

## ENGINE FAILURE - TAKEOFF

Airspeed ..... 70MPH  
Mixture ..... Cut-Off  
Fuel Selector Valve ..... Off  
Magneton ..... Off  
Master Switch ..... Off

## ENGINE FAILURE - FLIGHT

Airspeed ..... 70MPH  
Carb Heat ..... On  
Fuel Valve ..... Switch Tanks/Both  
Mixture ..... Rich  
Magneton ..... Both/L/R  

- Push START if prop not windmilling
- Cycle Magneto Switch L/R/Both

Throttle ..... Adjust  
Forced Landing ..... Execute

## ENGINE FIRE - FLIGHT

Mixture ..... Cut-Off  
Master Switch ..... Off  
Cabin heat/air ..... Off  
Airspeed ..... 160MPH  

- Increase speed as required to Vne
- Consider using a slip to keep flames away from fuselage
- Fire extinguished, best glide speed

Forced Landing Checklist ..... Complete

## FLOODED START

Throttle ..... Wide Open  
Mixture ..... Off  
Starter ..... Engage  
Throttle ..... Retard  

- Slowly until engine fires

Mixture ..... Rich

## ENGINE FIRE – GROUND

Cranking ..... Continue  
**IF ENGINE STARTS**

RPM ..... 1800  
◦ Continue for several minutes

Fuel Selector Valve ..... Off

### IF ENGINE FAILS TO START

Cranking ..... Continue

Throttle ..... Full Open

Fuel Selector Valve ..... Off

◦ Continue for several minutes or until flames extinguish

Magneton ..... Off

Master ..... Off

Aircraft ..... Evacuate

Fire Extinguisher ..... Use

## ELECTRICAL FIRE/SMOKE

Master Switch ..... Off  
Alternator ..... Off  
All Electrical Switches ..... Off  
Fire ..... Extinguish

## IF ABSOLUTELY REQUIRED

Master Switch ..... On  
Alternator ..... On  
Radio/Elec Switches ..... Min Req'd  

- Minimum required for safe flight

## FORCED LANDING – W/ POWER

Landing Area ..... Select/Circle  
Radio, Electric Switches ..... Off  
Airspeed ..... 70MPH  
Master Switch ..... Off  
Doors ..... Unlatch  
Touchdown ..... Slowest Speed  
Magneton ..... Off  
Brakes ..... As Req'd

## FORCED LANDING – W/O POWER

Airspeed ..... 70MPH  
Seatbelts ..... Secure  
Mixture ..... Cut-Off  
Fuel Selector Valve ..... Off  
Master Switch ..... Off  
Magneton ..... Off  
Doors ..... Unlatch  
Touchdown ..... Slowest Speed  
Brakes ..... As Req'd

## ELECTRICAL MALFUNCTIONS

### IF AMMETER INDICATES EXCESSIVE CHARGE

Master Switch ..... Off  
Alternator ..... Off  
All Electrical Switches ..... Off  
Flight ..... Terminate

### As required for Safety of Flight

Master Switch ..... On  
Radio Switch ..... On  
Electronics ..... Minimum Req'd

### IF AMMETER INDICATES DISCHARGE

All Electrical Switches ..... Off  
Alternator ..... Off  
Master Switch ..... Cycle  
Alternator ..... On

### If AMMETER continues to show discharge

Only Essential Radios ..... On  
Flight ..... Terminate

## 5P's: Plan, Pilot, Passengers, Programming, Plane

PMP	
120.55	ATIS
125.4	Tower/CTAF
121.90	Ground Control

### PRE-TAXI

Chocks ..... Removed  
 Seats/Belts ..... Secured/Secured  
 Controls ..... Checked  
 Fuel/Selector (min Fuel 1/4 Tank) ..... Checked/Both  
 Trim ..... Takeoff  
 Throttle ..... Set  
 Carb Heat ..... In  
 Mixture ..... Rich  
 \*Nav/Beacon ..... On  
 Master Switch ..... On  
 Magnetos ..... Both  
 Brakes ..... Set  
 Prime (see OM for Cold Start) ..... As Req'd  
 Prop ..... Clear  
 Starter ..... Engage  
 Throttle (< 1000 RPM for 3 Min) ..... Set  
 Oil Pressure (Min 10psi w/in 30 secs) ..... Checked  
 Magnetos Ground ..... Checked  
 Alternator (Check positive amps) ..... On  
 Txpdr (No 1090ES TX considered) ..... Alt  
 Avionics ..... Set  
 Mixture (100LL) ..... Lean  
 Brakes ..... Checked

### BEFORE TAKEOFF

Brakes ..... Set  
 Fuel Selector ..... Both  
 Trim ..... Set  
 Controls ..... Checked  
 Flight Instruments (altimeter) ..... Checked  
 Suction ..... Checked  
 Mixture ..... Rich  
 Yoke ..... Full Aft  
 Throttle ..... 1600 RPM  
 Oil Temperature (Min 75/Max 225) ..... Checked  
 Oil Pressure (30-60) ..... Checked  
 Ammeter (Positive or Neutral) ..... Checked  
 CHT (Min 225/Max 525) ..... Checked  
 Mag Check (max 150rpm <> 75) ..... R/L Checked  
 Carb Heat ..... Checked/On  
 Mixture ..... Set  
 Throttle ..... Idle  
 NO 1090ES TX (txpdr) ..... Extinguished  
 EFB/\*Flight Plan ..... Set/Opened  
 Pre-TakeOff Briefing/5P's ..... Complete  
 Doors/Windows ..... Closed/Latched  
 Flaps (0/20 check performance) ..... Set  
 Carb Heat ..... Off

**CLIMB/CRUISE**  
 Airspeed ..... Checked  
 Climb Vx76-67 / Vy88-79 / Cruise IAS vs. Planned  
**Power** ..... Checked/Set  
 Climb: min: 2250/2450 max S.L. cruise  
**Engine Instruments** ..... Checked  
 Oil: Norm 30-60psi/150F+/Max 225F  
 EGT: Norm 700-725 Hottest Cylinder, CHT: 525 Max  
**Taxi/Landing Light** ..... As Req'd  
**Fuel/Mixture** (Lean for cruise) ..... Checked/Set

**DESCENT**  
 Fuel Selector ..... Both  
 Mixture ..... Set  
 Amp/Temps/Fuel ..... Checked  
 Avionics/Flight Instruments ..... Set  
 Seatbelts/Harnesses ..... Secured  
 Carb Heat ..... As Req'd  
 Approach Speed ..... Noted  
 Normal-Short/Soft ..... 75 MPH/70MPH  
 Wheel/3pt ..... 80-85MPH/75 MPH  
**Taxi/Landing Light** ..... On

**LANDING**  
 (G)as (Fuel Selector) ..... Checked/Set  
 (U)ndercarriage ..... Inflated  
 (M)ixture ..... Rich  
 (P)rop ..... Rpm Set  
 (F)laps ..... Set  
 (S)eatbelts/Switches ..... Set

**SHUTDOWN**  
 Flaps ..... Up  
 Taxi/Landing Light ..... Off  
 Carb Heat ..... Off  
 On Time ..... Noted  
 Radios/Txpdr ..... Off  
 Alternator ..... Off  
 Magnetos Ground ..... Checked  
 Mixture ..... Cut-Off  
 \*Nav ..... Off  
 Magnetos ..... Off  
 Master Switch ..... Off  
 Headsets ..... ANR off  
 Trim ..... Takeoff  
 Air Inlets ..... Closed  
 \*Flight Plan ..... Closed  
 Hobbs/Tach ..... Checked/Noted