

WORKMETHOD FOR ABNORMAL / EMERGENCY SITUATIONS

- 1/ State the facts..... "FACTS are ____"
- 2/ Perform boxed items (if any) by memorySTATE & DO MEMORY ITEMS
- 3/ State the short term plan "SHORT TERM PLAN is ____"
- 4/ Read boxed items (if any) as confirmation READ & CONFIRM
- 5/ Perform non-boxed items in read-and-do READ & DO NON-MEMORY ITEMS
- 6/ Perform the normal checklist (if applicable) NORMAL CHECKLIST
- 7/ State the long term plan "LONG TERM PLAN is ____"

ENGINE FAILURE DURING FLIGHT

Glide ESTABLISH
 Suitable landing field..... LOCATE

Conditions permitting, check for cause of power loss:

MagnetosON
 Fuel pump.....ON
 Fuel selector..... SWITCH TO TANK CONTAINING FUEL
 MixtureFULL RICH
 Carburetor heat.....ON
 Engine instrumentsCHECK

If these actions do not restore power, prepare for power-off landing.

Time permitting, communicate:

Transponder..... 7700
 Mayday call TRANSMIT TO ATC OR ON CTAF OR ON 121.5

Time permitting, secure airplane:

Air conditionerOFF, ANNUNCIATOR CHECK
 Battery master switchOFF
 MagnetosOFF
 ThrottleCLOSE
 MixtureIDLE CUT-OFF
 Fuel selector.....OFF
 Seat belts and harnesses LOCK

Altitude permitting:

Fly..... SFA POWER OFF PATTERN

Engine failure immediately after takeoff:

Land.....STRAIGHT AHEAD OR SLIGHTLY LEFT OR RIGHT

LOSS OF FUEL PRESSURE

Fuel pump.....ON
 Fuel selector..... CHECK ON TANK CONTAINING FUEL

LOSS OF OIL PRESSURE

LAND AS SOON AS POSSIBLE
 PREPARE FOR POWER OFF LANDING

HIGH OIL TEMPERATURE

LAND AT NEAREST SUITABLE AIRPORT
 PREPARE FOR POWER OFF LANDING

ENGINE FIRE DURING START

Starter CONTINUE CRANKING ENGINE

If engine starts:

Throttle 1500 RPM FOR A FEW MINUTES
 Engine..... SHUTDOWN

If engine fails to start:

Starter CONTINUE CRANKING ENGINE
 Throttle FULL OPEN
 MixtureIDLE CUT-OFF
 Fuel pump.....OFF
 Fuel selector.....OFF
 Fire extinguisherOBTAIN
 Battery master switchOFF
 Alternator.....OFF
 MagnetosOFF
 Fire..... Extinguish

FIRE IN FLIGHT

Source of fire.....	DETERMINE
Electrical fire – Smoke in aircraft cabin	
LAND AS SOON AS POSSIBLE	
Battery master switch	OFF
Alternator.....	OFF
Overhead cabin vents	OPEN
Cabin and windshield air	OFF
Engine Fire	
LAND AS SOON AS POSSIBLE	
Fuel selector.....	OFF
Throttle	CLOSE
Mixture	IDLE CUT-OFF
Fuel pump.....	OFF
Cabin and windshield air	OFF
PREPARE FOR POWER OFF LANDING	

ELECTRICAL FAILURES

Anytime bus voltage is below 25V DC, the low bus voltage annunciator will be illuminated.

Alternator inop annunciator illuminated:

Alternator output

If alternator output = 0:

Alternator.....OFF

Electrical loads

Alternator circuit breaker

Alternator.....ON

If these actions do not restore electrical power:

Alternator.....OFF

**LAND AT THE NEAREST SUITABLE AIRPORT
ANTICIPATE COMPLETE ELECTRICAL FAILURE**

ELECTRICAL OVERLOAD

Alternator over 20A above known electrical load:

Alternator.....ON

Battery master switch

If alternator loads are reduced:

Electrical loads

If alternator loads are NOT reduced:

Alternator.....OFF

Battery master switch

**LAND AT THE NEAREST SUITABLE AIRPORT
ANTICIPATE COMPLETE ELECTRICAL FAILURE**

DOOR OPEN IN FLIGHT

Speed..... 85 KIAS

Overhead cabin vents

Window

Upper latch..... LATCH

Armrest..... PULL

Side latch

Upper latch..... LATCH

CARBURETOR ICING

Carburetor heat.....ON

Mixture

ENGINE ROUGHNESS

Carburetor heatON

If engine is still running rough after 1 minute:

Carburetor heat FULL COLD

Mixture ADJUST FOR MAXIMUM SMOOTHNESS

Fuel pumpON

Fuel selector SWITCH TANKS

Engine instrumentsCHECK

Magnetos CHECK LEFT ONLY - THEN RIGHT ONLY

If operation is satisfactory on 1 magneto, continue on that magneto at reduced power and full rich mixture to closest suitable airport

PREPARE FOR POWER OFF LANDING

LOSS OF RADIO COMMUNICATIONS

Intercom CHECK VOLUME & SQUELCH

COM radio CHECK VOLUME & SQUELCH

Headset CHECK VOLUME (IF APPLICABLE)

Audio panel CHECK FOR PROPER SELECTIONS

Circuit breakers IN

Headset connectorsCHECK PROPERLY PLUGGED IN

PTT switch CHECK CONDITION

Frequency RECYCLE

COM radio SWITCH OFF and ON AGAIN

Other headset (if available) TRY

Hand mike TRY

Other ATC frequency TRY

Alternator outputCHECK FOR ALTERNATOR FAILURE

If these actions do not restore radio communications, apply LOSS OF COMMUNICATIONS PROCEDURE