

Emergency Procedures

Fire Engine Failure

ENGINE FIRE DURING START

Fuel Selector.....OFF
 Throttle.....Full Open
 Master Switch.....OFF
 ** Wait for engine to stop **
 Ignition.....OFF
 Canopy.....Open & Evacuate

ENGINE FIRE DURING TAXI

Aircraft.....STOP
 Mixture.....Idle Cut Off
 Fuel Selector.....OFF
 Master Switch.....OFF
 Ignition.....OFF
 Canopy.....Open & Evacuate

ENGINE FIRE DURING FLIGHT

Fuel Selector.....OFF
 Mixture.....Idle Cut Off
 Throttle.....Full Open
 Fuel Pump.....OFF
 Airspeed.....73 KIAS
 Best Landing Site.....Selected
 MayDay.....Transmit (121.5)
 Transponder.....7700
 ELT.....Activate
 Seatbelts.....Secure
 Flaps.....As Required
 Electrical Equipment.....ALL OFF
 Force Landing.....Execute

ELECTRICAL FIRE

MayDay.....Transmit
 Master/Alternator.....OFF
 Cabin Heat.....OFF
 Vents.....Open As Needed
LAND AS SOON AS PRACTICAL

Sufficient Altitude for Restart?

NO: See "Securing Engine" Procedure

YES: Attempt Restart

Airspeed.....80 KIAS
 Electrical Equipment.....OFF
 Avionics Master.....OFF
 Battery Master.....Verify ON
 Mixture.....Enrichen As Required
 Fuel Selector.....Opposite Tank
 Fuel Pump.....ON
 Throttle.....Adjust / Set
 Prop.....High RPM
 Magnetos.....Left / Right / Both
 Best Landing Site.....Selected

Did Engine Restart?

YES: LAND AS SOON AS PRACTICAL

NO: Prepare for a Forced Landing

MayDay.....Transmit (121.5)
 Transponder.....7700
 ELT.....Activate
 See "Securing Engine" Procedure

SECURING ENGINE

Best Landing Site.....Selected
 Airspeed.....73 KIAS
 Mixture.....Idle Cut Off
 Fuel Selector.....OFF
 Magnetos.....OFF
 Flaps.....As Required
 Master Switch.....OFF
 Seatbelts.....Secure
 Land.....Evacuate Aircraft



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Preflight

CABIN

Hobbs.....Check
 Static Drain (IFR)*.....Closed
 Certs/Documents.....Check
 Battery Master.....ON
 Lights / Pitot Heat.....ON/Check/OFF
 Battery Master.....OFF
 Fuel & Oil.....Check
 **Call Air7 if fuel/oil is needed **

(805) 383-1100

LEFT WING

Strut & Tire.....Check
 Fuel Strainer.....Sample
 Stall Indicator.....Check
 Leading Edge.....Check
 Pitot Mast.....Clear
 Lights.....Check
 Aileron.....Check
 Flap Hinges.....Check

TAIL

Antennas.....Check
 Elevator.....Check
 Rudder.....Check

RIGHT WING

Flap Hinges.....Check
 Aileron.....Check
 Lights.....Check
 Leading Edge.....Check
 Strut & Tire.....Check
 Fuel Strainer.....Sample

NOSE

Oil Quantity.....5-7 qts
 Prop Blade.....Check
 Prop Hub.....Check
 Air Intake.....Clear
 Nose Gear Strut.....Check
 Nose Gear Tire.....Check

FINAL RAMP CHECK

Ramp/TieDown/Chocks.....All Clear

Engine Start

PRE-ENGINE START

Foot Pedals.....Adjusted
 Headsets.....Plugged In
 Seat Belts.....ON
 Canopy.....Closed & Latched
 Keys.....In and Ready
 Battery Master.....ON
 Strobe Lights.....ON
 Nav Lights (night).....(As Required)

COLD ENGINE START

Mixture.....Rich
 Throttle.....Full Open
 Fuel Pump.....4 Seconds
 Throttle.....Closed, then 1/4" Open
 Mixture.....Closed, then 1/4" Open
 Brakes.....Engaged
 Prop Area.....Clear
 Starter.....START
 Mixture.....Smoothly Advance

to Rich When Engine Fires

Throttle.....1000 RPM
 Oil Pressure.....Check
 Mixture.....Lean 50%
 Alternator.....ON
 Avionics Master.....ON
 Circuit Breakers.....Check
 Standby Att. Ind.....CAGE

PRE-TAXI

Brakes.....Check
 ATIS/ASOS (if available).....Listen

TAXI (IFR)

Heading Indicator.....Turns
 Turn Coordinator -Turns & Ball Skids

Run Up

ENGINE RUN-UP

Fuel.....Fullst Tank
 Brakes.....Engaged
 Mixture.....Rich (or as Required)
 Throttle.....2000 RPM
 Eng. Instruments.....Check
 AMP Meter.....Check
 Annunciators.....Check
 Cycle Propeller 3X.....M.P. Rises
 ...RPM Drops
 ...Oil Press. Drops
 Magneto Check
 Right Mag.....<175 RPM drop
 Back to Both.....
 Left Mag.....<175 RPM drop
 Back to Both.....
 Throttle.....Idle Check
 Throttle.....1000 RPM
 Mixture.....Lean 50%
 Flight Controls.....Free & Correct
 Flight Instruments.....Set
 Trim.....Set
 Flaps.....Set for T.O.

AVIONICS & SYSTEMS

Fuel Computer.....Set/Reset
 GPS.....Programmed
 Radios.....Set

BEFORE TAKEOFF

Canopy & Windows.....Secured
 Lights.....As Required
 Fuel Pump.....ON
 Mixture.....Rich (As Required)

Takeoff

Rotate.....Vr = 60 KIAS
 Climb.....Vy = 65 KIAS
 Fuel Pump.....OFF
 Flaps.....UP
 Prop.....2500 RPM
 Manifold.....25 Inches

Cruise

CRUISE - CLIMB

Climb Speed.....80 - 90 KIAS
 Mixture.....Lean As Required

Cruise

Mixture.....Lean (Rich of Peak)
 Prop.....2350 RPM

Approach

DESCENT

Power.....Reduce as Required
 Mixture.....Enrichen As Required
 ATIS/ASOS.....Listen
 Flight Instruments.....Check / Set
 Lights.....As Required
 Fuel Selector.....Fullst Tank
 Seat Belts.....Secure

FINAL APPROACH

Fuel Pump.....ON
 Prop.....High RPM
 Mixture.....Set for "Go-Around" Power
 Flaps.....Set
 Short Final.....65 KIAS

After Landing

EXITING RUNWAY

Fuel Pump.....OFF
 Mixture.....Lean 50%
 Flaps.....Retract
 Lights.....As Required
 Transponder.....1200

ENGINE SHUTDOWN

Canopy.....Closed & Latched
 Engine Tach.....Record
 Avionics Master.....OFF
 Throttle.....Idle
 Mixture.....Lean / Shut Off
 Ignition Key.....OFF & Out
 Lights.....OFF
 Master / Alternator.....OFF

Securing Aircraft

INSIDE

Hobbs.....Record
 Pilot Windows.....Closed & Latched
 Flight Controls.....Secured (with bar)

EXTERNAL

Canopy/Rear Door.....Locked
 Cover.....Installed
 Tiedown/Chocks.....Installed

Special Start Procedures

HOT START

Throttle.....1/4" Inch Open
 Prop.....Full Forward
 Mixture.....1/4" Inch Open
 Brakes.....Engaged
 Prop Area.....Clear
 Starter.....START
 Mixture.....Smoothly Advance
 to Rich When Engine Fires
 Throttle.....1000 RPM
 Oil Pressure.....Check
 Mixture.....Lean 50%

FLOODED START

Master Switch.....OFF
 Wait.....4 Minutes
 Master Switch.....ON
 Mixture.....Lean (cut off)
 Throttle.....Full Open
 Fuel Pump.....OFF
 Brakes.....Engaged
 Prop Area.....Clear
 Starter.....START
 Mixture.....Smoothly Advance
 to Rich When Engine Fires
 Throttle.....1000 RPM
 Oil Pressure.....Check
 Mixture.....Lean 50%

Unusual Procedures

ENGINE ROUGHNESS

Mixture.....Adjust As Needed
 Throttle.....Adjust As Needed
 ** If Roughness Continues **

Fuel Pump.....ON
 Fuel Selector.....Opposite Tank
 Engine Instruments.....Check
 Magnetos.....Switch to Left/Right
 If either Mag is Satisfactory,
 Continue on that Mag

Throttle.....Reduce Power
 LAND AS SOON AS PRACTICAL

LOSS OF OIL PRESSURE

LAND AS SOON AS PRACTICAL
 Prepare for Imminent Engine Failure

ELECTRICAL FAILURE IN IMC

Alternator.....OFF
 Essential Buss.....ON
 Emergency Attitude Power.....ON
 LAND AS SOON AS PRACTICAL

SPIN RECOVERY (PARE)

Power.....Idle
 Ailerons.....Neutral
 Rudder.....Opposite of Rotation
 Elevator.....Forward / Break Stall

V-Speeds (KIAS)

Vr - 60	Vg - 73
Vx - 60	Vno - 129
Vy - 65	Vne - 178
Vso - 49	Va - 108 (2535 lbs)
Vs1 - 52	- 94 (2160 lbs)
Vfe - 108 (T.O.)	Vref - 65
- 91 (LDG)	