Piper Archer II Aircraft Familiarization / Initial Transition

1. Describe the general systems of this aircraft:
    a. Engine – _____
    b. Fuel – Capacity?_____Usable (per tank)?_____ gals, Usable (to Tabs)? _____ gals
        i. Position & location of fuel drains to sump_____
        ii. Type of fuel permitted?_____
        iii. Fuel flow indication - _____
        _____
        _____
    c. Oil Type (all weather)? _____ Sump Capacity? _____ Min "safe" Qty?_____
    d. Electrical system is a _____v system and supplied by a _____ v battery
    e. Propeller _____
    f. Heating/ventilation – _____
    g. How are the flaps operated? _____
    h. What are some electrical accessories in this aircraft? _____
    _____
    i. Landing Gear – _____
    j. Brakes - _____
        i. Does this aircraft have brakes on the co-pilot side? _____
2. What is the manufacturer recommendation for leaning the mixture? _____
_____
_____
_____
3. What is the maximum allowable gross weight for this aircraft? _____lbs.
4. Current basic empty weight and arm for this aircraft is? _____ lbs., _____ inches
5. What is the Useful Load of this aircraft? _____ lbs
6. How much payload can be carried assuming maximum fuel on board? _____ lbs.
7. What is the maximum weight permitted in the baggage compartment in normal category? _____lbs, and what is this value when the aircraft is in the utility category? _____ lbs
8. The proper main strut inflation should be _____ inches. The proper nose strut inflation should be _____ inches (assuming aircraft has full fuel, all required oil, and no other loads)
9. Upon an "Alternator Failure" condition, the pilot should:
    a. _____
    b. _____
    c. _____
    d. _____
10. When should the electric fuel pump be used?_ _ _____
    a. What condition(s) should be avoided when burning fuel from either tank? _____
    b. What is the recommended procedure for using fuel from the tanks?_____
    c. What's the fuel burn at FULL power? _____ at 75% power? _____
11. What actions should be taken if "Loss of Fuel Flow/Pressure" occurs?
    a. _____
    b. _____

12. Starter cranking is limited to _____ seconds with _____ minute rest periods between cranking cycles
13. What is the "COLD START" procedure? _____
    _____
    _____
14. What causes engine flooding?
15. What is the procedure for starting the aircraft if the engine is FLOODED? _____
    _____
    _____
16. How do you "HOT START" aircraft? _____
    _____
    _____
17. 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
18. Is it permissible to fly this aircraft into forecast/known icing conditions? _____
19. Define (verbally) & note the following speeds for this aircraft:

V-speed	MPH	KIAS	V-Speed	MPH	KIAS
V_R			V_X		
V_{GLIDE}			V_Y		
V_{NO}			V_{NE}		
$V_{FINAL\ APP}$ (40°)			V_{LO}		
V_{SO}			V_A		
V_{FE}			$V_{CRUISE\ CLIMB}$		

20. What is the maximum demonstrated X-wind for this aircraft? _____MPH _____ KTS
21. What type of stall warning indication does this aircraft have? _____
22. What is a 'more accurate means' of leaning the mixture? _____
23. What are the flap settings of this aircraft? _____
24. During a Short or Soft-Field takeoff, the flaps should be lowered to the _____ notch which is _____ degrees
25. How can you determine if the panel light switch (right most rheostat on the central switch bank) is ON? ____
    _____
26. Where is the ELT located? _____
27. Can the ELT be activated from the flight deck (Yes/No)_____
28. What is the power off stall speed with flaps 40°, maximum gross weight, gear down, and a 40° angle of bank?
    _____
29. What are the first four steps in the emergency procedure for an in-flight engine fire?
    a. _____ b. _____ c. _____ d. _____
30. What is the minimum vacuum pressure at 2000 RPM _____
31. The carburetor heat source in this aircraft is: (Automatic/Manual/Both)?_____
32. When should carburetor heat be used? _____

_____

33. Does this aircraft have an alternator or generator? _____.

34. What's the advantage of having the above? _____

_____

35. When stopping the engine, the _____ should be fully aft to _____

36. What is the approximate ground roll distance under the following conditions: Landing weight: 2500lbs, Obstacle: 0 ft., Flaps: 40°, Power: Idle, Temp: 75° F, Pressure Alt: Sea Level, headwind: 0 kts ? _____ft.

37. What is the ground roll distance under the above conditions if there is a headwind of 10 kts? _____ ft.

38. What is the no-wind power-off glide range at a pressure altitude of 3500ft and standard temperature? _____ nm

39. The approximate fuel flow at 75% best power is?_____ gph. And at 75% best economy it is? _____ gph

40. What assumption(s) are made by the manufacturer to yield the above? _____

_____

41. What is the approximate landing distance (over a 50' obstacle) under the following conditions: Landing weight: 2500lbs, Flaps: 40°, Power: Off, Temperature: +35° C, Pressure Altitude: 1,000 ft.; Max braking? _____ft

42. What is the Best Glide Configuration of this aircraft at 2550lbs? Gear: _____, Flaps:_____, Airspeed:_____

43. At gross weight, climbing at full throttle at Vy, assuming an ambient temperature of +21° C, it will take _____ gals of fuel, _____ minutes, and distance of _____ nm to climb from sea level to 6000ft

44. While at sea level, gross weight, full power, and OAT is 90° F, you can expect a climb rate of approx _____ ft/min

45. While at sea level and OAT is 15° C, if you are at gross weight, and there is no wind, what is the approximate landing roll over a 50ft obstacle, assuming no wind? _____ ft

46. Using the previous scenario, how much would your landing be if you had a 5kt headwind?_____ ft

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

48. In reference to the above, why/why not? _ _____

_____

_____

49. 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.

50. May the pilot initiate takeoff if these values are slightly exceeded? (Yes/No) _____