

**Before START**

External Check .....COMPLETE  
 Pitot cover / control lock .....REMOVED  
 Headsets ..... PLUGGED IN  
 Parking Brake ..... ON  
 Seats..... Adjusted  
 Seat Belts/Harnesses .....CHECK/SECURE  
 Elevator Trim.....CHECK  
 Flying Controls .....CHECK  
 Master Switch ..... ON  
 Beacon ..... ON  
 Fuel Selector ..... CHECK ON (by left foot)  
 Fuel Contents .....CHECK

**Starting Engine**

Carb Heat .....CHECK/OFF  
 Mixture ..... CHECK/RICH  
 Throttle Friction .....CHECK  
 Oil Temperature.....CHECK  
 Engine .....PRIME  
 Throttle ..... SET 1/4 OPEN  
 Propeller Area ..... CLEAR  
 Magneto/Starter Switch ..... ON/START  
 ----- *Engine Starts* -----

Oil Pressure .....CHECK  
 Throttle ..... SET 1,200 RPM  
 Ammeter/Voltmeter .....CHECK  
 Suction .....CHECK  
 Engine running smoothly ...SET MAX 1,500 RPM

**After Engine START**

Avionics Master Switch ..... ON  
 Intercom ..... SET/CHECK  
 Magnetos .....CHECK  
 Radio/Nav/Transponder ..... CHECK/SET

**Taxying**

Brakes ..... Check  
 Flight Instruments ..... Check

**Power Check**

Oil Temperature.....Above Min  
 Throttle .....1700 RPM  
 Carb Heat .....CHECK  
 Magnetos (max drop 125, Max diff 50) ...CHECK  
 Oil Pressure/Fuel Pressure..... Green Arc  
 Ammeter/Voltmeter ..... Green Arc  
 Suction ..... Green Arc  
 Throttle .....Close - Idle 5-700  
 RPM.....Reset 1,500 RPM

**Pre- Takeoff**

Trimmer ..... SET  
 Mixture..... RICH  
 Carb Heat ..... OFF  
 Magnetos ..... ON BOTH  
 Fuel Selector..... ON  
 Fuel Contents ..... CHECK  
 Flaps ..... SET 10 degrees for short rwy  
 Flight Instruments\* ..... CHECK (DI Sync, Alt set)  
 Seat Belts/Harnesses.....SECURE  
 Doors..... CLOSED & LATCHED  
 Flying Controls..... FREE  
 Transponder .....ALT + CODE SET  
 Strobes, Landing Light & Anticol light ..... ON  
 Pitot Heat .....ON if req  
 Captains Brief .....COMPLETE

**Runway**

DI ..... ALIGNED  
 Min RPM at Full Throttle..... 2350  
*Rotation Speed* ..... **Normal 55 kts**  
*Climb* ..... **65 kts (75 C172)**

**After Takeoff / 1000ft**

Flaps ..... UP & OFF (150 AGL/70kt)  
 Landing Light ..... ON

**Final Approach**

Flaps .....20° enough unless v short  
*V Approach Full Flap* ..... **65 kts**  
*V Approach Flapless* ..... **70 kts**  
*Best Glide* ..... **60**

**After Landing**

Trimmer ..... Neutral  
 Flaps .....Up  
 Carb Heat ..... Off  
 Land Light, Strobes, Pitot Heat ..... Off  
 Transponder ..... Standby

**Shutdown**

Park Break ..... On (Off if at hangar)  
 Throttle .....1200 RPM  
 Magnetos .....Check  
 Radio ..... Off  
 Throttle ..... Closed  
 Mixture ..... Idle Cut Off  
 Magnetos / Starter ..... Off & Remove Key  
 Avionics master ..... Off  
 Battery Master ..... Off  
 Control Lock ..... Install