RI Flying Club

7178L Checkout Sheet

**Name:** **Date:**

**Make and Model Aircraft/ ATC designation when filing a flight plan/ATC designation when speaking to ATC:**

**AIRSPEEDS:**

**Specify the following airspeeds at max gross (indicate whether MPH or KIAS):**

**VR** **(Rotation-Normal T/O) Vfe       (Max. Flap Extended)**

**VY       (Best rate) Vne       (Never Exceed)**

**VA** **(Maneuvering) Vfa       (Final Approach-Norm.)**

**Vs1       (Stall – Clean) Vfa’       (Final Appr.-Short Fld.)**

**Vs0       (Stall – Dirty)**

**Vg       (Best glide)**

**Vcc       (Cruise Climb)**

**Vx       (Best Angle)**

**OIL AND FUEL SYSTEM:**

1. **What is the total fuel capacity?**
2. **What is the usable fuel capacity?**
3. **How many fuel tanks are there?**
4. **What is the correct fuel grade?** **Color?**
5. **When should a pilot sample the fuel tanks?**
6. **What position should the fuel selector be in for take-off?**
7. **What position should the fuel selector be in for landing?**
8. **How many fuel boost pumps are there? / explain**
9. **What is the oil capacity?**
10. **What is the minimum operating oil level?**
11. **What is the recommended grade of oil?**

**POWER SETTINGS: (RPM - use a cruise power setting of 65% at 7,500 feet and standard conditions)**

**Take-off:**

**Climb:**

**Cruise:**

**PROCEDURES:**

1. **What is the recommended short approach speed and configuration?**
2. **At what altitude would you lean during cruise?**
3. **How would you lean for optimal fuel consumption?**
4. **For a short-field take-off on this aircraft:**
   1. **What is the rotation speed?**
   2. **How many degrees of flaps should be used?**
5. **What are the proper steps for a hot engine start?**
6. **What are the proper steps for a flooded engine start?**
7. **What are the proper steps for an engine failure at altitude?**

**PERFORMANCE:**

1. **What is the Climb Rate at 6,000 feet (assume full power and standard conditions)?**

1. **Assuming Pressure Altitude is 6,500 feet, standard conditions, and RPM Setting is 2500 RPM (65% power), determine the following::**

**Fuel Consumption:       Gal/Hr**

**Range without reserve:       NM**

**Expected True Airspeed:       MPH**

**Endurance without reserve:       hours       minutes**

1. **At sea level, standard conditions, and max gross weight, determine the following.**

**Take-off Ground Roll:       feet Landing Ground Roll:       feet**

**Over 50 foot obstacle:       feet**

**SYSTEMS:**

1. **Is this aircraft fuel injected?**
2. **Does this aircraft have carburetor heat or alternate air?**
3. **When should it be used?**
4. **How many volts are there in the electrical system?**
5. **Will the aircraft function normally without electrical power (battery and/or alternator)? Explain**

**WEIGHT AND BALANCE:**

**Find the Weight and Balance information for THIS aircraft, full fuel, two 180 lbs occupants and 50 lbs in the baggage area, determine the following:**

1. **Maximum Gross Weight:       lbs.**
2. **Empty Weight:       lbs.**
3. **Total Useful Load:       lbs.**
4. **Weight of Usable Fuel:       lbs.**
5. **Useful Load with Fuel:       lbs.**
6. **CG for this flight:       inches**
7. **C.G. Limits at Max/ Gross Weight:       /       inches**
8. **Max allowable weight in the baggage compartment:       lbs.**
9. **Are we within the limits?**

**Now assume two 180 lbs occupants in the front seat, two 140 lbs occupants in the back seat, and 15 lbs in the baggage area, determine the following:**

1. **CG for this flight:       inches**
2. **Are we within the limits?**

**Discuss…**