

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 pumpON
 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 pumpOFF
 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 switchOFF
 Alternator.....OFF
 Overhead cabin vents OPEN
 Cabin and windshield airOFF

Engine Fire
LAND AS SOON AS POSSIBLE

Fuel selector.....OFF
 ThrottleCLOSE
 MixtureIDLE CUT-OFF
 Fuel pump.....OFF
 Cabin and windshield airOFF

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 outputCHECK

If alternator output = 0:

Alternator.....OFF
 Electrical loads REDUCE TO MINIMUM
 Alternator circuit breakerRESET or PULL-RESET
 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 switchOFF

If alternator loads are reduced:

Electrical loads REDUCE TO MINIMUM

If alternator loads are NOT reduced:

Alternator.....OFF
 Battery master switchON

LAND AT THE NEAREST SUITABLE AIRPORT
ANTICIPATE COMPLETE ELECTRICAL FAILURE

DOOR OPEN IN FLIGHT

Speed 85 KIAS
 Overhead cabin ventsCLOSE
 Window OPEN
 Upper latch..... LATCH
 Armrest PULL
 Side latch LATCH
 Upper latch..... LATCH

CARBURETOR ICING

Carburetor heat.....ON
 Mixture ADJUST FOR MAXIMUM SMOOTHNESS

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