector valve moved to the off position?
 - a. Rotate the selector counter-clockwise
 - b. Rotate the selector clockwise
 - c. Depress the button on the selector cover, hold it while rotating the selector to the off position

8. _____ The first indication of carburetor ice in an aircraft with a normally aspirated engine in cruise flight with a fixed pitch propeller is:
 - a. A gradual decrease in RPM
 - b. A sudden decrease in RPM
 - c. Rough running engine and RPM loss

9. _____ The normal leaning procedure, using an exhaust temperature gage (EGT), is to set the engine up for cruise power, lean the mixture until engine RPM peaks, then:
 - a. Enrich the mixture until EGT drops 50 degrees
 - b. Leave the mixture at peak EGT
 - c. Lean the mixture another 25 degrees

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10. ____ Flaps may be lowered at airspeeds up to 115 MPH, however it is desirable to have the airplane at a slower speed before extending flaps because:
- a. You have better pitch control
 - b. There are lower flap operating loads
 - c. There is better visibility over the nose
11. ____ Trim for take-off so that a very light back pressure is required at the best rotation speed for take-off under normal conditions. The normal rotation speed is:
- a. 65 MPH
 - b. 50 to 60 MPH
 - c. 55 to 65 MPH
12. ____ When should the electric fuel pump be turned on?
- a. For a cold start
 - b. For a cold start and take-off
 - c. For starting, take-off, approach and landing, and when switching tanks
13. ____ The airspeed indicator in N5163S registers in:
- a. KPH
 - b. MPH
 - c. KTS
14. ____ What is the maximum demonstrated cross wind component of a PA28-180F?
- a. 18 MPH
 - b. 12 MPH
 - c. 20 MPH
15. ____ The distance to clear a 50 ft. obstacle in a maximum effort, no wind, 2400 lb. gross from a paved runway at sea level with a temperature of 15 C (59 F) and altimeter setting of 29.92" is:
- a. 1525 feet
 - b. 1340 feet
 - c. 1625 feet
16. ____ For a normal landing the airplane should be trimmed to an approach speed of 85 MPH with the flaps up, and the approach speed should be reduced 3 MPH for each notch of flaps. Which statement is correct concerning pattern and approach speeds?
- a. 100 MPH down wind, 90 MPH on base and 82 MPH final with 25° flap
 - b. 100 MPH down wind, 90 MPH on base and 82 MPH final with 40° flap
 - c. 100 MPH down wind, 90 MPH on base and 79 MPH final with 25° flap
17. ____ What engine setting would produce the closest performance to 75% brake horse power at 5,000 feet on a standard day?
- a. 2600 RPM, for 9.9 gallons/hour
 - b. 2625 RPM, for 9.9 gallons/hour
 - c. 2585 RPM, for 9.9 gallons/hour
18. ____ What is the recommended tire pressure for the main gear tires?
- a. 29 psi on 6.00 x 6 tires
 - b. 24 psi on 6.00 x 6 tires
 - c. 30 psi on 6.00 x 6 tires
19. ____ What is the recommended tire pressure for the nose gear tire?
- a. 31 psi on 6.00 x 6 tire
 - b. 32 psi on 6.00 x 6 tire
 - c. 24 psi on 6.00 x 6 tire
20. ____ What power setting and airspeed is recommended for a cruise climb?
- a. Full throttle and 100 MPH
 - b. Full throttle and 70-90 MPH
 - c. Full throttle and 60-75 KTS
21. ____ What power setting is recommended for cruise flight?
- a. 2150-2300 RPM, but no > than 65%
 - b. 2200-2700 RPM, but no > than 75%
 - c. 2290-2640 RPM, but no > than 75%
22. ____ Prior to approach and landing, the fuel selector valve should be:
- a. Turned to the right tank to prevent siphoning
 - b. Remain on "Both"
 - c. Turned to the fullest tank
23. ____ What is the approved flap range for take-off?
- a. 0 to 10 degrees
 - b. Flaps not recommended for take-off
 - c. 0 to 25 degrees

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24. ____ The Piper Cherokee main and nose gear uses an oleo support strut. During pre-flight which statement best describes the airworthiness of the landing gear struts?
- They can be flat as long as soft field take-off and landings are used
 - A minimum of 3" extension is required before flight
 - They must all be inflated to the exact same height
25. Using the POH manual's loading graph and center of gravity moment envelope for N5163S, calculate the gross weight and CG for the following:

Item	Weight	Arm	Moment (in.lbs.)
Empty Weight			
Oil – 8 quarts			
Front Seats	320		
Rear Seats	285		
Fuel – 36 gallons			
Baggage Area	60		
Total Weight and Moment		CG=	

26. Using the POH manual's loading graph and center of gravity moment envelope for N5163S, calculate the gross weight and CG for the following:

Item	Weight	Arm	Moment (in.lbs.)
Empty Weight			
Oil – 8 quarts			
Front Seats	375		
Rear Seats	Empty		
Fuel – 50 gallons			
Baggage Area	15		
Total Weight and Moment		CG=	

27. ____ What airspeed produces the best glide for an engine out glide?
- 100 MPH IAS
 - 65 MPH IAS
 - 80 MPH IAS
28. ____ What is the stalling speed in a 60 degree bank with full flaps at the most rearward CG?
- 65 MPH IAS
 - 81 MPH IAS
 - 95 MPH IAS

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29. Provide the following airspeeds (IAS):

V_a	Design maneuvering speed	_____
V_{no}	Maximum cruise speed	_____
V_{ne}	Never exceed speed	_____
V_y	Best rate of climb speed	_____
V_x	Best angle of climb speed	_____
V_{fe}	Maximum flap extension speed	_____
V_{s1}	Power off stall, flaps up	_____
V_{so}	Power off stall, flaps down	_____

30. _____ The cockpit door has two latches. The upper latch must be secured by the pilot for the flight and when the airplane is secured on the ground to avoid rain water in the cockpit. If the door opens during flight, you should:
- a. Land immediately before the door blows off
 - b. Have your passenger hold the door shut
 - c. If you are not in a position to make a normal landing: slow the airplane to 100 MPH, close the cabin vents, open the pilot vent window, if the upper latch is open, latch it. If the lower latch is open, undo the top latch, push the door further open and then close rapidly and latch top latch. It is permissible to slip in the direction of the open door to assist in the latching procedure.
31. _____ The easiest way to ground handle this aircraft is to use the tow bar. What is the tow bar turning angle limit?
- a. Do not exceed 30 degrees from center
 - b. To the limit where it will turn no further
 - c. Do not exceed 22 degrees from center
32. _____ Where is the emergency locator transmitter (ELT) located?
- a. Behind the baggage compartment, just aft of the battery
 - b. Behind the baggage compartment
 - c. In the baggage compartment, near door
33. _____ How is the ELT armed in this aircraft?
- a. A switch on the unit's case
 - b. It is always armed
 - c. A switch on the instrument panel, left side
34. _____ Where is the battery located?
- a. Behind the baggage compartment
 - b. Behind the engine, on the firewall
 - c. Under the rear seats
35. _____ What is the voltage of the electrical system?
- a. 14 volt 60 amp generator, 12 volt battery
 - b. 28 volt 60 amp alternator, 24 volt battery
 - c. 12 volt 60 amp alternator, 12 volt battery
36. _____ Does N5163S have a radio (avionics) master switch?
- a. No, shut off each radio individually
 - b. Yes, for comm radios only
 - c. Yes, individual switches can be left on
37. _____ What engine RPM is used for a magneto check?
- a. 2000 RPM
 - b. 1700 RPM
 - c. 2300 RPM

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38. ____ When should carburetor heat be applied in the approach and landing phase?
- a. When there is an indication of carburetor icing
 - b. When you do the GUMPS check on down wind
 - c. When the engine is throttled down to idle before touchdown
39. ____ What is the normal engine RPM operating range at sea level?
- a. 2200-2500 RPM
 - b. 2000-2600 RPM
 - c. 2290-2500 RPM
40. ____ When is the manual engine fuel primer used?
- a. For normal engine starting
 - b. When the engine does not fire within 5 to 10 seconds
 - c. When the engine is cold
41. ____ What minimum fuel grades (octane) are authorized for use in N5163S?
- a. AV 80/87
 - b. AV100LL
 - c. AV 80/87 and Mogas
42. ____ To act as pilot in command of this aircraft, you must be rechecked in the aircraft:
- a. Every Bi-Annual
 - b. Every year
 - c. If you have not flown a like aircraft in the preceding 90 days or when deemed by the Club
43. ____ Who is responsible for the aircraft documentation that must be on board the airplane before flight?
- a. The maintenance officer
 - b. The pilot in command
 - c. The safety officer
44. ____ Who is responsible for cleaning the airplane interior and windows after a flight?
- a. The next user
 - b. The cleaning crew
 - c. The pilot who just completed the flight
45. ____ Who is responsible for installing the control lock, securing the tie-downs and locking the aircraft's doors and windows?
- a. The maintenance officer
 - b. The person assigned to ramp duty
 - c. The pilot who just completed the flight
46. ____ Who can perform any maintenance or modifications on club aircraft?
- a. Any Club member on the active list
 - b. Anyone with a pilot's license, except students
 - c. The maintenance officer or his designee
47. ____ Who can instruct in club aircraft?
- a. Affiliated instructors approved by the board
 - b. Any instructor appointed by an associate
 - c. An instructor hired by the member
48. ____ In order to complete a check out in the PA28-180, a club member must complete:
- a. A club authorized check out
 - b. A check out from an FBO
 - c. A check out form signed by any instructor

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Phase 2: Flight

Valley Fliers

1402 Auburn Way North, #223
Auburn WA 98002

Name: _____

Certificate Number: _____

Instructor: _____

Certificate Type: _____

Ratings: _____

Check Out Date: _____

Total Flight Time: _____ Last 90 Days: _____

Club check out is in two phases: Phase 1 – Pre-flight. Phase 2 – Flight.

The Phase 1 check out should be completed and discussed prior to the Phase 2 check out.

Flight Review	Instructor initials indicating satisfactory performance – refer to applicable PTS
I. Pre-Flight Inspection	
II. Check List and Pre-Start Procedures	
III. Starting Engine	
IV. Normal Departure Operations a. Taxing b. Pre Take-off Checks c. Normal Take-off d. Climb – appropriate power settings e. Cruise – appropriate power settings	a. _____ b. _____ c. _____ d. _____ e. _____
V. Air Work a. Steep Turns b. Flight at Minimum Controllable Airspeed c. Stall Recognition and Recovery d. Recovery from Unusual Attitudes by reference to instruments e. Simulated Emergency Descent	a. _____ b. _____ c. _____ d. _____ e. _____
VI. Normal Arrival Operations a. Descent and check list procedures b. Normal landings	a. _____ b. _____
VII. Pattern Work a. Cross wind take-off and landing b. Short field take-off and landing c. Soft field take-off and landing d. Go arounds e. Zero Flap landing	a. _____ b. _____ c. _____ d. _____ e. _____
VIII. After Landing and Post-Flight Procedures	
IX. Remarks:	

Overall Completion of Transition or Original Aircraft Check Out

Phase 1 – Ground Instruction

Hours of ground instruction completed: _____

Instructors signature: _____

Certificate number: _____

Expiration date: _____

Phase 2 – Flight Review

Hours of flight instruction completed: _____

Instructors signature: _____

Certificate number: _____

Expiration date: _____

I have received training to operate a Piper PA28-180 aircraft and completed the ground and flight training noted above.

Pilots signature: _____

Date: _____