



<p style="text-align: center;">INITIAL</p> <p>Weather – Checked NOTAMS – Checked Weight & Balance Fuel Required Gal. _____ A.R.O.W. Pitot Cover – Remove Gust Locks – Remove Fuel – Both Master – On Flaps – Extend Lights – Check Fuel Gauges – Verify Master – Off</p> <p style="text-align: center;">EXTERIOR</p> <p>Fuel Quantity – Stick Fuel Quality – Sump Caps, Drains, Vents Oil – 6 to 7 qts. Engine & Belt – Check Prop & Air Intake – Check Exhaust System – Check Control Surfaces – Check Pitot & Static Ports – Clear Gear, Tires, Brakes Antennas – Check Ties, Chocks, Towbar Baggage Door – Check</p> <p style="text-align: center;">INTERIOR</p> <p>Passenger Brief Hobbs – Record Alt Static – Closed Brakes – Pedal Test Seatbelts – Fastened Seats – Locked</p>	<p style="text-align: center;">ENGINE START</p> <p>Avionics – Off Fuel – Both Trim – Set for Takeoff Mixture – Full Rich Throttle – Open ¼ in. Carb Heat – Off Beacon – On Breakers – Checked In Master – On Prime – As Required Prop – Clear Mags – Start Oil Pressure – Check RPM – Idle Mixture – Lean for Taxi</p> <p style="text-align: center;">PRE-TAXI</p> <p>Flaps – Retracted Heat/Air – Set Avionics – On/Set ATIS/AWOS – Listen Altimeter – Set Transponder – On/Stby Radio – Test Taxi/Nav Light – As Req Brakes – Pedal Test</p> <p style="text-align: center;">TAXI</p> <p>DG & Compass <i>should be free moving & indicating known hdgs while taxiing</i> Attitude Indicator – Check Turn Coordinator – Check</p>	<p style="text-align: center;">RUN UP</p> <p>Brakes – Apply Controls – Free & Correct Instruments – 6 Checked Mixture – Rich Primer – Locked Throttle – 1700 RPM Mags – R/L/Both Carb Heat – Test Vacuum – Check Amps/ Volts – Check Oil Pressure – Check Oil Temp – Check Throttle – Idle</p> <p style="text-align: center;">PRE-TAKEOFF</p> <p>Fuel – Both Trim – Takeoff Flaps – 0°- 10° Mixture – Rich Carb Heat – Off Landing Light – On Strobes – On Transponder – Alt/ Sqwk Doors & Windows – Latch DG – Set to Compass Time – Note Check for Traffic & Call</p> <p style="text-align: center;">TAKEOFF</p> <p>Wind Direction – Note X-Wind Correction – Apply Throttle – Full Engine Gauges – Green Airspeed – Alive Rotate – V_r 55 Kts. Pitch for – V_y 76 Kts.</p>	<p style="text-align: center;">CLIMB</p> <p>Airspeed 70-80 Kts. Power – Set Mixture – Set Instruments – Check Taxi/ Lnd Light – Off</p> <p style="text-align: center;">CRUISE</p> <p>Power – Set Mixture – Set Instruments – Check DG – Set to Compass</p> <p style="text-align: center;">DESCENT</p> <p>Mixture – Richen Carb Heat – As Required ATIS/AWOS – Listen Altimeter – Set DG – Set to Compass Instruments – Check</p> <p style="text-align: center;">PRE-LANDING</p> <p>Fuel – Both Landing Light – On (10mi) Seat Belts – Fastened Radio – Announce Position Airspeed – White Arc</p> <p style="text-align: center;">Read & Do Checklists</p>	<p style="text-align: center;">LANDING</p> <p>Carb Heat – On Throttle – Reduce Flaps – 10°- 30° Airspeed – Set Trim – As required</p> <p style="text-align: center;">AFTER LANDING</p> <p>Announce Clear of Rwy Trim – Set for Takeoff Flaps – Retract Mixture – Lean for Taxi Carb Heat – Off Landing/Strobe Light – Off Taxi Light – As Req Transponder – Stby</p> <p style="text-align: center;">SHUTDOWN</p> <p style="text-align: center;"><i>Turn off In Order</i></p> <p>Music – Avionics Mixture – Cutoff Mags – Off Master – Off</p> <p style="text-align: center;">SECURING</p> <p>Switches – Off Hobbs/Tach – Record Squawks – Notify Gust Lock – Install Pitot Cover – Install Cowl Plugs – Install Chocks/Tie Down Verify Quiet & Dark</p> <p style="text-align: center;">Do & Verify Checklists</p>
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V_r • Rotation Speed – 55 Kts.	V_{so} • Stall Speed (Dirty) – 33 Kts.	V_a • Maneuvering Speed – 97 Kts.	V_{ne} • Never Exceed – 158 Kts.
V_x • Best Climb Angle – 56 Kts.	V_s • Stall Speed (Clean) – 44 Kts.	V_{fe} • Flap Extended – 85 Kts.	X Wind • Max Demo'd – 15 kts
V_y • Best Climb Rate – 76 Kts.	V_g • Best Glide Speed – 65 Kts.	V_{no} • Normal Operating – 127 Kts.	

	Knots	Flaps	– Notes –
Cruise Settings (TAS – 6,000')			<i>Lean mixture above 3000ft</i>
Economy	101 Kts.	0°	2300 RPM – 6.4 GPH – 57% Power
Normal	107 Kts.	0°	2400 RPM – 7.0 GPH – 63% Power
Maximum	113 Kts.	0°	2500 RPM – 7.8 GPH – 69% Power
Arrival			
Approach	70 – 65 Kts.	10° - 20°	1400 RPM (initially)
Short Final	65 – 61 Kts.	30°	Idle – 1200 RPM
Lebanon (M54) 588' CTAF – 122.725 AWOS – 118.325	Gallatin (XNX) 583' CTAF – 123.05 AWOS – 132.725		Short Field Takeoff (50 ft. obstacle): 0° Flaps Climb V_x 56 Kts until clear Short Field Takeoff (No obstacle): 10° Flaps Soft Field Takeoff 10° Flaps



ENGINE FAILURE – RESTART

- AIRSPEED PITCH FOR **65 KTS**
- FUEL SELECTOR BOTH
- MIXTURE FULL RICH
- CARB HEAT ON (OUT)
- PRIMER IN & LOCKED
- MAGS BOTH/ START (If propeller has stopped windmilling)

*If no restart proceed to forced landing checklist
Once landing is assured and time permits*

FORCED LANDING

- SEATBELTS & SHOULDER HARNESSSES SECURE
- AIRSPEED **65 KTS** (flaps up) **60 KTS** (flaps down)
- MIXTURE CUTOFF
- FUEL SELECTOR OFF
- MAGS OFF
- RADIO 121.5 (Declare Emergency)
- TRANSPONDER 7700
- FLAPS **40° RECCOMENDED**
- MASTER OFF
- DOORS UNLATCHED

ENGINE FIRE IN FLIGHT

- MIXTURE CUTOFF
- FUEL SELECTOR OFF
- MASTER OFF
- CABIN HEAT CLOSED
- AIRSPEED **100 - 120 KTS**

Proceed to forced landing checklist

ELECTRICAL FIRE IN FLIGHT

- MASTER & AVIONICS MASTER OFF
 - CABIN HEAT OFF
- Land at nearest airport or proceed to forced landing checklist*

OVERVOLTAGE LIGHT

If light illuminates alternator will disengage

- MASTER OFF, THEN ON

If overvoltage light remains off proceed normally

** If overvoltage light remains on*

- MASTER OFF
 - BEFORE LANDING MASTER ON
- This conserves power for flaps, radios, & essential equipment*

INSUFFICIENT RATE OF CHARGE

If ammeter shows -negative value battery is discharging

- MASTER OFF
 - BEFORE LANDING MASTER ON
- This conserves power for flaps, radios, & essential equipment*

ICING CONDITIONS

- PITOT HEAT ON
- CARB HEAT ON
- CABIN HEAT MAXIMUM

CONSIDER 180 TURN OR CLIMB OR DESCEND

DO NOT REMAIN IN ICING CONDITIONS

- RPMS INCREASE
- FLAPS NOT RECCOMENDED FOR LANDING
- LAND AT HIGHER AIRSPEED

GO AROUND

- POWER FULL
- CARB HEAT OFF
- CLIMB POSITIVE RATE
- FLAPS RETRACT SLOWLY
- AIRSPEED **60 KTS**

Cessna 172 P (Lycoming O-320- D2J, 160HP)	
Empty Weight:	Useful Load:
Max Gross Weight (takeoff): 2400 lbs	
Max Baggage Area: 120 lbs	
Fuel Type: 100 LL (Blue)	
Fuel: Useable 50 gal / Total 54 gal / Unusable 4 gal	
Oil Capacity: 8qts (Minimum 6)	
Electrical System: 28V / 60 AMP Alternator	
Service Ceiling: 13,100ft	
Rate of Climb (sea level): 685 fpm	
Range (75% 8,000ft): 5.9 hrs (no reserve, 710 NM, no wind)	

