

ENGINE FAILURES

DURING TAKEOFF ROLL

Throttle.....IDLE
Brakes.....APPLY
Flaps.....RETRACT
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF
STBY Battery.....OFF
Master Switch.....OFF

IMMEDIATELY AFTER TAKEOFF

Airspeed75/70 (Flaps down)
Mixture.....IDLE CUT-OFF
Fuel Shutoff Valve.....OFF
Ignition Switch.....OFF
Flaps.....AS REQUIRED
STBY Battery Switch.....OFF
Master Switch.....OFF
Cabin Doors.....UNLATCH
Land.....STRAIGHT AHEAD

IN FLIGHT

Airspeed.....76 KIAS
Fuel Selector.....BOTH
Mixture.....RICH
Auxiliary Fuel Pump.....ON
Ignition Switch.....START/BOTH
Auxiliary Fuel Pump.....OFF
-ONLY IF engine DOES NOT restart
'Power Off Landing'.....EXECUTE

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FIRES

ENGINE FIRE DURING START

Ignition.....CONTINUE CRANKING

IF ENGINE STARTS:

Power.....1800 RPM for 3 min
Engine.....SHUTDOWN

Throttle.....FULL OPEN
Mixture.....IDLE CUT-OFF
Starter.....CONTINUE CRANKING
Fuel Shutoff Valve.....OFF
Auxiliary Fuel Pump.....OFF
Ignition Switch.....OFF
STBY Battery Switch.....OFF
Master Switch.....OFF
Engine.....SECURE
Parking Break.....RELEASE
Fire Extinguisher.....ACTIVATE
Airplane.....EVACUATE
Fire.....EXTINGUISH
Fire Damage.....INSPECT

ENGINE FIRE IN FLIGHT

Mixture.....IDLE CUT-OFF
Fuel SelectorOFF
Auxiliary Fuel Pump.....OFF
Master Switch.....OFF
Cabin Heat and Air.....OFF
-EXCEPT FOR THE OVERHEAD VENTS
Airspeed.....100 KIAS
'Power Off Landing'.....EXECUTE

ELECTRICAL FIRE IN FLIGHT

STBY Battery Switch.....OFF
Master Switch.....OFF
Vents/Cabin Air/Heat.....OFF
Fire Extinguisher.....ACTIVATE
Avionics Master Switch.....OFF
All Electrical Equipment.....OFF

AFTER FIRE IS EXTINGUISHED:

Vents/Cabin Air/Heat.....OPEN
Circ. Breakers.....DO NOT RESET
Master Switch.....ON
STBY Battery.....ON
Avionics Master.....ON

CABIN FIRE

STBY Battery.....OFF
Master Switch.....OFF
Vents/Cabin Air/Heat.....CLOSED
Fire Extinguisher.....ACTIVATE

AFTER FIRE IS EXTINGUISHED:

Vents/Cabin Air/Heat.....OPEN

WING FIRE

Landing + Taxi Lights.....OFF
Nav + Strobe Lights.....OFF
Pitot Heat.....OFF
Perform SIDESLIP & Land ASAP!

ELECTRICAL

HIGH MAIN BATTERY CHARGE

(M Bus Volts >32 OR M Bus Amps >40)
Master Switch (ALT).....OFF
Non-essential Electrical Equipment.....OFF
Avionics.....OFF
Flight.....COMPLETE ASAP

LOW VOLTAGE

Alternator Circuit Breaker.....IN
Master Switch.....OFF
Master Switch.....ON
'Low Volts' Annunciator.....CHECK OFF
M Bus Volts.....27.5v MINIMUM
M Batt Amps.....CHECK CHARGING
Avionics Master Switch.....ON

IF LOW VOLTAGE PERSIST:

Master Switch.....OFF
Non Essential Electrical.....OFF
Flight.....COMPLETE ASAP

POWER OFF LANDING

Passenger Seat Backs.....UPRIGHT
Seats + Seatbelts.....SECURE
Airspeed.....75/70 (Flaps Down)
Mixture.....IDLE CUT-OFF
Fuel Selector.....OFF
Ignition Switch.....OFF
ATC or 121.5.....DECLARE EMERGENCY
Flaps.....AS REQUIRED
Master Switch.....OFF
Doors.....UNLATCH
Touchdown.....SLIGHTY TAIL LOW
Brakes.....APPLY HEAVILY

**Refer to the POH for any
other emergency procedures**



BEFORE START

- 1) Passenger Briefing.....Complete
- 2) Seats, Belts, and Doors.....Locked
- 3) Brakes.....Test & Set
- 4) Circuit Breakers.....All In
- 5) Electrical Equipment.....Off
- 6) Beacon.....On
- 7) Fuel Selector Valve.....On
- 8) Cowl Flaps.....Open
- 8) Fuel Shutoff Valve.....On

ENGINE START

- 1) Throttle.....Open ¼ inch
- 2) Mixture.....Idle Cut-Off
- 3) Propeller Area.....Clear
- 4) STBY Battery.....Test for 20 seconds
- 5) STBY Battery.....Arm (Verify PFD)
- 6) Engine Indications.....Check
- 7) E Bus volts.....24v minimum
- 8) M Bus volts.....1.5v or less
- 9) STBY Batt. Annunciator.....On
- 10) Master Switch.....On
- 11) Priming (Omit if engine is warm)

Aux Pump.....On
Mixture.....Rich (3-5 sec)
Mixture.....Idle Cut-Off
Aux Pump.....Off

- 12) Ignition Switch.....Start
Mixture.....Full Rich
- 13) Throttle.....1000 RPM
- 14) Engine Oil Pressure.....Check
- 15) Mixture.....Lean
- 16) Amps (M Batt + S Batt).....Check
- 17) Low Volts Annunciator.....Off
- 18) Avionics Master.....On
- 19) Flaps.....Up
- 20) Lights.....As Required

ENGINE RUN UP

- 1) Brakes.....Set
- 2) Avionics.....Set
 - A) Verify Transponder
 - B) Enter GPS Flight Plan
 - C) Compute RAIM (IFR)
- 3) Flight Instruments.....Check
 - A) No Red X'sVerify (3) Altimeter Settings
 - C) Verify STBY Instruments
 - D) Set ALT + HDG Bugs
- 4) Flight Controls.....Free & Correct
- 5) Autopilot.....Test
- 6) Electric Trim.....Test
- 7) Elevator Trim.....Set for Takeoff
- 8) Fuel Quantity.....Check
 - A) Set Quantity in MFD
- 9) Mixture.....Full Rich
- 10) Throttle.....1800 RPM
- 11) Magnetos.....175/50
- 12) Propeller.....Cycle (High>Low>High)
- 13) Oil Press. & Temp.....Green
- 14) Ammeters/Voltmeters.....Check
- 15) Vacuum (Suction).....Check
- 16) Annunciators.....Check (None)
- 17) Throttle.....Idle (575-625)
- 18) Throttle.....1000 RPM
- 19) Throttle Friction Lock.....Adjust
- 20) Mixture.....Lean
- 21) Departure Briefing.....Complete
- 22) Brakes.....Release

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BEFORE TAKEOFF

- 1) Lights.....As Required
- 2) Mixture.....As Required
- 3) Autopilot.....Off
- 4) Flaps.....0-10°
- 5) Cowl FlapsOpen

CLIMB

- 1) Airspeed.....85 –95 KIAS
- 2) Throttle.....23" or Full Open
- 3) Propeller.....2400 RPM
- 4) Mixture.....15 GPH or Full Rich
- 5) Fuel SelectorBoth
- 6) Cowl FlapsOpen

CRUISE

- 1) Power 15-23 " MAP 2000-2400 RPM
- 2) Elevator / Rudder Trim.....Adjust
- 3) Cowl FlapsClosed
- 4) Mixture.....Lean
- 5) LightsAs Required

DESCENT

- 1) Power.....Set
- 2) Mixture.....Adjust
- 3) Cowl FlapsClosed
- 4) Fuel Selector.....Both
- 5) Altimeter (3)Set
- 6) Lights.....As Required

BEFORE LANDING

- 1) Seats/Belts.....Secured
- 2) Fuel Selector.....Both
- 3) Mixture.....As Required
- 4) Propeller ControlHigh RPM
- 5) Lights.....As Required
- 6) Autopilot.....Off

AFTER LANDING

- 1) Throttle.....1000 RPM
- 2) Mixture.....Lean
- 3) FlapsUp
- 4) Cowl FlapsClosed
- 4) Lights.....As Required
- 5) Trim.....Set for Takeoff

ENGINE SHUTDOWN

- 1) Brakes.....Set
- 2) Avionics Master.....Off
- 3) Electrical Equipment.....Off
- 4) Magnetos.....Check for Grounding
- 5) Mixture.....Idle Cut-Off
- 6) Ignition Switch.....Off/Keys Out
- 7) Master Switch.....Off
- 8) STBY Battery.....Off
- 9) Control Wheel Lock.....Install
- 10) Fuel Selector.....Left or Right
- 11) Flight Plan.....Closed

V Speeds

V ₅₀	41
V ₅	51
V _R	58
V _G	75
Approach.....	65†/70
V _X	58
V _Y	80
V _{FE}	140
Steep Turns.....	100
V _A (max gross).....	110
V _{NO}	140
V _{NE}	175

† Short field landing
* with flaps

