Piper Saratoga II Familiarization (Initial HP+Complex)

Note: This aircraft ***does not*** possess an automatic-gear extension system, hence no "OVERRIDE" is available or required for use during the procedures outlined throughout the POH where such is mentioned.

1. Describe the general systems of the aircraft:
    a. Engine Mfr, Type, Desig _____
    b. Fuel – Capacity?_____Usable (per tank)?_____, Tabs (per tank)? _____
        i. Position & location of fuel drains to sump_____
        ii. Type of fuel permitted?_____
        iii. Fuel flow indicator? _____
    c. Oil: (All Wx) _____Min operational qty?_____ Sump Capacity? _____
    d. Propeller Type _____
    e. Electrical System: Battery _____v, System____v
    f. Flap Settings: _____
2. What is the ramp weight for this aircraft? _____ lbs. Takeoff Weight? _____lbs
3. Current basic empty weight for this aircraft? _____ lbs., _____ inches
4. What is the Useful Load of this aircraft? _____lbs
5. How much payload can be carried assuming full fuel on board? _____lbs.
6. What is the max permitted weight in Main Cargo area? _____ Nose compartment?_____
7. Note the following v-speeds:

v-SPEED	KIAS	v-SPEED	KIAS	KIAS
V_{NE}		V_X (CLEAN / GEAR DN + FLAPS)		
V_{GLIDE}		V_Y (CLEAN / GEAR DN + FLAPS)		
V_{NO}		V_R		
V_{SO}		V_{LO} (R)		
V_A		V_{LO} (E)		
V_{FE}		V_{LE}		
$V_{CRUISE\ CLIMB}$				

8. What is the emergency/manual gear extension speed? _____
9. What is the max demonstrated cross-wind for this aircraft? ____ kts
10. Can the aircraft be flown with cabin/rear cargo doors removed? _____ IF so, under what condition(s)? _____
11. The maximum full-power take-off duration is_____ minutes
12. Can you fly with the front door removed?_____ IF so, when?_____
13. What is the probable cause of a propeller overspeed condition? _____
    _____
14. What is the remedy for a "Propeller Overspeed" condition?_____
    _____
15. What is the recovery procedure if the cabin door opens in flight? _____
    _____
    _____

16. Upon an "Alternator Failure" condition, the pilot should:
    a. _____
    b. _____
    c. _____
    d. _____
17. When should the electric fuel pump be used?_____
18. If a tank has been run dry, what might you experience? _____

_____

19. How long could it take for fuel flow to resume? _____
20. What actions should be taken if "Loss of Fuel Flow/Pressure" occurs?
    a. _____
    b. _____
    c. _____
21. Starter cranking is limited to _____ seconds with _____ minute rest periods between cranking cycles.
22. During the "warm up period" the engine should be at a minimum of _____RPM and maximum of _____RPM. The "warm up period" should be no longer than _____ minutes in warm weather, and _____ minutes in cold weather
23. Is it permissible to fly this aircraft into forecasted icing conditions? _____
24. During cruise, what is the recommended maximum power settings? _____
25. What is the maximum demonstrated X-wind for this aircraft? _____
26. What type of stall warning indication does this aircraft have? _____
27. During a short- or soft-field takeoff, the flaps should be extended to the _____ notch which is _____ degrees
28. The rotation speed for this aircraft is?_____
29. If the Panel Light rheostat Switch is in the "ON" position how does that effect the Landing Gear Position Indicator Lights?_____
30. This aircraft is equipped with a back-up landing gear extender, that automatically extends the landing gear at certain flight conditions (True / False)?_____
31. Can the ELT be activated from the flight deck (Yes / No)_____
32. What is the power off stall speed with flaps 40°, maximum gross weight, gear down, and a 40° angle of bank? _____
33. What are the first five steps in the emergency procedure for an in-flight engine fire?
    a. _____ b. _____ c. _____ d. _____
    e. _____

26. The engine induction Alternate Air source in this aircraft is: (Auto/Manual/Both)?_____

27. What is the approximate short field takeoff distance (over a 50’ obstacle) under the following conditions: Takeoff weight: Gross, Obstacle: 50 ft., Flaps: 25°, Power: Full Throttle, Temperature: +30° C, Pressure Altitude: 1,500 ft.? _____ ft.

30. What is the approximate landing distance (over a 50’ obstacle) under the following conditions: Landing weight: Gross, Flaps: 40°, Power: Off, Temperature: +40° C, Pressure Altitude: 1,000 ft.; Max Braking? _____ ft.

31. What is the Best Glide Configuration for this aircraft at gross weight? Gear: _____, Flaps:_____, Airspeed:_____

32. When transitioning to a balked landing from a normal landing configuration, the flaps should initially be retracted to _____ notch or _____degrees.

33. When configuring the aircraft for landing, should carburetor heat be used? (Yes / No) _____

Why? _____

34. During the pre-takeoff engine run-up, the power should be set to _____ RPM. As each magneto is individually selected, the maximum allowable drop is _____ RPM. The difference between the left and right magneto RPM drop must not exceed _____ RPM. May the pilot initiate a takeoff if these values are slightly exceeded? (Yes/No) _____

35. What flap setting(s) should be used to test the stall warning system? _____

36. When should the landing gear be retracted after takeoff? _____
_____

37. What are the indications that the landing gear has been fully retracted? _____
_____ and when extended? _____

38. Under what conditions would the landing gear warning system make an audible alert? _____
_____
_____

39. What is the manufacturer’s recommendation about leaning the fuel mixture? _____
_____

40. Which of the following methods holds the landing gear in the retracted position?
- [ ] a. Mechanical locks
- [ ] b. Electrical locks
- [ ] c. Hydraulic pressure

41. During NORMAL landing gear operations, the Emergency Gear Extension Lever should be in the _____ position.

42. In the event of an electrical system failure, the landing gear may be extended using which of the following alternative methods?

[ ] a. Moving the landing gear handle to the down position, as it is not part of the aircraft electrical circuit

[ ] b. Pressurizing the hydraulic system using the Emergency gear extension hand pump lever

[ ] c. Holding the Emergency gear lever in the “down” position to release hydraulic pressure

43. What is the takeoff distance at Pressure Alt 2000ft, Gross Weight, OAT 30°C, Wind 0 kts _____ft

45. Using the above conditions, what is the required distance to clear a 50ft obstacle?_____ft

44. Tire pressure for the Nose tire is _____ psi; the Main tires is _____ psi.

45. Given the following aircraft loading criteria (lbs): Pilot. 220, Copilot 150,Rear Pax 115, Main Baggage 80, Rear Baggage 95, Fuel Full. Gross Weight is _____ lbs. The C.G. is _____ inches aft of datum. Is the aircraft loaded within allowable weight limits? _____ Is the aircraft loaded within allowable C.G. limits? _____

46. Given the loading scenario from the previous question, adding another rear pax weighing 110 will cause the:

[ ] a. aircraft’s rearward C.G. limit to be exceeded

[ ] b. aircraft’s forward C.G. limit to be exceeded.

[ ] c. aircraft to be within weight and C.G. limits.

47. What are the preflight actions for the autopilot? _____

_____

48. The Nexrad radar available on the G750 can be used to circumnavigate squall line thunderstorms with precise accuracy, and can thus be used for flight planning in adverse convective conditions (True/False)_____.

49. How might you determine the best combination(s) of RPM and manifold pressure settings to use in cruise flight? _____

_____

50. What is the recommended procedure to drain the fuel tanks to check for contaminants prior to the first flight of the day? _____

_____

_____

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For Instrument Checkouts:

I-1. If the GPS enters “Loss of Integrity” mode (LOI) what is the corrective action that you should take?

[ ] a. Continue to navigate by use of the moving map, as the aircraft position will be calculated through the GPS via “dead reckoning” methods.

[ ] b. Continue to navigate by use of the CDI, however moving map aircraft position is unreliable

[ ] c. Revert to an alternate means of navigation until GPS information signal is restored

I-2. During a GPS LPV approach, if GPS accuracy requirements are not met by the GPS receiver, and the unit annunciates a change from your ‘LPV’ approach to ‘LNAV’, what action must be taken?

[ ] a. Continue to fly the approach, however only to LNAV minimums

[ ] b. Abandon the approach immediately, the GPS unit may not be used to transmit GPS nor NAV frequency data

[ ] c. You may continue to fly the approach to the LPV minimums on the published approach

I-3. To fly the ILS05 approach into KCPK, the pilot must ensure that the GPS unit providing the ILS/NAV signal is set to _____mode.