

# 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



rev. 06/2021

## Preflight

Fuel & Oil (visual).....**Check**  
 To reduce delay if fuel/oil is needed

**Call SunAir (805) 389-9301**

### CABIN

Hobbs/Tach.....Verify  
 Static Drain (IFR)\*.....Closed  
 Certs/Documents.....Check  
 Battery Master.....**ON**  
 Lights / Pitot Heat.....**ON/Check/OFF**  
 Battery Master.....**OFF**

### 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

Headsets.....Plugged In  
 Seat Belts.....**ON**  
 Canopy.....Closed & Latched  
 Foot Pedals.....Adjusted  
 Keys.....In and Ready  
 Avionics Master.....Verify **OFF**  
 Master (ALT & BAT).....**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%  
 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.....Fulllest 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.....2400 RPM  
 Manifold.....24 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.....Fulllest 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**  
 Mixture.....**LEAN / CUT OFF**  
 Throttle.....Idle  
 Ignition Key.....**OFF** and **OUT**  
 Master (ALT & BAT).....**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	<b>Vg - 73</b>
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)	