

Take Off

Brakes..... Release – Steer with Rudder Only
 Throttle..... **Full Forward**
 MFD Engine Parameters..... **Check**
 Rotate..... **65-70 Kts**
Flaps..... (above 200 AGL and 85 Kts)..... **Up**
Vx 50% Flaps 75 Kts Vx 83-87 Kts Vy 96-92 Kts

Climb

Cruise Climb..... **105 Kts**
 Auto Pilot..... (above 400 AGL)..... Engage as Required
 Fuel Pump..... (above 1000 AGL)..... **Off**

Cruise

Power Setting..... **70%**
 Mixture..... **Lean Assist or 75°F ROP or 1350°F or 11.2 GPH**
 MFD Engine Parameters..... Monitor
 Max. allowable fuel imbalance..... **7.5 gallons**

Descent

Power Setting..... **50%**
 Mixture..... As Required
 Landing Light..... **On**

Approach & Landing

Fuel selector..... **Fullest Tank**
Fuel Pump..... **Boost**
Auto Pilot..... **Off or as required**
Mixture..... **Full Rich**
IFR Descent at FAF..... **25% Power**
Downwind (Abeam Rwy)... **GUMPS**..... **50% Flaps, 90 Kts**
Base..... **GUMPS**..... **100% Flaps, 80 Kts**
Final..... **GUMPS**..... **100% Flaps, 75 Kts**

Other Landing Speeds: 50 % Flaps = 80 Kts No Flaps = 85 Kts

After Landing

Fuel Pump..... **Off**..... Mixture..... Lean as required
 Flaps..... **Up**

Shut Down

Mag Check before Shut Down..... **Left - Right - Both**
Mixture..... **Idle Cut Off**
Mags, Masters - Off..... **Lights etc. - Off**..... **Key – Out**
CAPS handle..... **Install Pin**

Preflight

AROW (Air W, Reg, ELT, AD's, Static/Transponder, W&B) **Check**

Cabin

Bat 2 Master Switch..... **On**
 PFD On..... Listen for Fan..... Volts on PDF **23-25**
 Flap Position Light..... **Out**
Bat 1 Master Switch..... **On**
 Lights & Stall Warning..... Fuel Selector Set..... **Test**
 Flaps 100%..... Check Light **On**
Bat 1 & 2..... **Off**
 Alt Static, Breakers, Fire Ext, Hammer..... **Check**
CAPS Handle..... **Remove Pin**

Left & Right Fuselage, Empennage

Com Antennas & Static Button..... Check
 Baggage Door, Parachute cover..... Check
 Static Buttons..... Condition
 Verify Tape over Inspection Holes..... Condition
 Elevator, Rudder Hinges & Pins & Weights..... Condition

Left & Right Wings

Flap & Rub Strips, Hinges, Pins..... Condition
 Wing Tip, Lights..... Condition
 Fuel Vents..... Condition
 Fuel..... 28 gals useable each tank. 13 to Tab Check Quantity
 Drain Fuel **2** locations each wing, gascolator..... Check
 Wheels, Brakes, Overheating Dot..... Check
 Pitot Mast Left Wing..... Check

Engine Compartment & Propeller

Propeller, Nose Gear, Spinner..... Check
 Oil Level..... Only fill to **7qts**, Add if below **6 qts**
 Compartment – Alternator Belt..... Tension
 Prop & Spinner, Cowling..... Condition
 Nose Wheel & Strut..... Inflation & Condition
 Air Intake..... Clean & Not Blocked
 Exhaust Pipes..... Secure

Before Starting Engine

Tow Bar.....Removed & Stowed
Parking Brake.....Engage
Seat Belts & Passenger Briefing.....Complete
Fuel Selector.....Desired Tank
Bat 1 & 2 Master Switches.....On-Check Volts
Strobe Lights.....On
Area.....Clear

Cold Engine (Normal Start)

Throttle.....1/4 inch Open
Mixture.....Full Rich
Hot Start Only.....No Prime.....Mixture.....Idle Cutoff
Fuel Pump.....Prime for 3 to 7 seconds, then switch to **Boost**
Mixture.....Idle Cutoff
Key.....Crank to Start
Mixture after Start.....Full Rich
Oil Pressure.....Check in green

Flooded Start

Throttle.....Full Open
Mixture.....Idle Cutoff
Fuel Pump.....Off
Mixture at Start **Full Rich**.....Throttle less than **1000 rpm**
Oil Pressure.....Check in green

Taxi

Alternator Masters 1 & 2.....On
MFD.....Set Fuel, Set-up, Passenger Brief (at prompt).....Follow
Engine Parameter screen.....Monitor
Flaps.....Up.....Mixture.....Lean as required
Radios / Avionics / GPS.....As required
Lights.....As required
Transponder.....Code Set, ALT as required
Flight Instruments.....Check operation
Brakes & Steering.....Check

***Use MFD Checklists after Engine Start**

Pre – Takeoff Check

Doors.....Latched
CAPS Handle.....Verify Pin Removed
Seat Belts & Harness.....Secure
Fuel Selector.....Switch Tanks
Fuel Pump.....Boost
Flaps.....Set 50%
Auto Pilot.....Check Ready
Navigation Radios/GPS.....Set for Takeoff
PFD Flight Values.....(Hdg, Alt, VSI Bugs).....Set
MFD Review Checklists.....then Engine Parameters Page
Brakes.....HOLD
Alternate Air.....Check Off
Mixture.....Full Rich
Throttle.....1700 rpm
Alternators.....1 & 2 Lights Out & Positive Amps
Pitot Heat, Lights, **ON**.....Then As Required
Annunciator Lights.....Press to Test
Magnetos.....Check 150 RPM Max, 75 Diff Max
MFD Engine Parameter.....Check
Throttle.....less than 1000 rpm
Instruments, Altimeter, HSI.....Set
Flight Controls.....Free & Correct
Trim – Elevator & Ailerons.....Set
Circuit Breakers.....Check In
Lights.....As required

Before Each Take Off

Mixture.....Full Rich
Flaps.....Set 50%
Trim (Elevator & Ailerons).....Set
Doors, Seat Belts.....Latched and Locked
Auto Pilot.....Ready

Engine Failure - Emergency Checklist

Squawk **7700**

Best Glide **96 kts** **CAPS ASAP** or **Locate** Landing **Switch** Tanks
Mixture **Rich** Fuel Pump **BOOST** Mags. **L&R** Alt Air **Open**

Emergency Landing Checklist:

CAPS below **135 kts**

Throttle **Off** Mixture **Idle Cutoff** Mag Switch **Off** Master **Off**
Fuel Tanks **Off** Belts **Tight** Door **Unlatch** Land **Soft**