PRINCIPAL AIR LTD

FLIGHT TRAINING / CHARTER

Name: _____ **Date: _____**

PIPER PA-28-151

This open-book exam is to familiarize the pilot with the Piper Cherokee Warrior, PA-28-151, and its corresponding POH. Refer to the POH as you complete the exam.

GENERAL SPECIFICATIONS

1. What is the minimum Takeoff Ground run in feet? _____
2. What is the minimum Takeoff Distance over a 50-foot obstacle? _____
3. What is the Best Rate of Climb speed? _____
4. What is the stall speed with flaps down (mph)? _____
5. What is the stall speed with flaps up (mph)? _____
6. What is the Gross Weight (lbs.)? _____
7. What is the Rated Horsepower? _____
8. What is fuel capacity? _____
9. What is the usable fuel capacity? _____
10. What is the minimum grade fuel? _____
11. What is the capacity of the oil sump? _____
12. What is the Maximum Baggage load? _____
13. What is the recommended tire pressure (mains)? _____
14. What is the recommended tier pressure (nose)? _____

DESCRIPTION AIRPLANE AND SYSTEMS

1. What are the four flap positions? _____
2. In what position(s) may the flaps be used as a step? _____
3. How are the flaps deployed? _____
4. How are the flaps retracted? _____
5. What is the fuel tank capacity in each wing? _____
6. What is usable fuel capacity in each wing? _____
7. Where is the tank selector control located? _____
8. Where are the fuel drains located? _____
9. Where is the gascolator located? _____

10. Where are the fuel quantity and fuel pressure gauges located? _____
11. Where is the battery located? _____
12. Where is the switch for the navigation lights located? _____
13. Where is the electric fuel pump switch located? _____
14. What is the function of the annunciator panel? _____
15. How is the ammeter system different from previous generator systems?
_____
16. What does a "0" vacuum pressure indicate? _____

AIRPLANE FLIGHT MANUAL

1. What is Vne? _____
2. What is Vno? _____
3. What is Va? _____
4. What is Vfe? _____
5. What is Stall speed flaps up? (See pg. 3-7) _____
6. What is Stall speed flaps down? _____
7. What is the aircraft Max. Gross Weight (Normal Category)? _____
8. What is the aircraft Max. Gross Weight (Utility Category)? _____
9. Are intentional spins approved for this aircraft? _____
10. What is the demonstrated cross wind component for this aircraft? _____
11. What is the procedure for recovery from an unintentional spin?

_____

EMERGENCY PROCEDURES

1. What is the procedure for engine power loss on takeoff?
_____
_____
2. What is the procedure for engine power loss at altitude?
_____
_____
3. What is best glide speed? _____
4. What is the recommended landing speed for the shortest landing? _____
5. What is the recommended procedure for open cabin door in flight?
_____
_____
6. What is most likely indicated by a partial loss of oil pressure? _____
7. What is the correct procedure for loss of fuel pressure? _____
8. What is the correct procedure for abnormally high oil temperature?
_____
9. What is the correct procedure for loss of alternator output?
_____
10. What is the most likely cause of rough engine running? _____
11. Why is it important to use full carburetor heat when icing is suspected?
_____

WEIGHT AND BALANCE

1. What is the Max. Gross Weight of this aircraft? _____
2. What is the Useful Load of this aircraft? _____
3. What is the useful load with full fuel? _____
4. What is the useful load with full fuel in the Utility Category? _____
5. Who is responsible to ensure the aircraft is loaded properly before flight? _____
6. Calculate the C of G: front seat pilot and passenger: 320 lbs.; rear seat passenger: 175 lbs. ; baggage: 50 lbs.; fuel: as much fuel as possible _____
7. Is the aircraft within safe limits under the conditions listed in #6? _____

OPERATING INSTRUCTIONS

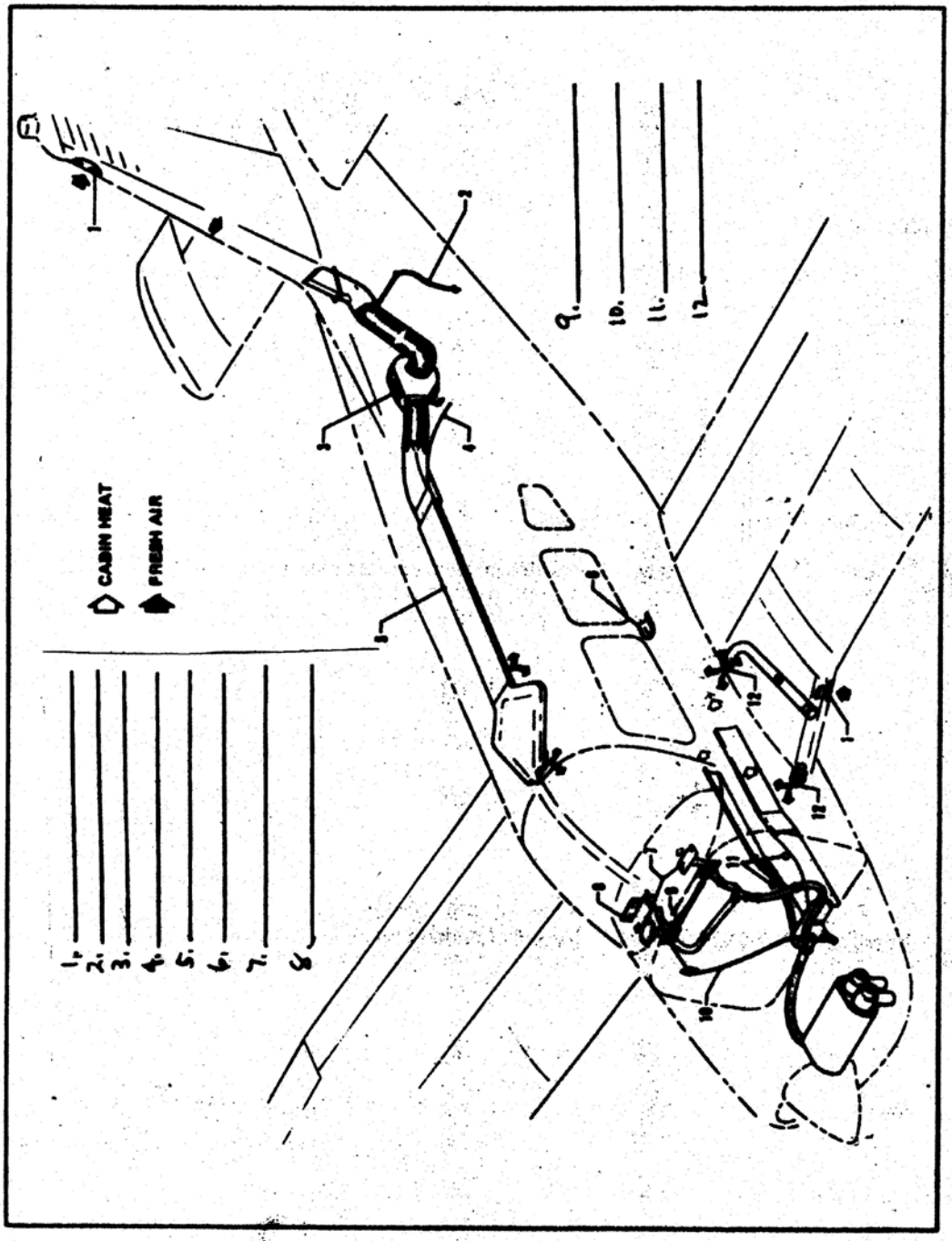
1. What is the recommended rotation speed for a normal takeoff? _____
2. What is the advantage to using flap on takeoff? _____
3. On short field takeoffs, what flap setting is recommended? _____
4. If any doubt exists as to the amount of power being used what mixture setting should be used? _____
5. Why is fuel tank selection at low altitude not recommended? _____
6. What position should be selected for the electric fuel pump during cruise? _____
7. What is the recommended approach with flaps up? _____
8. What is the recommended ground contact speed during landing? _____
9. What is the location of the ELT switch? _____

OPERATING TIPS

1. What is the recommended takeoff speed? _____
2. How may a pilot reset the alternator relay? _____
3. Why are extended and/or radical slips or turns not recommended?
   _____
4. Why is it important for the pilot to be familiar with the correct foot positioning?
   _____

PERFORMANCE CHARTS

1. What is the takeoff distance at an altitude of 5000' with OAT 15 degrees C? ____
2. What TAS can be expected using 65% power at 4500'? _____
3. What is the expected range (45 min reserve) using 65% power at 7000' _____
4. What is the expected range (45 min reserve) using 65% power at 4000' _____
5. What is the expected gliding range from 3500'? _____
6. What is the expected total landing distance at 1000' density alt.? _____



Heating and Ventilating System