Piper Arrow PA 28 RT-201T (Turbo) - Checkout Sheet

Name _____

Date _____

CFI _____

1. List the following speeds:

V_X _____ (gear up, flaps up) Best Angle of Climb Speed

_____ (gear down, flaps up)

V_Y _____ (gear up, flaps up) Best Rate of Climb Speed

_____ (gear down, flaps up)

V_{S0} _____ Stall speed (dirty)

V_{S1} _____ Stall speed (clean)

V_A _____ (at 2900 lbs) Maneuvering Speed – no full abrupt control movements above this speed

_____ (at 1893 lbs)

V_{NE} _____ Never Exceed Speed – do not exceed this speed in any configuration

V_{NO} _____ Maximum Structural Cruising Speed – do not exceed this speed except in smooth air, and only with caution

V_{FE} _____ Maximum Flaps Extended Speed – do not exceed this speed with flaps extended

V_{LE} _____ Maximum Landing Gear Extended Speed – do not exceed this speed with the landing gear extended

What is the Maximum Landing Gear Extension Speed? This speed should not be exceeded when extending the landing gear. _____

What is the Maximum Landing Gear Retraction Speed? This speed should not be exceeded when retracting the landing gear. _____

What is the Turbulent Air Operating Speed? _____

What is the Maximum Demonstrated Crosswind Velocity? _____

2. Maximum Weights

Maximum Takeoff Weight _____

Maximum Landing Weight _____

Maximum Ramp Weight _____

3. **Weight and Balance Problem**
   Determine if the aircraft is within weight and CG limits. Calculate this by using the aircraft POH.

	Weight	Arm	Moment
Basic Empty Weight	1798.7	87.8	157,918
Pilot & Front Passenger	380.0		30,590
Rear Passenger	200.0		23,620
Fuel (50 gal @ 6lb/gal)	300.0		28,500
Baggage	100.0		14,280
Totals			

   What is the aircraft gross weight? _____

   What is the aircraft CG? _____

   Is the aircraft within limitations? _____

4. Determine the takeoff distance over a 50-ft obstacle and the liftoff speed with the given information:
   PA 6,095 ft MSL, OAT = 23^{o}C, Gross weight = 2,700 b, Headwind = 5 kts.
   (Use page 5-13, Figure 5-5 in aircraft POH)

5. Determine the fuel burn and distance to climb with the following given information:
   Maximum gross weight, gear retracted, climb speed @87 knots, no wind, takeoff PA = 3,795 ft MSL and OAT = 25^{o}C, Cruise PA = 8,450 ft MSL and OAT = 6^{o}C.
   (Use page 5-19, Figure 5-17 in aircraft POH)

6. Determine the landing distance and approach airspeed over a 50-ft obstacle with the following given information:
   Destination PA = 525 ft MSL and OAT = 18^{o}C, Landing weight = 2,580 lbs, no wind.
   (Use page 5-30, Figure 5-35 in aircraft POH)

7. **Fuel and Oil**
   What is the fuel capacity for this aircraft? Total: _____ gal. Total Useable: _____ gal.
   What is the minimum octane fuel this aircraft can use? _____
   What is the engine oil capacity? _____

8. Performance

What is the Engine Model Number? _____

Maximum rated Horsepower? _____

Maximum Rotation Speed (RPM)? _____

What is the maximum takeoff weight? _____

What is the normal main oleo strut extension? _____

What is the maximum magneto drop? _____ The maximum magneto difference? _____

You should avoid continuous engine operation between _____ and _____ RPM and below _____.

Why should prolonged idling at low RPM be avoided? _____

What is the Service Ceiling for this aircraft? _____

9. Emergency Procedures & Failures

1. List the emergency procedure for Engine Fire During Start:

_____

_____

_____

_____

_____

2. List the emergency procedure for Engine Fire In Flight:

_____

_____

_____

_____

_____

3. List the emergency procedure for Engine Fire In Flight (During Cruise):

_____

_____

_____

_____

_____

4. List the emergency procedure for Emergency Approach to Landing:

_____

_____

5. What are the prop over-speed procedures?

6. What are the (5) steps to spin recovery?

7. In the power off emergency landing pattern, downwind altitude is how many feet? _____
8. At best glide speed, a wind-milling engine, prop full decrease, the aircraft will travel _____ miles for each 1,000 feet of altitude loss.
9. How is an alternator failure detected?

10. What are the corrective steps for an alternator failure?

10. General Questions

1. Which documents must be carried aboard the aircraft?

2. What documents must you carry with you?

   _____

   _____

   _____

   _____

3. What are the (3) most probable causes for engine roughness?

   _____

   _____

   _____

4. How is the engine primed?

   _____

   _____

5. What is the maximum starter cranking and resting periods?

   _____

6. The gear unsafe horn will activate if the throttle is reduced below _____.
7. What is the gear up rate of climb at 2,750 lbs, 15^{o}C, at sea level? _____ fpm.
8. What is the flaps up takeoff distance at 2,750 lbs, 20^{o}C, at sea level, lift off is at 71 kts, with wind? _____ feet
9. At 75% power, GPH is approximately _____.
10. If the OAT is 10^{o}C, PA is 3,000 ft, TAS is _____.
11. Who is responsible for determining that the aircraft is airworthy before flight?

    _____

Completed Date _____

CFI _____

Chief Flight Instructor _____

CFI Remarks

_____

_____

_____

_____

_____