

Exterior Inspection ✓
Checked Fuel for Water?
Passenger Briefing
Check GPS signal on iPad
Door latched—Listen for click
Seat Belts and Harnesses
Fuses and Breakers
Avionics—OFF
Trim for Takeoff
Fuel Selector—SET
Rotating Beacon—ON
Controls Free

Pre-Start
Master—ON
Boost Pump—On
Prime—feel resistance then
one more and ½ turn.
Mixture In
Throttle ¼"
Feet on brakes—not soft
Mags—Both
Check fuel levels

Start

Note Time

Clear

Push Starter

10 sec max

20 sec cool down

1000 RPM

Oil Pressure—30 sec max

Boost Pump—OFF

Lean Aggressively

Test brakes - 3' and stop

Pre-Taxi

Radios—ON

Transponder—ON & 1200

Get ATIS

Set Altimeter and verify with
field elevation

Check oil and engine temps

Check Marker Beacon

Ground Frequency in Comm

Tower in Standby

Call Gnd w/ location & ATIS

Taxi

Ask for Flight Following

Set Transponder

Position controls for wind

Set DG

In Turns

 Check ball and TC

 Check HI

Runup

Oil Temp in Green

Throttle 1800 RPM

Suction in Green 5"

Magnetos

 175 RPM Max drop

 50 RPM Max difference

Carb Heat—slight RPM drop

Check ammeter

Check oil pressure

GPS/VORs set if required

Radios—Tower & Approach

Pre-Takeoff

Set Flaps

Fuel Pump—ON

Hand on Mixture

Call for clearance

Mixture in

Check for traffic

Flaps

Normal 0°

High Alt 10°

Short Field 20°

Takeoff

Verify Heading = Runway

Slight Back Pressure

Ailerons for wind

Airspeed alive, RPM max

Lift nose 50-60 MPH

Right Rudder

Climb 85 MPH to Pattern Alt

Flaps up when +climb rate

Pattern Alt

Boost Pump—OFF

Throttle to top of green

Climb

Airspeed 100 MPH

Check Temps

Scan aggressively

Adjust RPM as you climb

Lean over 3,000'

Cruise

Lean for cruise

Trim

Check Heading Indicator

Check Temps

Change Tanks every ½ Hour

Pre-Landing

C-FARTS

Compass and HI
Fuel Selector—Most
ATIS
Runway in use
Traffic Pattern Alt
Safety
Lights
Seat Belts
Loose Items

Landing

B-RAAGS

Boost Pump—ON
Report—when req'd
Airspeed
Altitude
Gear
Scan Aggressively

1st Notch 115 MPH MAX
2nd Notch 112 MPH MAX
3rd Notch 109 MPH MAX

Pattern Airspeeds and Power Settings

Downwind - 1700 RPM and 100 MPH

Numbers - 1500 RPM and 90 MPH 1 Notch of Flaps

Base - 1500 RPM and 80 MPH 2 Notches

Short Final - 1500 RPM and 70 MPH 3 Notches

Numbers - Idle and 70 → 55 MPH

Landing—On Runway

Flaps—UP

Ailerons into wind

Landing—Off Runway

Boost Pump—OFF

Lean

Contact Ground w/ Position

Shutdown

Avionics—OFF

1800 RPM

Mag check

Mixture, Master, Mags

Keys on Dash

Hot Start

Throttle $\frac{1}{2}$ "

Master—ON

Boost Pump—ON

Mixture—Idle Cutoff

Engage Starter

When engine fires, advance Mixture

Retard throttle to 1000 RPM

Check Oil Pressure

Lean Aggressively

Speeds—MPH

V_X 74

V_Y 85

V_A 129 Heavy

V_A 108 Very Light

V_{NE} 171

V_{SO} 55

V_{S1} 64

V_{FE} 115

Best Glide 83

V_X and V_Y are at gross weight
less if light