

<p><b>INITIAL</b></p> <p>Weather &amp; Den. Alt. Weight &amp; Balance Performance Req. Flight Plan - File Papers - A.R.O.W. Fuel - Both Control Lock Master - On Flaps - Extend Pitot Heat - Test Lights - Int. / Ext. Fuel Gauges - True Master - Off</p> <p><b>EXTERIOR SUMMARY</b> <i>After Geographical Check</i></p> <p>Fuel Quantity Fuel Quality Caps/Drains/Vents Engine / Oil / Belt Prop / Air Intake Exhaust System Stall Indicator - Test Surfaces &amp; Controls Pitot &amp; Static Ports Gear / Tires / Brakes Antennas Ties / Chocks Baggage Door Final Walk Around</p> <p><b>INTERIOR</b></p> <p>Passenger Brief Hobbs / Tach Time Circuit Breakers Alternate Static Brakes - Pedal Test</p>	<p><b>START</b></p> <p>Seat Track/Back - Lock Avionics - Off Autopilot - Off Carb Heat - Off Beacon - On Mixture - Full Rich Throttle - Slight Prime Brakes Prop - Clear Master - On Mags - Start Oil Pressure Lights - As Req. Mixture - As Req.</p> <p><b>PRE-TAXI / TAXI</b></p> <p>Seat Belts / Harness Flaps - Up Heat / Vent / Defrost Avionics - On / Set Transpond - STBY ATIS / AWOS Altimeter - Set Radio - Test Taxi Light - As Req. Brakes - Test Attitude Indic. - Test Turn Coord. - Test H.I. / Compass - Test</p>	<p><b>RUN-UP</b></p> <p>Brakes - Set Fuel - Both Trim - Takeoff Flight Controls Instruments Mixture - Best Power Primer - In &amp; Lock</p> <p>1700 RPM Mags (R&amp;L) - Test Carb Heat - Test Vacuum Amps / Volts Oil Pressure Oil Temperature Idle - Check Closed Throttle Friction</p> <p><b>PRE-TAKEOFF</b></p> <p>Flaps - 0°- 10° Mixture - Best Power Carb Heat - Off <i>Or As Req.</i> Pitot Heat - As Req. H.I. To Compass Doors / Windows Transp - Alt + Sqwk Landing Light - On Strobes - On Time - Note Brakes - Release</p> <p><i>Abort Plan - Ready!</i></p>	<p><b>TAKEOFF</b></p> <p>Full Throttle 2260 RPM (Min) Oil Pressure Rotate * 52 (60) Vy - 71 (82) Flaps - Up</p> <p><b>CLIMB</b></p> <p>70-78 (80-90) Power Mixture Instruments Taxi / Land Light - Off Flight Plan - Open</p> <p><b>CRUISE</b></p> <p>Power Mixture Instruments H.I. To Compass</p>	<p><b>DESCENT</b></p> <p>Mixture - Richen Fuel - Both Carb Heat - As Req. ATIS / AWOS Altimeter - Set Instruments H.I. To Compass</p> <p><b>PRE-LANDING</b></p> <p>Landing Light - On Autopilot - Off Seat Belt / Harness Mixture - Best Power Carb Heat - On Fuel - Both Flaps - As Req.</p> <p><b>LANDING</b></p> <p>Flaps - 40° <i>Or As Req.</i> Speed * 61 (70)</p> <p><i>G. U. M. P. F. S.</i></p> <p><b>GO AROUND</b> <i>Power - Full Carb Heat - Off Positive Rate Climb Flaps - Retract Slowly</i></p>	<p><b>AFTER LANDING</b></p> <p>Flaps - Up Carb Heat - Off Strobes - Off Landing Light - Off Taxi Light - As Req. Pitot Heat - Off Mixture - As Req. Trim - Takeoff Transpond - STBY</p> <p><b>SECURING</b></p> <p>ELT - Verify Silent Avionics - Off Mixture - Full Lean Mags - Off Master - Off Fuel - Left or Right Lights - Off Hobbs / Tach Time Control Lock Chocks Tie Downs Pitot Cover Baggage Door Cabin Doors</p> <p><b>Close Flight Plan</b></p> <p>* Adjust Speed As Needed For Conditions</p>
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Vr • Rotation Speed - 52 (60)	Vs0 • Stall with flaps - 43 <sup>(1)</sup> (49)	Va • Max Abrupt (2000 lbs) - 99 (114)	Vfe • Full Flaps - 87 (100)
Vx • Best Angle Climb - 59 (68)	Vs • Stall without flaps - 50 <sup>(1)</sup> (57)	Va • Max Abrupt (Full Gross) - 106 (122)	X Wind • Max Demo'd - 13 (15)
Vy • Best Rate Climb - 71 (82)	Best Glide (2000 lbs) - 65 (75)	Vno • Max Structural Cruise - 122 (140)	
	Best Glide (Full Gross) - 70 (80)	Vne • Never Exceed - 151 (174)	

	KNOTS (MPH)	FLAPS °	- NOTES -
<b>DEPARTURE</b>			<sup>(1)</sup> Stall Speeds Are CAS
Rotation *	52 (60)	0	Short Field w/Obstacle: 0° Flaps
Best Angle Climb	59 (68)	0	Short w/o Obstacle or Soft: 10° Flaps
Best Rate Climb	71 (82)	0	
<b>CRUISE</b> (TAS -5,000')			
Economy	95 (109)	0	2300 RPM - 6.5 GPH - 55%
Normal	107 (123)	0	2500 RPM - 7.4 GPH - 68%
Maximum	112 (129)	0	2600 RPM - 8.1 GPH - 75%
<b>ARRIVAL</b>			
Approach	70 (80)	10-20	1700 RPM (Initially)
Short Final *	61 (70)	30-40	Idle-1200 RPM

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Specs Are Approximate Because Of Environment & Plane Model / Year Variables. Specs Are In: LBS, KIAS, Sea Level, Standard Day, Normal Category, Max Gross Wt., No Wind, "Best Power", Wheel Pants, New Engine. ( ) = MPH.

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## POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL  
 BEST GLIDE – **70 KIAS** (80 MPH) (Full Gross Weight)  
 FUEL SELECTOR – OFF  
 MIXTURE – FULL LEAN / IDLE CUTOFF  
 FLAPS – DOWN  
 MASTER & MAGS – OFF (Unlatch Doors)

## POWER LOSS IN FLIGHT

BEST GLIDE – **70 KIAS** (80 MPH) (Full Gross Weight)  
 CARB HEAT – ON (Also Supplies Alternate Air)  
 NOTE WIND DIRECTION & VELOCITY  
 PICK LANDING SITE  
 MIXTURE – FULL RICH  
 FUEL SELECTOR – CHECK / SWITCH / BOTH (Note Gauges)  
 FUEL PRIMER – LOCKED (Try Re-Priming)  
 MAGNETOS – CHECK ALL  
 MASTER – ON

## IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE  
 SQUAWK 7700  
 DECLARE EMERGENCY (TWR, APP, Unicom, 121.5)  
 FUEL SELECTOR – OFF  
 MIXTURE – FULL LEAN / IDLE CUTOFF  
 SEATBELTS / HARNESS  
 FLAPS – AS NEEDED (Full Flaps When Field Assured)  
 MASTER & MAGS – OFF  
 UNLATCH DOORS  
 PROTECT BODY

## ELECTRICAL FIRE IN FLIGHT

ALL ELECTRICAL DEVICES + MASTER OFF (Mags On)  
 CABIN HEAT & AIR – OFF  
 IF FIRE OUT – MASTER ON ONLY IF CRITICAL (Vents – Open)  
 THEN ONE ESSENTIAL ELECTRICAL DEVICE AT A TIME  
 RESET CIRCUIT BREAKER ONLY IF CRITICAL

## ENGINE FIRE IN FLIGHT

MIXTURE – FULL LEAN / IDLE CUTOFF  
 FUEL SELECTOR – OFF  
 MASTER SWITCH – OFF  
 CABIN HEAT & AIR – OFF (Except Overhead Vents)  
 INCREASE AIRSPEED TO EXTINGUISH – LAND ASAP

## ENGINE FIRE DURING START

CONTINUE CRANKING ENGINE  
 IF START – RUN A FEW SECONDS - SHUTDOWN - INSPECT  
 IF NO START – IDLE MIXTURE CUTOFF & FUEL SELECTOR OFF  
 THROTTLE FULL OPEN  
 CONTINUE CRANKING ENGINE A FEW SECONDS  
 MASTER & MAGS – OFF  
 EVACUATE / FIRE EXTINGUISHER

## ICING

PITOT HEAT – ON  
 CARB HEAT – ON  
 CABIN HEAT & DEFROST – MAXIMUM  
 STRONGLY CONSIDER 180° TURN  
 ATTAIN HIGHER OR LOWER ALTITUDE  
 INCREASE ENGINE SPEED  
 FLAPS – NOT RECOMMENDED FOR LANDING  
 LAND FASTER AS NEEDED

## OTHER

**EXCESSIVE RATE OF CHARGE:** Over Voltage Warning Light Will Illuminate If Reaches Approx. 16 Volts. To Reactivate, Turn Both Sides Of The Master Switch Off / Then On Again. If Light Comes On Again, Terminate Flight A.S.A.P.

**INSUFFICIENT RATE OF CHARGE:** Nonessential Electric – Off / Terminate Flight A.S.A.P.

**RADIO OUT:** Check Circuit Breakers & VOLUME  
 Recycle Alternator Switch  
 If IFR & Still Out, Set Transponder At 7600.  
 (Suggested For VFR If In B, C, D Airspace.)

**UNICOM:** 122.7 – 122.8 – 122.95 – 123.0 – 123.05  
**MULTICOM:** 122.9 (CTAF), 122.75, 122.85 (Air To Air)  
**FLIGHT WATCH:** 122.0

TOWER SIGNALS	ON GROUND	IN FLIGHT
Steady Green	Cleared For Takeoff	Cleared To Land
Flashing Green	Cleared To Taxi	Return For Landing
Steady Red	Stop	Yield & Continue Circling
Flashing Red	Taxi Clear of Landing Area	Airport Unsafe - Do Not Land
Flashing White	Return To Starting Point	N/A
Alternating Red & Green	Use Extreme Caution	Use Extreme Caution

\* Every Plane Has A Different Empty Weight And Useful Load

Cessna 172 L,K,L Lycoming: O-320-E2D, 150 HP

\* **Empty Weight:**  LBS (Specific Plane Weight)  
 \* **Max. Useful Load:**  LBS (Including Fuel @ 6 lbs/gal)  
**Max. Baggage Area:** 120 LBS (Included In Useful Load)  
**Max. T.O. Weight:** 2300 LBS

**Fuel Type:** 100 LL (Blue) / 100 (Green) / 80/87 (Red)  
**Usable Fuel:** 38 Gallons (48 L.R Tanks)  
**Oil Capacity:** 8 Quarts (Minimum 6)  
**Electrical:** 12-14 VOLT / 60 AMP

**Tire Pressure:** Nose – 26 PSI (5.00 x 5) (172 L,K)  
 31 PSI (6.00 x 6) (172 L,K,L)  
 Main – 24 PSI (6.00 x 6) (172 L,K)  
 29 PSI (6.00 x 6) (172 L)