

## INITIAL

Weather & Den. Alt.  
Weight & Balance  
Performance Req.  
Flight Plan - File  
Papers - A.R.O.W.  
Fuel - Both  
Fuel Shutoff Valve-On  
(Full In)  
Control Lock  
Master - On  
Flaps - Extend  
Pitot Heat - Test  
Lights - Int. / Ext.  
Fuel Gauges - True  
Low Fuel Lights Off  
Avionics Cooling Fan  
(Avionics Master On/Off)  
Master - Off

## EXTERIOR SUMMARY

After Geographical Check

Fuel Quantity  
Fuel Quality  
Caps / Drains / Vents  
Engine / Oil / Belt  
Prop / Air Intake  
Exhaust System  
Stall Indicator - Test  
Surfaces & Controls  
Pitot & Static Ports  
Gear / Tires / Brakes  
Antennas  
Ties / Chocks / Towbar  
Baggage Door  
Final Walk Around

## INTERIOR

Passenger Brief  
Hobbs / Tach Time  
Circuit Breakers  
Alternate Static  
Brakes - Pedal Test

## START (2)

Seat Track/Back - Lock  
Avionics - Off  
Autopilot - Off  
Throttle - 1/4"  
Mixture - Full Lean  
Brakes - Set  
Prop - Clear  
Master - On  
Beacon - On  
Aux Fuel Pump-On<sup>(1)</sup>  
Mixture Rich - 3-5 GPH  
Mixture - Full Lean  
Aux Fuel Pump - Off  
Mags - Start  
Mixture - Full Rich  
Oil Pressure  
Lights - As Req.  
Mixture - As Req.

## PRE-TAXI / TAXI

Seat Belts / Harness  
Flaps - Up  
Heat / Vent / Defrost  
Avionics - On / Set  
ATIS / AWOS  
Altimeter - Set  
XPDR - Alt + Sqwk  
ADS-B - On  
Radio - Test  
Taxi Light - As Req.  
Brakes - Test  
Attitude Indic. - Test  
Turn Coord. - Test  
HSI/Compass - Test

## RUN-UP

Brakes - Set  
Fuel - Both  
Trim - Takeoff  
Flight Controls  
Annunciator Lights  
Instruments  
Mixture - Best Power  
  
1800 RPM  
Mags (R & L) - Test  
Vacuum  
Amps / Volts  
Oil Pressure  
Oil Temperature  
Idle - (575-625 RPM) Ck  
Mixture - Lean to Ck  
(10 Min - 50 Max RPM Rise)  
Throttle Friction

## PRE-TAKEOFF

Flaps - 0°-10°  
Mixture - Best Power  
Aux Fuel Pump - Off  
HSI To Compass  
XPDR - Alt + Sqwk  
Doors / Windows  
Landing Light - On  
Strobes - As Req.  
Time - Note  
Brakes - Release

Abort Plan - Ready!

## TAKEOFF

Full Throttle  
2300-2400 RPM  
Oil Pressure  
Rotate \* **55** (63)  
Vy - **74** (85)  
Flaps - Up

## CLIMB

**70-85** (81-98)  
Power  
Mixture  
Instruments  
Taxi / Land Light - Off  
Flight Plan - Open

## CRUISE

Power  
Mixture  
Instruments

## DESCENT

Mixture - Richen  
Fuel - Both  
ATIS / AWOS  
Altimeter - Set  
Instruments  
HSI To Compass

## PRE-LANDING

Landing Light - On  
Autopilot - Off  
Seat Belt / Harness  
Mixture - Best Power  
Fuel - Both  
Flaps - As Req.

## LANDING

Flaps - 30° Or As Req.  
Speed \* **65** (75)

G.U.M.P.F.S.

## GO AROUND

Power - Full  
Positive Rate Climb  
Flaps - Retract Slowly

## AFTER LANDING

Flaps - Up  
Strobes - Off  
Landing Light - Off  
Taxi Light - As Req.  
Pitot Heat - Off  
Mixture - As Req.  
Trim - Takeoff  
XPDR - Alt + Sqwk

## SECURING

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

## Close Flight Plan

\* Adjust Speed  
As Needed For  
Conditions

X Wind • Max Demo'd - 15 (17)	Vs0 • Stall with flaps - 40 (46)	Va • Max Abrupt Ctrl (1900 lbs) - 90 (104)	Vfe • 10° Flaps - 110 (127)
Vr • Rotation Speed - 55 (63)	Vs • Stall w/o flaps - 48 (55)	Va • Max Abrupt (Full Gross) - 105 (121)	Vfe • Full Flaps - 85 (98)
Vx • Best Angle Climb - 62 (71)	Best Glide (1900 lbs) - 59 (68)	Vno • Max Structural Cruise - 129 (148)	Chandelles/Lazy Eights - 105 (121)
Vy • Best Rate Climb - 74 (85)	Best Glide (Full Gross) - 68 (78)	Vne • Never Exceed - 163 (187)	Steep Turns - 95 (109)

## KNOTS (MPH)

## FLAPS °

## - NOTES -

## DEPARTURE

Rotation \* **55** (63)  
Best Angle Climb **62** (71)  
Best Rate Climb **74** (85)

## CRUISE (TAS-8,000')

Economy **106** (122)  
Normal **112** (129)  
Maximum **119** (137)

## ARRIVAL

Approach **75** (86)  
Short Final \* **65** (75)

10-20  
30

(2) START Procedure Assumes SB04-24-01 Complied. (ALT Control Unit)

Short Field: 10° Flaps - **56** (64) Until Clear

Soft Field: 10° Flaps

(1) Hot Start - Do not prime to 3-5 GPH

2400 RPM - 7.8 GPH - 54%  
2500 RPM - 8.6 GPH - 61%  
2600 RPM - 9.4 GPH - 68%

1700 RPM (Initially)  
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, "Lean Mixture", Wheel Pants, New Engine. (r) = MPH.  
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VERTICAL SCALE = NAUTICAL MILES PER INCH: WAC = 14 SEC = 7 TAC = 3.5 NOS = 12 JEPPI = 15 ELA = 12

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(IF UNABLE TO ABORT TAKEOFF)

## POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL

AIRSPED – **70 KIAS** (81 MPH) (Full Gross Weight)

FUEL SHUTOFF VALVE – OFF (Pull Full Out)

MIXTURE – FULL LEAN / IDLE CUTOFF

FLAPS – DOWN – **65 KIAS** (75 MPH) (Full Gross Weight)

MASTER & MAGS – OFF

UNLATCH DOORS

## POWER LOSS IN FLIGHT

BEST GLIDE – **68 KIAS** (78 MPH) (Full Gross Weight)

NOTE WIND DIRECTION & VELOCITY

PICK LANDING SITE

FUEL SHUTOFF VALVE – ON (Push Full In)

FUEL SELECTOR – CHECK / SWITCH / BOTH (Note Gauges)

AUX FUEL PUMP SWITCH – ON

MIXTURE – FULL RICH (To Restart, Lean As Req)

MAGNETOS – CHECK ALL

MASTER – ON

## IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE

SQUAWK 7700

DECLARE EMERGENCY (TWR, APP, Unicom, 121.5)

MIXTURE – FULL LEAN / IDLE CUTOFF

FUEL SHUTOFF VALVE – OFF (Pull Full Out)

SEATBELTS / HARNESS

FLAPS – AS NEEDED (Full Flaps When Field Assured)

MASTER & MAGS – OFF **65 KIAS** (75 MPH) w/ Full Flaps

UNLATCH DOORS

PROTECT BODY

## ELECTRICAL FIRE IN FLIGHT

ALL ELECTRICAL DEVICES + MASTER – OFF (Mags On)

VENTS, CABIN HEAT, & AIR – CLOSED

FIRE EXTINGUISHER

IF FIRE OUT – MASTER ON ONLY IF CRITICAL (Vents – Open)

THEN ONE ESSENTIAL ELECTRICAL DEVICE AT A TIME

RESET CIRCUIT BREAKER(S) ONLY IF CRITICAL

## ENGINE FIRE IN FLIGHT

MIXTURE – FULL LEAN / IDLE CUTOFF

FUEL SHUTOFF VALVE – OFF (Pull Full Out)

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 VALVE OFF

THROTTLE FULL OPEN

CONTINUE CRANKING ENGINE A FEW SECONDS

FUEL SHUTOFF VALVE – OFF (Pull Full Out)

MASTER & MAGS – OFF

EVACUATE / FIRE EXTINGUISHER

## ICING

PITOT 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

LITTLE OR NO FLARE

## OTHER

**AMMETER w/EXCESS RATE OF CHARGE:** Alternator – Off, Pul C.B. / Nonessential Electric – Off / Terminate Flight A.S.A.P.

**LOW VOLTAGE:** Avionics Power Switch – Off / Alt. C.B. - In / Master – Off, then, Master – On / Ck. Volt Lt. Off / Avionics – On / If Illuminates Again: Alt. & Electric – Off / Terminate Flight A.S.A.P.

**RADIO OUT:** Check Circuit Breakers & VOLUME  
Recycle Alternator Switch  
If IFR & Still Out, Set XPDR To 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)  
**F.S.S.:** 122.000 To 122.675. **Most Common - 122.2**  
**EMERGENCY:** 121.5

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 172s / SP Lycoming IO-360-L2A (180 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:** 2550 LBS Ramp Wt: 2558 LBS

**Fuel Type:** 100LL (Blue) / 100 (Green)

**Usable Fuel:** 53 Gallons

**Oil Capacity:** 8 Quarts (Minimum 6)

**Electrical:** 24-28 VOLT / 60 AMP

**Tire Pressure:** Nose - 45 PSI / Main - 38 PSI