

Before Starting Engine

- 1) Preflight complete, documents on board, headset on, pax briefing
- 2) Seat belts – ON & ADJUSTED
- 3) Fuel valve – ON
- 4) Brakes – TEST & SET
- 5) Radios and electrical equipment – OFF
- 6) Door – CLOSED & LATCHED

Starting the Engine

- 1) Throttle – Open ¼ inch
- 2) Alternate air – COLD
- 3) Master switch & strobe lights – ON
- 4) Engine Monitor (CGR) – push “E” button to clear blue popup

Cold Start Priming Sequence (oil temp <100°F):

Mixture RICH, fuel pump ON for 2 seconds, then fuel pump OFF

Warm Engine Start (oil temp >100°F): Do not prime, leave mixture at idle cutoff

- 5) Ignition switches – L & R ON
- 6) Control Stick – FULL AFT (“stick coming back”)
- 7) Propeller area – “CLEAR” and visually clear all around
- 8) Starter button – ENGAGE (max. 10 sec.), release after engine fires
- 9) Mixture – RICH before engine quits (warm engine start only)
- 10) Throttle – Set 800 to 1000 RPM

After Start *Don't block up the ramp! Look around and move if people are waiting.*

- 1) Oil pressure – CHECK GREEN within 30 seconds or shut down engine
- 2) Ammeter & volts – CHECK (volts on CGR page 2)
- 3) Fuel onboard – CGR page 3, enter total fuel measured
- 4) Mixture – LEAN almost to idle cutoff (observe slight rpm rise)
- 5) Transponder – ALT & 1200 *Note: No ADS-B
- 6) ATIS (125.20) and RHV Ground (121.65) – CHECK & CALL for taxi
- 7) Taxi briefing, then brake check – COMPLETE

Run-up

- 1) Tailwheel straight, brakes held tight
- 2) Flight Controls – FREE & CORRECT (full box, stick & rudder deflections)
- 3) Trim – SET FOR TAKEOFF (stick back, trim flush with elevator)
- 4) Instruments – CHECK & SET (altimeter near field elevation)
- 5) Fuel – Check quantity, fuel valve ON, fuel pump OFF, mixture RICH
- 6) Door & window – CLOSED & LATCHED
- 7) Once oil temperature > 90°F: Control stick FULL AFT & Throttle 1800 RPM
 - Ignition – Check L, then R with <175 RPM max drop, and BOTH ON
 - Alternate air – Check operation (HOT, then back to COLD)
 - Prop – CYCLE 3 times (max. 300 RPM drop)
 - Engine instruments & ammeter – CHECK
 - Throttle to Idle (600-900 RPM), then 1000 RPM
- 8) Transponder & radio – ALT with squawk code & RHV TWR 119.80
- 9) Takeoff briefing – COMPLETE

Before Take-off

- 1) Lights – AS NEEDED
- 2) Fuel – Check quantity, fuel valve ON, mixture RICH (or set for DA)
- 3) Alt air – COLD
- 4) Prop – FULL FORWARD
- 5) Trim – SET FOR TAKEOFF
- 6) Normal takeoff flow –heels on the floor, feet off the brakes, throttle smoothly to full forward, then stick forward to takeoff position (¾ forward)
- 7) Check engine instruments & lift off at V_R 60 MPH

Enroute Climb (at 1000' AGL and clear of obstacles)

- 1) Climb power – Throttle set 25” MP, then prop set 2500 RPM
- 2) Cruise climb – 80 MPH
- 3) Engine gauges – Monitor temps (max EGT 1420°, max CHT 400°)

Cruise

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|--|----------------------|
| | <u>Acro</u> |
| 1) Power – Set throttle < 23” MP & prop set 2300 RPM | (Set 25” & 2500) |
| 2) Mixture – Lean for altitude | (Lean only slightly) |
| 3) Engine gauges – Monitor temps (max EGT 1420°, max CHT 400°) | |

Descent/Before Landing

- 1) Cooldown – Set throttle 21” MP & prop 2300 RPM, then reduce 1” MP/min
- 2) Fuel – CHECK quantity, fuel valve ON, mixture enrichen during descent
- 3) Lights – AS NEEDED
- 4) Short final – Mixture RICH, Prop FULL FORWARD, Alt air COLD
- 5) Airspeed 70-75 MPH for 3-point landing and 80 MPH for wheel landing

After Landing

- 1) Mixture – LEAN for taxi
- 2) Trim – SET FOR TAKEOFF
- 3) Lights – AS NEEDED
- 4) Transponder – ALT & 1200
- 5) Radio – CALL Ground 121.65 for taxi

Shutdown

- 1) Radio & electrical switches – OFF
- 2) Throttle – 1000 RPM
- 3) Mixture – LEAN all the way out
- 4) Master switch – Record Tach time (CGR pg. 2), then OFF
- 5) Ignition switches – OFF

Securing Aircraft (Double check all electrical switches and Master are OFF)

- 1) Tailwheel straight & locked, wheels chocked, wings & tail tied down
- 2) Controls – Secure the lap belt around front seat control stick
- 3) Sunshades – Installed (silver side out)
- 4) Clean – Remove all items and trash
- 5) Record Hobbs & Tach in aircraft binder