

Before Starting Engine

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

Starting the Engine

- 1) Primer
 - Oil temp COLD – 3-4 strokes, then locked
 - Oil temp HOT – 0-1 strokes, then locked
- 2) Mixture – RICH
- 3) Carb heat – COLD
- 4) Throttle – OPEN ¼ inch or less
- 5) Beacon switch – ON
- 6) Master switch – ON
- 7) Ignition switches – L & R ON
- 8) Control stick – FULL AFT (“stick coming back”)
- 9) Propeller area – “CLEAR” and visually clear all around
- 10) Starter – ENGAGE, slowly advance throttle, release after engine starts
- 11) 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 – CHECK slightly positive
- 3) Mixture – LEAN almost to idle cutoff (observe slight rpm rise)
- 4) Radios, NAV LT, and T & B switches – ON
- 5) Transponder – ALT & 1200
- 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, primer locked, mixture RICH
- 6) Door and window – CLOSED & LATCHED
- 7) Control stick FULL AFT & Throttle to 1800 RPM
 - Engine instruments & ammeter – CHECK
 - Ignition – CHECK L, then R with <100 RPM max. drop
 - Carb heat – CHECK (carb heat HOT, note RPM drop, then COLD)
 - Throttle IDLE (600 - 900 RPM), then back to 800 to 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, valve ON, primer LOCKED, mixture RICH (set for DA)
- 3) Carb Heat – COLD
- 4) Trim – SET FOR TAKEOFF
- 5) Normal takeoff flow – heels on the floor, feet off the brakes, throttle smoothly to full forward, then stick forward to takeoff position (¾ forward)
- 6) Check engine instruments & lift off at V_R 55-60 MPH

Normal Climb

- 1) Initial climb to 1,000 AGL at V_Y 69 MPH (or V_X 58 MPH for obstacle clearance)
- 2) Above 1,000 AGL or clear of obstacles – Cruise climb at 75-80 MPH
- 3) Monitor oil temp (ideally between 180-210°F), oil pressure, and ammeter
- 4) Mixture – **Only if** oil temp is below 200°F, lean slightly above 5000'

Cruise

- 1) Throttle – 2300 RPM (or 70% power or less)
- 2) Engine instruments & fuel gauges – CHECK & MONITOR
- 3) Mixture – Once oil temp <210°F, lean for ROP (to stumble, then in ½”)

Descent/Before Landing

- 1) ATIS/AWOS/ASOS – CHECK weather, SET altimeter, PLAN for pattern
- 2) Fuel – CHECK quantity, valve ON, primer LOCKED
- 3) Mixture – ENRICHEN SLOWLY throughout descent for altitude
- 4) Lights – AS NEEDED
- 5) Short final – Mixture RICH, carb heat as needed (ready to go around)

After Landing

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

Shutdown

- 1) Radios & electrical switches – OFF
- 2) Throttle – 1000 RPM
- 3) Mixture – LEAN all the way out
- 4) Master switch – 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