**Start Up Checklist ** **Colorado Sport Pilot, LLC**

**STARTING:**

* Seat Position: **Adjusted and Secure**
* Ailerons: **Position for wind**
* Seat Belts / Harnesses: **FASTENED**
* Parking Brake: **SET**
* Passenger Briefing
	+ Seat Belt use
	+ Door Release
	+ Emergency Equipment
	+ Motion Sickness
	+ Sterile Cockpit
* Oil Temperature Control: **SET** (push in to warm up oil)
* Fuel Valve: **OPEN**
* Throttle: **IDLE**
* Choke: **As Required** (pull for choke)
* Master Switch: **ON**
* Charge light: **ON**
* Fuel Quantity: **CHECK**
* ACL (Strobe lights): **ON**
* Electric Fuel Pump: **ON**
* Propeller Area **“CLEAR”**
* Ignition Switch: **START**
* Engine RPM (**2000**-**2500**): **CHECK**
* Oil Pressure: **CHECK**
* Choke: **OFF** (push in to close)
* Electric Fuel Pump: **OFF**
* Flaps: **UP**

**Start Up Checklist**

**AVIONICS:**

* Avionics Master: **ON**
* Radio Frequency **122.7** (KFNL)
* Transponder (Check Code): **ALT** (1200)
* AWOS: **OBTAIN** (135.075)
* Altimeters (EFIS & Analog): **SET**
* GPS: **SET** (Press Enter)
* Attitude Indicator: **CHECK**
* Magnetic Compass: **Compare to Directional Indicator**

**TAXI:**

* Parking Brake: **OFF**
* Brakes: **CHECK**

**RUNUP:**

* Parking Brake: **SET**
* Oil Temperature Control: **SET** (pull out if temps over 122°)
* Throttle: **4000 RPM (No Movement!)**
* Engine instruments: **CHECK**

• Oil Pressure **29 – 73 PSI**

• Oil temperature **122° - 266° F**

• Cylinder head temp **Max** **275° F**

• Voltmeter **13+ Volts**

• Ammeter **Positive Charge**

• Fuel Pressure **2 – 6 bar**

* Charge light: **OFF**
* Test ignition systems:

• *Maximum RPM drop with only one ignition 300 rpm*

*• Max difference between LEFT or RIGHT 120 rpm*

* Carb Heat: **CHECK** (pull to add carb heat)
	+ Carb Heat **OFF**
* Throttle: **FULL IDLE** (check for roughness)
* Throttle: **2000 RPM**
* Flight controls: **CHECK**
* Seat belts: **FASTENED**

**Flight Checklist**

**HOLD SHORT LINE**

* Flaps: **UP** (Normal), 15° (Short)
* Electric Fuel Pump: **ON**, Check Pressure
* Trim: **2/3 UP**
* **Takeoff Brief: Complete**
* ACL (Strobe) and Landing Lights: **ON**
* Transponder: **ALT**
* Doors: **CLOSED**
* Pattern: **CHECK**
* Radio: **CALL**
* Parking brake: **OFF**

**TAKE OFF:**

* Taxi to line-up, Directional Indicator: **CHECK**
* Throttle: **FULL**

**NOTE: Static RPM is approximately 4900 rpm**

* RPM and Oil Pressure: **CHECK**

*Airspeed Indicator Alive / RPMs up - if not abort*

* Vr (Rotation speed): **@ 50 Knots**

 **NOTE:**

**Rotate to takeoff attitude and accelerate to a climb speed of 65 knots with flaps up.**

**CLIMB:**

* Flaps: **RETRACT**
* Landing light: **OFF**
* Establish Vy clean: **76 KNOTS**
* Trim: **ADJUST**
* Cruise climb: **86 – 92 KNOTS**

**CRUISE:**

* Throttle: **SET** (5500 RPM Max)
* Engine instruments: **CHECK**
* Oil Temp Control: **SET**
* Engine instruments: **CHECK**

**Flight Checklist**

• Oil Pressure **29 – 72.5 PSI**

• Oil temperature **122 - 230° F**

• Cylinder head temp **122 - 275° F**

• Voltmeter **13+ Volts**

• Ammeter **Positive Charge**

• Fuel Pressure **2 – 5 bar**

**PRE-MANEUVERS LIST:**

Pattern Altitude @ 6000 Feet

* **Clearing Turns**
* **Select emergency landing area**
* Va – **94 KNOTS**

**EXTENDED DESCENT:**

* Minimum: **3000 RPM**
* Speed - **75 - 86 KNOTS**
* Engine Instruments – **Monitor**

**LANDING LIST:**

 ***Check safety belts tight***

* Landing light: **ON**
* Electric Fuel Pump: **ON**
* Brake: **OFF**
* Carb Heat: **ON**
* Flaps: **AS DESIRED**

**GO-AROUND:**

* Throttle: **FULL POWER**
* Carb Heat: **OFF**
* Pitch: **Climb Attitude**
* Flaps: **Retract to 15 degrees – 65 KNTS**

Above 300 feet:

* Flaps: **UP**, Climb Speed – 65 KNOTS
* Trim: **Adjust**
* Maneuver Stay right of runway