

# SECTION 3

## EMERGENCY PROCEDURES

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### **3.1 - GENERAL**

The recommended procedures for different failures or emergency situations are provided in this Section.

Emergency procedures associated with optional or particular equipment which require pilot's operating handbook supplements are provided in Section 9 "Supplements".

Pilot must know procedures given in this section and be prepared to take appropriate action should an emergency arise.

Some emergency procedures are a part of pilot basic training. Although these emergencies are discussed here, this information is not intended to replace such training, but only to provide a source of reference and review. This information also provides failure procedures which are not the same for all airplanes.

It is important for the pilot to be familiar with standard emergency procedures to be at the optimum efficacy if necessary.

***Alarm system recall***

Main failure or state modification of the different systems are provided by an advisory panel.

This panel includes **red** warning lights indicating a failure which requires an immediate action from the pilot, and **amber** warning lights indicating failures or discrepancies which require an action as soon as practical.

Red or amber failure warning are coupled with the lighting of

- a flashing red indicator



or - a flashing amber indicator



Both indicators are located on the upper part of the L.H. instrument panel. When either one lights up, press it once to reactivate, it will go out and is ready to signal in the event of another failure. On the warning light central panel, the corresponding failure warning light remains ON as long as the failed condition exists.

## 3.2 - REJECTED TAKEOFF PROCEDURE

*Following an engine failure, refer to Chapter 3.3, Paragraph "ENGINE FAILURE AT TAKEOFF BEFORE ROTATION".*

*For any other reason :*

- 1 - Power lever ..... **IDLE**
- 2 - Reverse ..... **AS REQUIRED**
- 3 - Braking ..... **AS REQUIRED**

*If the airplane cannot be stopped on the remaining runway :*

- 4 - Power lever ..... **IDLE**
- 5 - Condition lever ..... **CUT OFF**
- 6 - Tank selector ..... **OFF**
- 7 - CRASH lever ..... **PULL DOWN**

*Evacuate if necessary, after the airplane has come to a stop.*

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### 3.3 - ENGINE FAILURES

#### **ENGINE FAILURE AT TAKEOFF BEFORE ROTATION**

- 1 - Power lever ..... **IDLE**
- 2 - Braking ..... **AS REQUIRED**
- If the airplane cannot be stopped on the remaining runway :*
- 3 - Condition lever ..... **CUT OFF**
- 4 - Tank selector ..... **OFF**
- 5 - CRASH lever ..... **PULL DOWN**



## 3.3 - ENGINE FAILURES

**ENGINE FAILURE DURING FLIGHT**

- 1 - Power lever ..... **IDLE**
- 2 - Propeller governor lever ..... **FEATHER**
- 3 - Condition lever ..... **CUT OFF**
- 4 - Remaining fuel ..... **CHECK**
- 5 - Tank selector ..... **SWITCH TANKS**
- 6 - "AUX BP" switch  
and fuel pressure ..... **CHECK / CORRECT**
- 7 - Air start in flight (Refer to Chapter 3.4)
- 8 - In case of high altitude (above 12000 ft), undertake an  
**EMERGENCY DESCENT** (Refer to Chapter 3.6)
- 9 - In case of failure, perform a **FORCED LANDING** (Refer to  
Chapter 3.7)

3.3 - ENGINE FAILURES

**OIL PRESSURE DROP**

RED WARNING LIGHT **OIL PRESS** ON

- 1 - Oil pressure indicator ..... **CHECK**
- 2 - If the indicated pressure is correct ..... **SHORTEN THE FLIGHT / MONITOR**
- 3 - If indicated pressure is below the green arc ..... **CONFIRMED FAILURE**

Due to the oil pressure drop, the propeller blade angle may go towards high pitch and therefore lead to a Np propeller rotation speed decrease.

**CAUTION**

**PREPARE FOR AN ENGINE STOP, SHORTLY ; REDUCE POWER TO THE MINIMUM NECESSARY, LAND AS SOON AS PRACTICAL**

*If engine drops itself :*

- 4 - Power lever ..... **IDLE**
- 5 - Propeller governor lever ..... **FEATHER**
- 6 - Condition lever ..... **CUT OFF**

Perform a **FORCED LANDING** (Refer to Chapter 3.7)

### 3.3 - ENGINE FAILURES

## ENGINE REGULATION DISCREPANCY, POWER LOSS, POWER LEVER CONTROL LOSS

- 1 - If circumstances allow :  
Power lever ..... **IDLE**
- 2 - Confirm engine still running
- 3 - Tank selector ..... **SWITCH TANKS**
- 4 - Check that no parameter exceeds allowed values
- 5 - "MAN OVRD" control ..... **ACTUATED**  
**progressively forward**  
**(Adjust power necessary to continue flight)**

If the available power is weak, extend the landing gear only on a glide path in final approach and extend full flaps only in short final. Do not perform a go-around.

### CAUTION

**IN "MANUAL OVERRIDE" ENGINE IS NEITHER PROTECTED AGAINST SLAM ACCELERATIONS, NOR AGAINST MAXIMUM SPEED OVERSHOOTING. AVOID RAPID CONTROL MOVEMENTS AND MANAGE ENGINE PARAMETERS**

### CAUTION

**IN SOME CASES, WHEN "MANUAL OVERRIDE" CONTROL IS USED, THE AVAILABLE POWER MAY NOT BE SUFFICIENT TO ENSURE A GO-AROUND IN LANDING CONFIGURATION, IN PARTICULAR IF THE WEIGHT IS NEAR THE MAXIMUM WEIGHT**

- 6 - Continue flight, **SHORTEN** if possible



3.3 - ENGINE FAILURES

ENGINE REGULATION DISCREPANCY,  
POWER LOSS,  
POWER LEVER CONTROL LOSS (Cont'd)

7 - Perform a normal landing WITHOUT REVERSE

8 - Braking ..... **AS REQUIRED**

*If minimum power obtained is excessive :*

1 - Reduce airspeed by setting airplane in nose-up attitude at  
IAS < 178 KIAS

2 - "INERT SEP" switch ..... **ON**

3 - If ITT > 800°C :  
"INERT SEP" switch ..... **OFF**

4 - Landing gear control ..... **DN**

5 - Flaps ..... **TO**

6 - Establish a long final or an ILS approach respecting  
IAS < 178 KIAS

7 - When runway is assured :  
Condition lever ..... **CUT OFF**

8 - Propeller governor lever ..... **FEATHER**  
**if necessary to extend trajectory**

9 - Flaps ..... **LDG as required**  
**(at IAS < 122 KIAS)**

10 - Land normally WITHOUT REVERSE

11 - Braking ..... **AS REQUIRED**

## 3.3 - ENGINE FAILURES

**GOVERNOR REGULATION CONTROL NOT OPERATING**

May indicate a rupture of the linkage of the governor control.

- 1 - Continue the flight.
- 2 - If  $N_p < 2000$  RPM, do not perform a go-around and do not use the reverse.

In that case, the go-around performance and the reverse efficiency are no longer warranted. The airplane must be repaired mandatorily before any other flight.

### 3.3 - ENGINE FAILURES

#### **EXCESSIVE PROPELLER ROTATION SPEED**

Indicates :

- a propeller governor failure

In that case, the propeller overspeed limiter will limit initially the rotation speed to 2100 RPM approximately.

- or a propeller governor and overspeed limiter failure

In that case, only the torque limiter operates to limit the power. However, the pilot intervention is necessary to maintain  $N_p \leq 2000$  RPM. The propeller reducer is designed for a max.  $N_p$  of 2200 RPM.

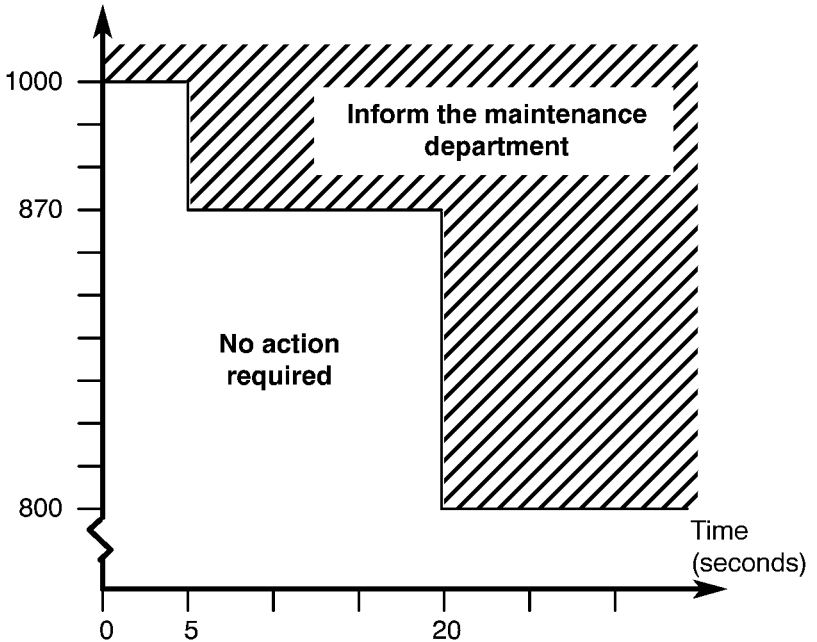
- 1 - Reduce the power and the aircraft speed to avoid propeller rotation speeds higher than 2000 RPM.
- 2 - Land as soon as possible.
- 3 - Do not perform a go-around.

*A go-around would damage the propeller reducer.*



## 3.3 - ENGINE FAILURES

<b>RED WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px;">ITT</span> <b>ON</b>
Indicates that ITT exceeds 800°C
<b><i>During an engine start</i></b>
Intertubine temperature °C



TEMPERATURE LIMITS DURING START

*If the above diagram limits are exceeded :*

- 1 - ITT indicator ..... **CHECK**
- 2 - Stop the starting procedure.



### 3.3 - ENGINE FAILURES

RED WARNING LIGHT "ITT" ON (Cont'd)

- 3 - Record the engine parameters read in case of overtemperature, as well as ground conditions.
- 4 - Inform maintenance department.

***During flight***

- 1 - ITT indicator ..... **CHECK**
- 2 - Reduce power and correct display according to "Engine Operation" tables - Chapter 5.7

*If ITT remains > 800°C :*

- 3 - Reduce power to maintain ITT < 800°C.
- 4 - Shorten the flight.
- 5 - Record the airplane and engine parameters read in case of overtemperature.
- 6 - Inform maintenance department at the end of the flight.

## 3.3 - ENGINE FAILURES

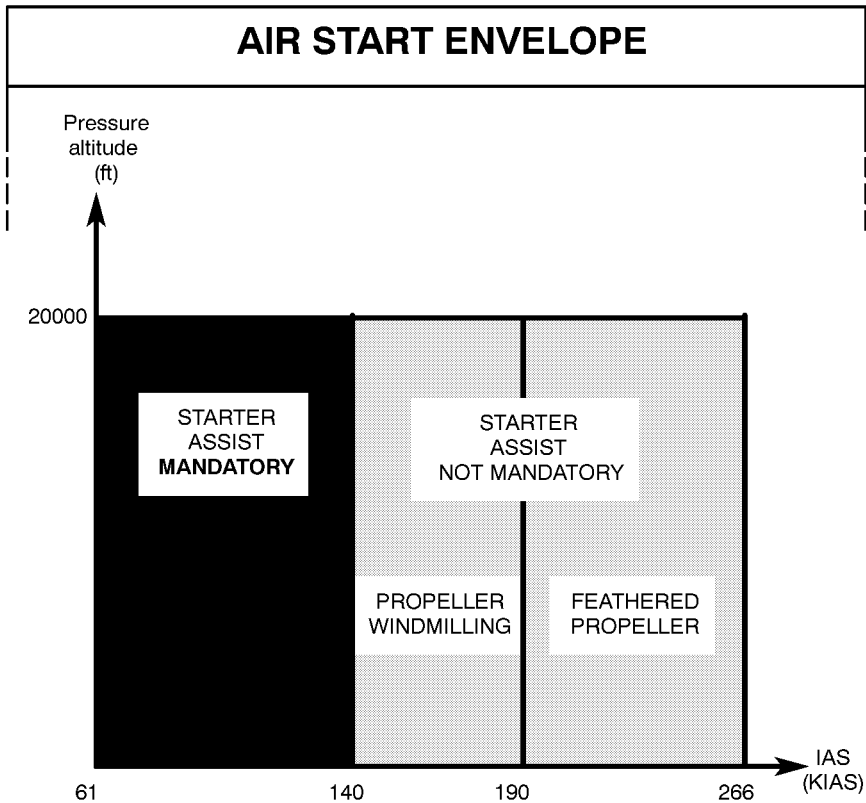
**ENGINE DOES NOT STOP ON GROUND**

If the engine does not stop when the condition lever is set to CUT OFF, proceed as follows :

- |   |             |
|---|-------------|
| 1 - "AP / TRIMS MASTER" switch .....                  | <b>OFF</b>  |
| 2 - "RADIO MASTER" switch .....                       | <b>OFF</b>  |
| 3 - "INT. LIGHTS" panel<br>All switches .....         | <b>OFF</b>  |
| 4 - "EXT. LIGHTS" panel<br>All switches .....         | <b>OFF</b>  |
| 5 - "ECS" panel<br>All switches .....                 | <b>OFF</b>  |
| 6 - Tank selector .....                               | <b>OFF</b>  |
| Wait for engine stop due to lack of fuel in the pipes |             |
| 7 - "GENERATOR" selector .....                        | <b>MAIN</b> |
| 8 - "SOURCE" selector .....                           | <b>OFF</b>  |
| 9 - Inform the maintenance department                 |             |

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## 3.4 - AIR START



Air start may be attempted at all speeds and all altitudes. However, above 20000 ft or with  $N_g < 13\%$ , ITT tends to increase during start and prudence is recommended.

Figure 3.4.1 - AIR START ENVELOPE

3.4 - AIR START

**AIR START WITH STARTER**

**CAUTION**

**THE STARTER CANNOT OPERATE IF THE "GENERATOR" SELECTOR IS ON "ST-BY"**

**CAUTION**

**IGNITION IS NOT AVAILABLE IF THE "ESS BUS TIE" SWITCH IS KEPT "EMER"**

1 - "BLEED" switch ..... **OFF**

**CAUTION**

**"BLEED" SWITCH ON MAY CAUSE OVERTEMPERATURE OR ABNORMAL ACCELERATION**

- 2 - "AIR COND" switch ..... **OFF**
- 3 - Air start envelope ..... **CHECKED**
- 4 - Electric consumption ..... **REDUCE**
- 5 - Power lever ..... **IDLE**
- 6 - Propeller governor lever ..... **FEATHER**
- 7 - Condition lever ..... **CUT OFF**
- 8 - Tank selector ..... **CHECK**
- 9 - "AUX BP" fuel switch ..... **ON**
- 10 - "IGNITION" switch ..... **AUTO or ON**
- 11 - "STARTER" switch ..... **ON**



## 3.4 - AIR START

AIR START WITH STARTER (Cont'd)

- 12 - Condition lever ..... **LO / IDLE**  
**when Ng ~ 13 %**
- 13 - ITT and Ng ..... **MONITOR**
- 14 - When Ng ~ 50 % steady ..... **STARTER OFF**  
**IGNITION AUTO or ON**
- 15 - Condition lever ..... **HI / IDLE**
- 16 - Propeller governor lever ..... **MAX. RPM**
- 17 - Power lever ..... **AS REQUIRED**
- 18 - Electrical equipment ..... **AS REQUIRED**
- 19 - "AUX BP" fuel switch ..... **AUTO**
- 20 - "BLEED" switch ..... **AS REQUIRED**

**CAUTION**  
**WITH THE EFS 40, DISPLAYS ARE MOMENTARILY LOST**  
**DURING STARTER OPERATION**

**CAUTION**  
**WITH ALTIMETERS AM250 (if installed), ALTITUDE**  
**INFORMATION IS MOMENTARILY CUT OFF DURING**  
**STARTER OPERATION**

3.4 - AIR START

**AIR START WITHOUT STARTER  
(STARTER ASSIST NOT MANDATORY)**

**CAUTION**

**THE STARTER CANNOT OPERATE IF THE "GENERATOR"  
SELECTOR IS ON "ST-BY"**

**CAUTION**

**IGNITION IS NOT AVAILABLE IF THE "ESS BUS TIE" SWITCH IS  
KEPT "EMER"**

1 - "BLEED" switch ..... OFF

**CAUTION**

**"BLEED" SWITCH ON MAY CAUSE OVERTEMPERATURE OR  
ABNORMAL ACCELERATION**

2 - "AIR COND" switch ..... OFF

3 - Air start envelope ..... CHECKED  
Speed with propeller windmilling      **140 < IAS < 190 KIAS**  
with feathered propeller                      **IAS > 190 KIAS**

4 - Electrical consumption ..... REDUCE

5 - Power lever ..... IDLE

6 - Condition lever ..... CUT OFF

7 - Tank selector ..... CHECK

8 - "AUX BP" fuel switch ..... ON





## 3.4 - AIR START

AIR START WITHOUT STARTER  
(STARTER ASSIST NOT MANDATORY) (Cont'd)

- 9 - "IGNITION" switch ..... **ON**
- 10 - Condition lever ..... **LO / IDLE**
- 11 - ITT and Ng ..... **MONITOR**
- 12 - When Ng ~ 50 % steady ..... **IGNITION AUTO or ON**
- 13 - Condition lever ..... **HI / IDLE**
- 14 - Propeller governor lever ..... **MAX. RPM**
- 15 - Power lever ..... **AS REQUIRED**
- 16 - Electrical equipment ..... **AS REQUIRED**
- 17 - "AUX BP" fuel selector ..... **AUTO**
- 18 - "BLEED" switch ..... **AS REQUIRED**

**CAUTION**

**WITH THE EFS 40, DISPLAYS ARE MOMENTARILY LOST  
DURING STARTER OPERATION**

**CAUTION**

**WITH ALTIMETERS AM250 (if installed), ALTITUDE  
INFORMATION IS MOMENTARILY CUT OFF DURING  
STARTER OPERATION**

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## 3.5 - FIRE AND SMOKE

### ENGINE FIRE ON GROUND

Symptoms : ITT increasing, red warning light ITT on, smoke, ...

- 1 - Power lever ..... **IDLE**
- 2 - Condition lever ..... **CUT OFF**
- 3 - "BLEED" switch ..... **OFF**
- 4 - "AIR COND" switch ..... **OFF**
- 5 - Brakes ..... **AS REQUIRED**
- 6 - Tank selector ..... **OFF**
- 7 - Warn for ground assistance, if necessary
- 8 - CRASH lever ..... **PULL DOWN**
- 9 - EVACUATE as soon as possible

### CABIN FIRE ON GROUND

- 1 - Power lever ..... **IDLE**
- 2 - Condition lever ..... **CUT OFF**
- 3 - Brakes ..... **AS REQUIRED**
- 4 - Warn for ground assistance, if necessary
- 5 - CRASH lever ..... **PULL DOWN**
- 6 - Cabin extinguisher ..... **AS REQUIRED**
- 7 - EVACUATE as soon as possible

3.5 - FIRE AND SMOKE

**ENGINE FIRE IN FLIGHT**

Symptoms : ITT increasing, red warning light **ITT** on, smoke, ...

- 1 - Power lever ..... **IDLE**
- 2 - Propeller governor lever ..... **FEATHER**
- 3 - Condition lever ..... **CUT OFF**
- 4 - "AUX BP" fuel switch ..... **OFF**
- 5 - Tank selector ..... **OFF**
- 6 - "BLEED" switch ..... **OFF**
- 7 - "AIR COND" switch ..... **OFF**
- 8 - In case of high altitude (above 12000 ft), undertake an EMERGENCY DESCENT (Refer to Chapter 3.6)
- 9 - Perform a FORCED LANDING (ENGINE CUT OFF) (Refer to Chapter 3.7)

**WARNING**

**AFTER ENGINE FIRE, DO NOT ATTEMPT AN AIR START**

## 3.5 - FIRE AND SMOKE

### CABIN ELECTRICAL FIRE OR SMOKE DURING FLIGHT

*If the origin is known :*

- 1 - Oxygen ..... **USE AS REQUIRED**  
(pilot and passengers)
- 2 - Defective equipment ..... **OFF**  
*Descend quickly below 12000 ft*
- 3 - Using the on board extinguisher, **EXTINGUISH** fire if necessary
- 4 - Smoke elimination  
(if necessary) ..... **UNDERTAKE PROCEDURE**  
(Refer to this chapter)
- 5 - **LAND** as soon as possible

*If the origin is unknown :*

- 1 - Oxygen ..... **USE AS REQUIRED**  
(pilot and passengers)
- 2 - "AIR COND" switch ..... **OFF**
- 3 - Non essential equipment ..... **OFF**
- 4 - Smoke elimination  
(if necessary) ..... **UNDERTAKE PROCEDURE**  
(Refer to this chapter)

*If smoke or fire stops :*

*LAND as soon as possible.*



3.5 - FIRE AND SMOKE

CABIN ELECTRICAL FIRE OR SMOKE  
DURING FLIGHT (Cont'd)

*If smoke or fire persists :*

- 5 - "SOURCE" selector ..... **OFF**
- 6 - "GENERATOR" selector ..... **OFF**
- 7 - Fire ..... **EXTINGUISH if necessary with the  
on board extinguisher**
- 8 - All "pull-off" type circuit-breakers ..... **PULL**
- 9 - All electrical equipment ..... **CUT OFF**
- 10 - "SOURCE" selector ..... **BAT**
- 11 - "GENERATOR" selector ..... **MAIN**
- 12 - Necessary circuit-breakers ..... **ENGAGE  
one after the other checking for  
possible fire or smoke**
- 13 - Necessary electrical equipment ..... **ON  
one after the other checking for  
possible fire or smoke**
- 14 - Defective equipment ..... **OFF**
- 15 - Not affected essential equipment ..... **ON as required**
- 16 - LAND as soon as possible

## 3.5 - FIRE AND SMOKE

**SMOKE ELIMINATION**

- 1 - Smoke origin ..... **IDENTIFY**
- 2 - Oxygen ..... **USE AS REQUIRED**  
**(pilot and passengers)**
- 3 - If smoke persists, undertake an EMERGENCY DESCENT (Refer to Chapter 3.6)
- 4 - "BLEED" switch ..... **OFF**
- 5 - "AIR COND" switch ..... **OFF**
- 6 - "DUMP" control ..... **ACTUATE**  
Wait until the differential pressure drops
- 7 - "RAM AIR" control knob ..... **PULL**  
If smoke increases ..... **PUSH**
- 8 - LAND as soon as possible

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## 3.6 - EMERGENCY DESCENTS

### PROCEDURE IN SMOOTH AIR

- |                                    |                                  |
|------------------------------------|----------------------------------|
| 1 - Power lever .....              | <b>IDLE</b>                      |
| 2 - Oxygen .....                   | <b>If necessary</b>              |
| 3 - Propeller governor lever ..... | <b>MAX. RPM</b>                  |
| 4 - Flaps .....                    | <b>UP</b>                        |
| 5 - Landing gear .....             | <b>UP</b>                        |
| 6 - Speed .....                    | <b>V<sub>MO</sub> = 266 KIAS</b> |

### PROCEDURE IN ROUGH AIR OR IN CASE OF STRUCTURE PROBLEM

- |                                    |                       |
|------------------------------------|-----------------------|
| 1 - Power lever .....              | <b>IDLE</b>           |
| 2 - Oxygen .....                   | <b>If necessary</b>   |
| 3 - Propeller governor lever ..... | <b>MAX. RPM</b>       |
| 4 - Reduce speed .....             | <b>IAS ≤ 178 KIAS</b> |
| 5 - Landing gear .....             | <b>DN</b>             |
| 6 - Flaps .....                    | <b>UP</b>             |
| 7 - Keep .....                     | <b>IAS ≤ 178 KIAS</b> |

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### 3.7 - EMERGENCY LANDINGS

<b>GLIDE DISTANCE AND OPTIMUM SPEED</b>	
<b>Configuration</b>	
1 - Flaps .....	<b>UP</b>
2 - Landing gear .....	<b>UP</b>
3 - Propeller governor lever .....	<b>FEATHER</b>
4 - Optimum speed (L / D ratio = 10) .....	<b>IAS = 110 KIAS</b>

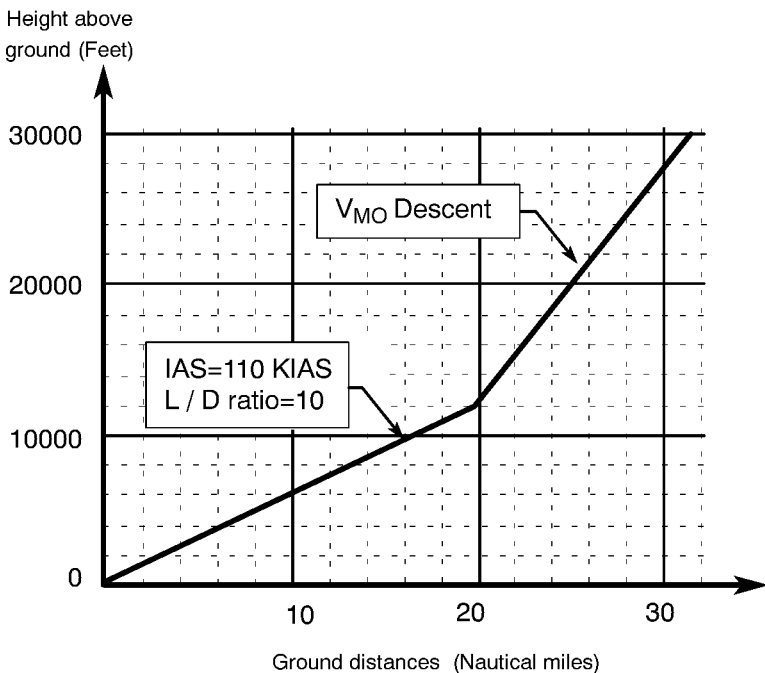


Figure 3.7.1 - MAXIMUM GLIDE SLOPE

3.7 - EMERGENCY LANDINGS

**FORCED LANDING (ENGINE CUT OFF)**

- 1 - Power lever ..... **IDLE**
- 2 - Propeller governor lever ..... **FEATHER**
- 3 - Condition lever ..... **CUT OFF**
- 4 - Tank selector ..... **OFF**
- 5 - "AUX BP" fuel switch ..... **OFF**
- 6 - "BLEED" switch ..... **OFF**
- 7 - "AIR COND" switch ..... **OFF**
- 8 - "DUMP" switch ..... **ACTUATED**
- 9 - Glide speed ..... **110 KIAS maintained until favourable ground approach**

*If ground allows it :*

- 10 - Landing gear ..... **DN**

*If ground does not allow it :*

- 11 - Keep landing gear ..... **UP**
- 12 - When chosen ground is assured ..... **FLAPS LDG**
- 13 - CRASH lever ..... **PULL DOWN**
- 14 - Final approach ..... **IAS = 80 KIAS**
- 15 - Land flaring out
- 16 - EVACUATE after stop

## 3.7 - EMERGENCY LANDINGS

### **TIRE BLOWOUT DURING LANDING**

- 1 - Control direction with brakes and nose wheel steering
- 2 - REVERSE ..... **AS REQUIRED**
- 3 - Stop airplane to minimize damages
- 4 - Perform engine SHUT-DOWN procedure (Refer to Chapter 4.3)

3.7 - EMERGENCY LANDINGS

**LANDING WITH UNLOCKED MAIN  
LANDING GEAR**

- 1 - Ask control tower or another airplane to visually check landing gear position

**CAUTION**

**IF ONE MAIN LANDING GEAR IS NOT DOWN, IT IS  
BETTER TO LAND WITH GEAR UP.**

*If defective gear is down but unlocked :*

- 2 - "BLEED" switch ..... **OFF**
- 3 - "DUMP" switch ..... **ACTUATED**
- 4 - Maintain tank selector on defective landing gear side to lighten corresponding wing [maximum fuel imbalance 25 us gal (95 litres)]
- 5 - Choose a runway with headwind or crosswind blowing from defective gear side
- 6 - Align the airplane to land on the runway edge opposite to the defective landing gear
- 7 - Land and set nose gear immediately on ground to assure lateral control
- 8 - Use full aileron during roll-out to lift the wing with the defective landing gear
- 9 - Preferably do not use reverse
- 10 - Complete taxiing with a slight turn toward defective landing gear



## 3.7 - EMERGENCY LANDINGS

### LANDING WITH UNLOCKED MAIN LANDING GEAR (Cont'd)

- 11 - Condition lever ..... **CUT OFF**
- 12 - Engine stop procedure ..... **COMPLETE**
- 13 - EVACUATE

*If landing gear drags during landing :*

- 14 - Condition lever ..... **CUT OFF**
- 15 - CRASH lever ..... **PULL DOWN**
- 16 - Tank selector ..... **OFF**
- 17 - EVACUATE after airplane comes to a stop

3.7 - EMERGENCY LANDINGS

**LANDING WITH DEFECTIVE NOSE LANDING GEAR (DOWN UNLOCKED OR NOT DOWN)**

- 1 - Transfer passengers to the rear, if necessary
- 2 - Approach ..... **Flaps TO IAS = 90 KIAS**
- 3 - Land with nose-up attitude, keep nose high
- 4 - Condition lever ..... **CUT OFF**
- 5 - Propeller governor lever ..... **FEATHER**
- 6 - Touch-down slowly with nose wheel and keep elevator at nose-up stop
- 7 - Moderate braking
- 8 - CRASH lever ..... **PULL DOWN**
- 9 - EVACUATE after airplane comes to a stop



## 3.7 - EMERGENCY LANDINGS

**LANDING WITH GEAR UP**

- 1 - Final approach ..... **Standard  
(Flaps LDG, IAS = 80 KIAS)**
- 2 - "BLEED" switch ..... **OFF**
- 3 - "DUMP" switch ..... **ACTUATED**

*When runway is assured :*

- 4 - Power lever ..... **IDLE**
- 5 - Propeller governor lever ..... **FEATHER**
- 6 - Condition lever ..... **CUT OFF**
- 7 - Tank selector ..... **OFF**
- 8 - Flare out
- 9 - After touch-down, CRASH lever ..... **PULL DOWN**
- 10 - EVACUATE after airplane comes to a stop

3.7 - EMERGENCY LANDINGS

**LANDING WITHOUT ELEVATOR CONTROL**

- 1 - Configuration ..... **LANDING GEAR DN - FLAPS LDG**
- 2 - Airspeed ..... **Maintain IAS = 95 KIAS**
- 3 - Power as necessary to maintain airspeed according to an easy approach slope  $\approx 300$  ft / min
- 4 - Adjust elevator by using manual pitch trim wheel
- 5 - When ground approaches, decrease slope progressively
- 6 - Reduce power progressively

**LANDING WITHOUT FLAPS**

Proceed as for a normal landing, maintaining approach airspeed IAS = 100 KIAS  
Provide for a landing distance increased by about 60 %

## 3.7 - EMERGENCY LANDINGS

**DITCHING**

- 1 - Landing gear ..... **UP**  
*In heavy swell with light wind, land parallel to the swell (rollers).*  
*In heavy wind, land facing wind.*
- 2 - Flaps ..... **LDG**
- 3 - Maintain a descent rate as low as possible when approaching the water
- 4 - Airspeed ..... **IAS = 80 KIAS**
- 5 - "BLEED" switch ..... **OFF**
- 6 - "DUMP" switch ..... **ACTUATED**
- 7 - CRASH lever ..... **PULL DOWN**
- 8 - Maintain attitude without rounding off until touch-down
- 9 - EVACUATE through EMERGENCY EXIT

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### 3.8 - FUEL SYSTEM

<b>RED WARNING LIGHT</b> <div style="display: inline-block; border: 1px solid black; padding: 2px 10px; margin: 0 10px;">FUEL PRESS</div> <b>ON</b>
---

Indicates a fuel pressure drop at "HP" engine pump inlet

- 1 - Remaining fuel ..... **CHECK**
- 2 - Tank selector ..... **SWITCH TANKS**
- 3 - Fuel pressure indication ..... **CHECK**
- 4 - "AUX BP" fuel switch ..... **AUTO CHECK / CORRECT**

*If alarm persists :*

- 5 - "AUX BP" fuel switch ..... **ON**  
Warning light 

AUX BP ON

 on ..... **CHECK**
- 6 - Fuel pressure ..... **CHECK**

*If pressure is normal again and warning light is off, mechanical pump has failed.*

- 7 - Maintain "AUX BP" fuel switch ..... **ON**

*If pressure remains at 0 (or drops to 0 after "AUX BP" pump operation)*

*and if warning 

FUEL PRESS

 remains on :*

- 8 - Tank switching ..... **PERFORM**

*If pressure is normal again, a supply problem may have occurred from the tank selected first (air vent, fuel icing, etc ...).*



### 3.8 - FUEL SYSTEM

RED WARNING LIGHT "FUEL PRESS" ON (Cont'd)

*If pressure remains at 0 and if warning FUEL PRESS remains on :*

- 9 - Selection of the fullest tank ..... **PERFORM**
- 10 - Avoid high power and rapid movements of the power lever.
- 11 - Descend to an altitude below 20000 ft.
- 12 - Land as soon as possible.

## 3.8 - FUEL SYSTEM

<b>AMBER WARNING LIGHT</b>	<b>AUX BP ON</b>	<b>ON</b>
(Indication is normal if "AUX BP" fuel switch is in ON position)		
<i>If "AUX BP" fuel switch is in AUTO position :</i>		
1 - Reset to .....		<b>ON</b>
2 - Then to .....		<b>AUTO</b>
<i>If</i>	<b>AUX BP ON</b>	<i>warning light goes out, continue flight normally</i>
<i>If</i>	<b>AUX BP ON</b>	<i>warning light remains on, mechanical booster pump has failed</i>
<i>In that case :</i>		
3 - "AUX BP" fuel switch .....		<b>ON</b>
4 - Shorten flight		

3.8 - FUEL SYSTEM

<b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px; margin-left: 20px;">FUEL L. LO</span> <b>OR</b> <span style="border: 1px solid black; padding: 2px 10px; margin-left: 20px;">FUEL R. LO</span> <b>ON</b>
<p>Indicates level drop in the corresponding tank</p> <p>1 - Corresponding gage ..... <b>CHECK</b></p> <p>2 - Check the other tank has been automatically selected</p> <p style="padding-left: 20px;"><i>If not :</i></p> <p>3 - "FUEL SEL" switch ..... <b>MAN</b></p> <p>4 - Select tanks manually as required</p>

<b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px; margin-left: 20px;">AUTO SEL</span> <b>ON</b>
<p>Indicates that the mode control automatic timer is off or has failed</p> <p>1 - "FUEL SEL" switch ..... <b>AUTO</b> <b>CHECK / CORRECT</b></p> <p>2 - If it is on AUTO : confirmed failure</p> <p>3 - "FUEL SEL" switch ..... <b>MAN</b></p> <p>4 - Select tanks manually as required</p>



### 3.9 - ELECTRICAL SYSTEM

<b>RED WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px;">BAT OVHT</span> <b>ON</b> (if Cadmium-Nickel battery installed)	
Indicates a battery overheat	
1 - "SOURCE" selector .....	<b>OFF</b>  <div style="display: flex; justify-content: space-between; align-items: center;"> <span>WARNING LIGHT</span> <span style="border: 1px solid black; padding: 2px 10px;">BAT OFF</span> <span><b>ON</b></span> </div>
2 - Monitor airplane mains voltage 3 - LAND AS SOON AS POSSIBLE	
<i>REMARK :</i> In case of subsequent electrical generator failure, the battery can be used again by selecting :	
4 - "GENERATOR" selector .....	<b>OFF</b>  <div style="display: flex; justify-content: space-between; align-items: center;"> <span>WARNING LIGHT</span> <span style="border: 1px solid black; padding: 2px 10px;">MAIN GEN</span> <span><b>ON</b></span> </div>
5 - "SOURCE" selector ..... <b>BAT</b>	
6 - Refer to paragraph "AMBER WARNING LIGHT "LO VOLT" ON functioning on "ST-BY GENERATOR" (after "MAIN GEN" failure)"	

<b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px;">BAT OFF</span> <b>ON</b>	
Indicates that "SOURCE" selector has been positioned on OFF or GPU, or that the battery is disconnected from the mains	
1 - If necessary .....	<b>CORRECT</b>
2 - If warning persists .....	<b>SHORTEN FLIGHT</b>
3 - Monitor airplane mains voltage	

3.9 - ELECTRICAL SYSTEM

<b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px; margin: 0 10px;"><b>MAIN GEN</b></span> <b>ON</b>
<p>Indicates that "GENERATOR" selector has been positioned to OFF or ST-BY, or main generator is cut off</p> <p>1 - If necessary ..... <b>CORRECT</b></p> <p>2 - If warning persists ..... <b>"MAIN GEN" switching confirmed</b></p> <p>3 - "MAIN GENERATOR RESET" push-button ..... <b>PUSH</b></p> <p style="padding-left: 20px;"><i>In case of failure :</i></p> <p>4 - Disconnect following ancillary electrical systems :</p> <ul style="list-style-type: none"><li>- "AIR COND" switch ..... <b>OFF</b></li><li>- "STROBE" switch ..... <b>OFF</b></li><li>- "NAV" switch ..... <b>OFF</b></li><li>- "CABIN" lights switch ..... <b>OFF</b></li><li>- "AP/TRIMS MASTER" switch ..... <b>AP OFF</b></li><li>- All equipment not essential ..... <b>OFF</b></li><li>- "L.WINDSHIELD" switch (above 15 000 ft) ..... <b>OFF</b></li><li>- "R.WINDSHIELD" switch (above 15 000 ft) ..... <b>OFF</b></li><li>- "BLEED" switch (before landing and on ground) ..... <b>OFF</b></li><li>- Only use landing lights briefly and if necessary.</li></ul> <p>5 - "GENERATOR" selector ..... <b>ST- BY</b> <b>(RESET if necessary)</b></p>

3.9 - ELECTRICAL SYSTEM

<p><b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px;">LO VOLT</span> <b>ON</b>  <b>normal functioning on "MAIN GEN"</b></p>	
1 - Voltmeter voltage .....	<b>CHECK</b>
2 - If voltage is < 26 Volts, monitor a possible drop or any indication of battery run-down	
<i>In that case :</i>	
3 - Disconnect following ancillary electrical systems :	
- "AIR COND" switch .....	<b>OFF</b>
- "STROBE" switch .....	<b>OFF</b>
- "NAV" switch .....	<b>OFF</b>
- "CABIN" lights switch .....	<b>OFF</b>
- "AP / TRIMS MASTER" switch .....	<b>AP OFF</b>
- All equipment not essential .....	<b>OFF</b>
- "L.WINDSHIELD" switch (above 15 000 ft) .....	<b>OFF</b>
- "R.WINDSHIELD" switch (above 15 000 ft) .....	<b>OFF</b>
- "BLEED" switch (before landing and on ground) .....	<b>OFF</b>
- Only use landing lights briefly and if necessary.	
4 - "GENERATOR" selector .....	<b>ST-BY</b> <b>(RESET if necessary)</b>
5 - Voltage and battery charge .....	<b>MONITOR</b>

3.9 - ELECTRICAL SYSTEM

**AMBER WARNING LIGHT LO VOLT ON**  
**functioning on "ST-BY GENERATOR"**  
**(after "MAIN GEN" failure)**

Amber warning lights MAIN GEN and LO VOLT ON  
with "GENERATOR" selector on "ST-BY"

- 1 - "GENERATOR" selector ..... **MAIN**
- 2 - "MAIN GENERATOR RESET" push-button ..... **PRESS**

**If successful :**

- 3 - Disconnect ancillary electrical systems not essential
  - 4 - Monitor voltmeter and ammeter
- Prepare to SHORTEN FLIGHT*

**If not successful :**

- 5 - "GENERATOR" selector ..... **ST-BY**
- 6 - "ST-BY GENERATOR RESET" push-button ..... **PRESS**

**If successful :**

- 7 - Disconnect ancillary electrical systems not essential
  - 8 - Monitor voltmeter and ammeter
- Prepare to SHORTEN FLIGHT*

**If not successful, both generators failure is confirmed. If possible, return to VMC conditions**



## 3.9 - ELECTRICAL SYSTEM

AMBER WARNING LIGHT "LO VOLT" ON functioning on "ST-BY GENERATOR" (after "MAIN GEN" failure) (Cont'd)

9 - "GENERATOR" selector ..... **OFF**

*If conditions allow : VMC and non icing conditions*

10 - Descend ..... **Altitude ≤ 12000 ft**

11 - "ESS BUS TIE" reverse switch ..... **Cover up  
EMER position**

*In this configuration, only both "ESS BUS" bars and "BUS BAT" bar are directly supplied by the battery*

Available ancillary systems - see Figure 3.9.1

12 - LAND as soon as possible

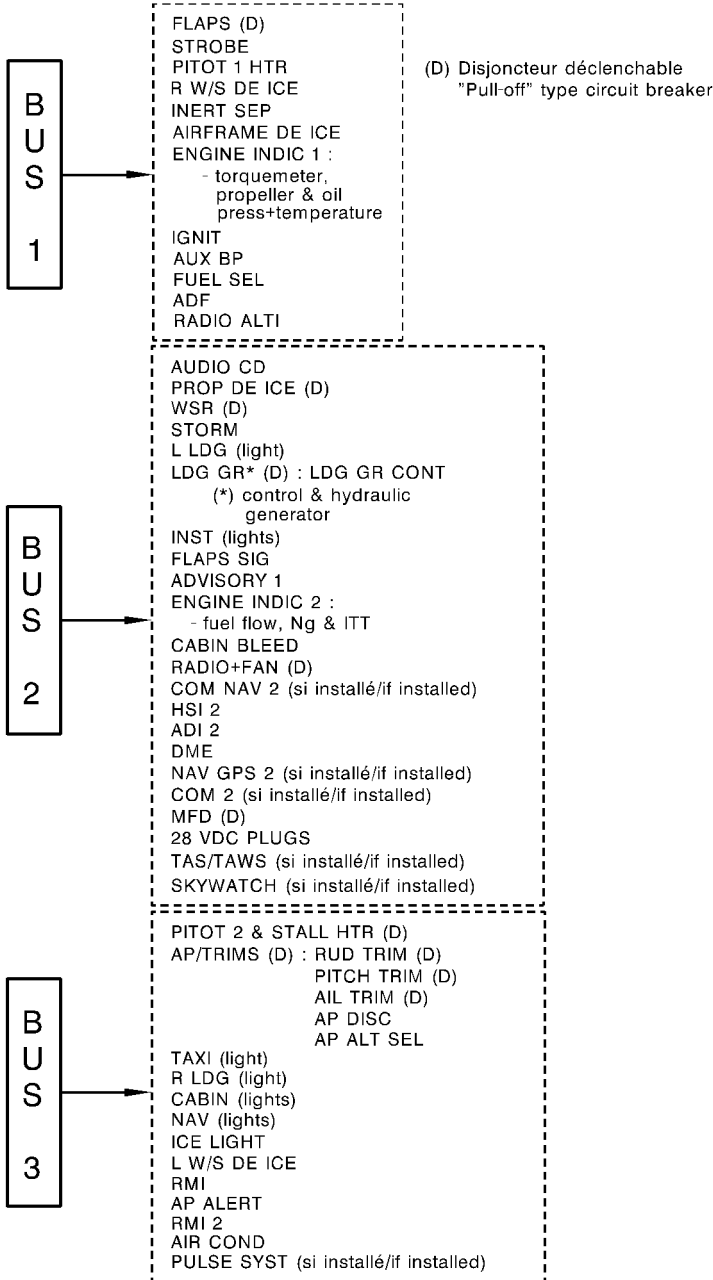
*If necessary, it is always possible to use other ancillary systems by selecting :*

- "ESS BUS TIE" reverse switch ..... **NORMAL**

*If flight conditions do not allow :*

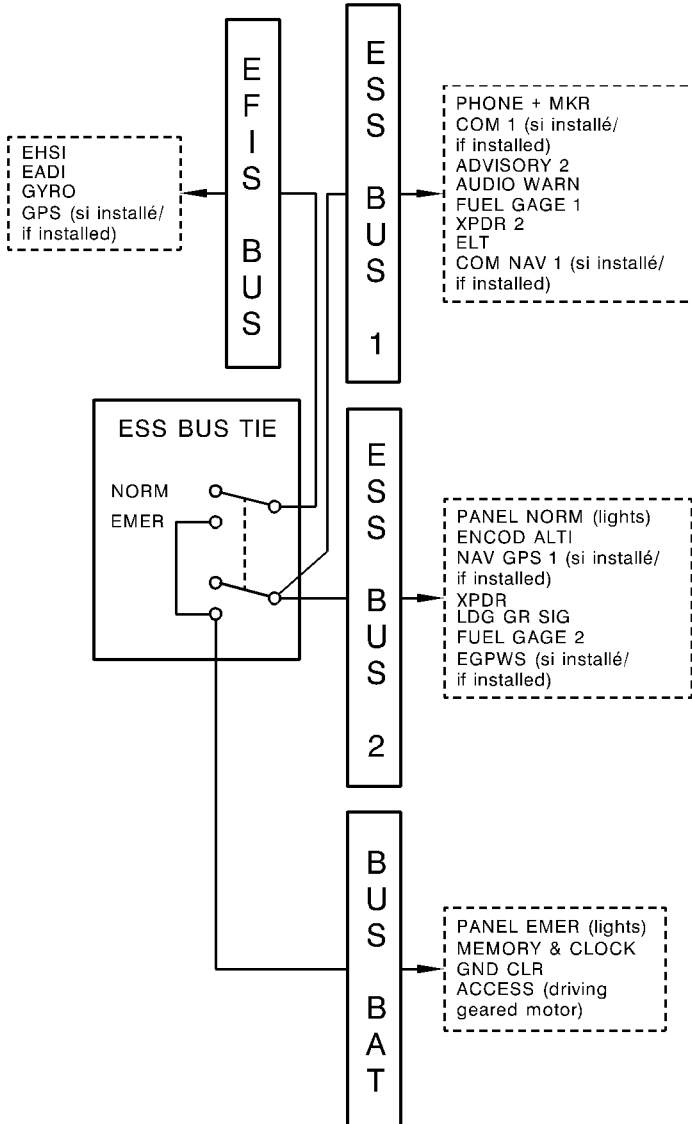
13 - Manually disconnect all ancillary systems which are not essential

14 - LAND as soon as possible



14246000AAA C/M/A8000

Figure 3.9.1 (1/2) - ELECTRICAL DISTRIBUTION OF BUS BARS



I4246000AAACMA8100

Figure 3.9.1 (2/2) - ELECTRICAL DISTRIBUTION OF BUS BARS

3.9 - ELECTRICAL SYSTEM

**"RADIO MASTER" SWITCH FAILURE**

*In case of "RADIO MASTER" switch malfunction, leading to the impossibility of energizing the radionavigation equipment :*

- 1 - "RADIO FAN" circuit breaker ..... **PULL**  
[Circuit breaker panel L.H. (or R.H., if "pilot" door installed) lower corner]

The radionavigation equipment are supplied again and the flight can continue.

However the equipment forced ventilation is no longer available. An excessive use of VHF COM transmitters may reduce their power, so that transmission range will be limited.



### 3.10 - PRESSURIZATION AND AIR CONDITIONING

<div style="display: flex; justify-content: space-between; align-items: center;"> <span style="font-size: 1.2em; font-weight: bold;">RED WARNING LIGHT</span> <div style="border: 2px solid black; padding: 5px; margin: 0 10px;">CAB PRESS</div> <span style="font-size: 1.2em; font-weight: bold;">ON</span> </div>
<p>1 - Pressurization indicator ..... <b>CHECK</b></p> <p><i>If <math>\Delta P &gt; 6.2</math> psi :</i></p> <p>2 - "BLEED" switch ..... <b>OFF</b></p> <p>3 - EMERGENCY DESCENT (Refer to Chapter 3.6)</p> <p><i>If cabin altitude &gt; 10000 ft :</i></p> <p>4 - Oxygen ..... <b>Refer to Chapter 3.13</b></p> <p>5 - "BLEED" switch ..... <b>CHECK ON</b></p> <p>6 - "DUMP" switch ..... <b>CHECK UNDER GUARD</b></p> <p>7 - "RAM AIR" control knob ..... <b>CHECK PUSHED</b></p> <p>8 - Limit flight altitude to maintain cabin altitude &lt; 12000 ft</p> <p>9 - If necessary EMERGENCY DESCENT (Refer to Chapter 3.6)</p>

<h2 style="margin: 0;">CABIN NOT DEPRESSURIZED AFTER LANDING</h2>
<p><b><math>\Delta P</math> cabin &gt; 0</b></p> <p>1 - "DUMP" switch ..... <b>ACTUATED</b></p> <p>2 - "BLEED" switch ..... <b>OFF</b></p> <p>3 - "RAM AIR" control knob ..... <b>PULLED if necessary</b></p> <p>4 - Wait for complete cabin depressurization before opening the door</p>

3.10 - PRESSURIZATION AND AIR CONDITIONING

**AMBER WARNING LIGHT** **BLEED OFF** **ON**

Indicates an overpressure at air conditioning pack inlet or a malfunction of the pressure stop and regulating valve

(Normal signal if "BLEED" switch is OFF)

- 1 - If necessary ..... **CORRECT**
- 2 - If possible, reduce power
- 3 - "BLEED" switch ..... **OFF**
- 4 - "BLEED" switch ..... **ON**
- 5 - If **BLEED OFF** **ON**, and if necessary **EMERGENCY DESCENT**  
(refer to Chapter 3.6) or continue flight at an altitude < 12000 ft)
- 6 - Continue flight

## 3.10 - PRESSURIZATION AND AIR CONDITIONING

### RED WARNING LIGHT **BLEED TEMP** ON

Indicates overheat of air conditioning pack. Normally this leads to BLEED cutoff and to **BLEED OFF** amber warning light illumination.

*Should automatic cutoff occur or not :*

- 1 - If possible, reduce power
- 2 - "AIR FLOW" distributor ..... **CABIN**
- 3 - "CABIN TEMP/°C" selector ..... **15°C**
- 4 - "BLEED" switch ..... **OFF**
- 5 - As soon as **BLEED TEMP** OFF, "BLEED" switch ..... **ON**
- 6 - If **BLEED TEMP** and **BLEED OFF** ON and if necessary  
EMERGENCY DESCENT (Refer to Chapter 3.6) or continue flight  
at an altitude < 12000 ft
- 7 - Continue flight

3.10 - PRESSURIZATION AND AIR CONDITIONING

<b>RED WARNING LIGHT</b> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="text-align: center;">DOOR</td></tr></table> <b>ON</b>	DOOR
DOOR	

Indicates that one of the door latches of the access door and (if installed) of the "pilot" door has not been correctly locked

***On ground**, check the correct locking, as well as the latches position of the access door and (if installed) of the "pilot" door*

**During flight :**

- 1 - Start a slow descent
- 2 - Decrease cabin  $\Delta P$  by selecting a higher cabin altitude and maximum cabin rate

*If real failure of one of the doors is noted :*

- 3 - "BLEED" switch ..... **OFF**
- 4 - "DUMP" switch ..... **ACTUATED**
- 5 - If necessary, undertake an EMERGENCY DESCENT of "IN ROUGH ATMOSPHERE" type (Refer to Chapter 3.6)

## 3.10 - PRESSURIZATION AND AIR CONDITIONING

<b>AMBER WARNING LIGHT</b>	<b>VACUUM LO</b>	<b>ON</b>
Suction gage indicator .....		<b>CHECK</b>
Low vacuum may lead to malfunctioning of leading edge deicing, pressurization and gyroscopic vacuum-operated instruments .....		<b>MONITOR</b>
If necessary, fly to an altitude $\leq$ 12000 ft and if possible return to VMC conditions		
"BLEED" switch .....		<b>OFF</b>

3.10 – PRESSURIZATION AND AIR CONDITIONING

**DEFOG MALFUNCTION**

If moisture starts to quickly cover the inside of the windshield with the distributor already positioned on "DEFOG" :

- 1 - "AIR FLOW" distributor ..... **Set to around a 10 o'clock position**

*If moisture continues :*

- 2 - "AIR FLOW" distributor ..... **HOT**
- 3 - "L. WINDSHIELD" switch ..... **ON**
- 4 - "R. WINDSHIELD" switch ..... **ON**

*If there is no improvement and if the flight safety is engaged :*

- 5 - Altitude ..... **≤12000 ft**
- 6 - "BLEED" switch ..... **OFF**

**NOTE :**

*If in flight, the cabin will quickly be depressurized. Therefore, the cabin vertical speed indicator and altimeter indications will rapidly meet those of respectively the aircraft VSI and altimeter.*

### 3.11 - LANDING GEAR AND FLAPS

#### DISCREPANCY WHEN LANDING GEAR GOES UP

- **Red warning light on "LANDING GEAR" control panel remains flashing ON :**

The red warning light on the landing gear control panel flashing at the end of maneuver indicates that the landing gear electrohydraulic pump still operates.

- 1 - "LDG GR" circuit breaker ..... **PULL**

*If the red warning light goes off :*

The flight may be continued without any restriction. The electrohydraulic pump starting will be manually controlled with the "LDG GR" circuit breaker for the landing gear extension.

*If the red warning light remains fixed ON, apply the following procedure :*

- **Red warning light on "LANDING GEAR" control panel remains fixed ON (whatever the condition of the green lights may be) :**

The red warning light on the landing gear control panel is fixed ON at the end of maneuver, the green indicator lights are ON or OFF :

- 1 - Keep IAS  $\leq$  128 KIAS.
- 2 - EXTEND the landing gear.



### 3.11 - LANDING GEAR AND FLAPS

#### DISCREPANCY WHEN LANDING GEAR GOES UP (Cont'd)

*If the fixed red warning light is still on :*

Continue flight if necessary at a speed BELOW 178 KIAS, without icing conditions or land.

If landing gear does not lock (incorrect indication), refer to paragraph "DISCREPANCY WHEN LANDING GEAR GOES DOWN".

#### **CAUTION**

**DO NOT ENTER ICING CONDITIONS (THIS COULD ADVERSELY INCREASE DRAG AND WEIGHT DUE TO ICE ACCUMULATION, AND LOCK WHEELS AND STRUTS).**

**CLIMB PERFORMANCE WILL BE DEGRADED BY 50 %.**

**INDICATED AIRSPEED AT CRUISE WILL BE DECREASED BY 50 KIAS.**

**THIS SHOULD BE TAKEN INTO ACCOUNT WHEN CALCULATING THE AIRCRAFT RANGE.**



3.11 - LANDING GEAR AND FLAPS

**DISCREPANCY WHEN  
LANDING GEAR GOES DOWN**

- **Red warning light on "LANDING GEAR" control panel remains flashing ON (whatever the condition of the green lights may be) :**

The red warning light on the landing gear control panel flashing at the end of maneuver indicates that the landing gear electrohydraulic pump operates correctly.

- 1 - "LDG GR" circuit breaker ..... **PULL**

*If the red warning light goes off :*

- 2 - LAND.

*If the red warning light remains fixed ON, apply the following procedure :*

- **Red warning light on "LANDING GEAR" control panel remains fixed ON (whatever the condition of the green lights may be) :**

The red warning light on the landing gear control panel is fixed ON at the end of maneuver, the green indicator lights are ON or OFF, extend the landing gear manually.

- 1 - "LDG GR" circuit breaker ..... **PULL**
- 2 - Floor hatch ..... **OPEN**
- 3 - By-pass selector ..... **FULLY PULL / LOCK**
- 4 - Landing gear control ..... **DN**
- 5 - Hand pump ..... **ACTUATE**  
**with maximum amplitude**

**CAUTION**

**THE ENTIRE EXTENSION OF THE LANDING GEAR TAKES ABOUT 65 CYCLES. IT IS MANDATORY TO HAVE A CLEAN HARDENING OF THE MANUAL CONTROL AT THE END OF THE MANEUVER**



### 3.11 - LANDING GEAR AND FLAPS

#### DISCREPANCY WHEN LANDING GEAR GOES DOWN (Cont'd)

6 - "LDG GR" circuit breaker ..... **PUSH**

7 - "CHECK DN" inverter ..... **ACTUATE**

*If the hardening of the manual control is marked and if the normal indicating shows 3 green indicator lights or the "CHECK DN" indicating shows 3 green indicator lights.*

8 - LAND.

*If the manual control remains soft or if one (or several) green indicator light(s) miss(es) on the normal indicating and on the "CHECK DN" indicating, the bad locking of a landing gear in down position is confirmed. Recycle the landing gear as follows :*

9 - By-pass selector ..... **UNLOCK / PUSH**

10 - Wait a minute.

11 - Landing gear control ( $IAS \leq 128$  KIAS) ..... **UP**

*Perform tests of landing gear extension in the NORMAL mode by applying positive load factors during the maneuver as well as skidding.*

*In case of failure, refer to Chapter 3.7 "EMERGENCY LANDINGS", Paragraph "LANDING WITH UNLOCKED MAIN LANDING GEAR" or Paragraph "LANDING WITH DEFECTIVE NOSE LANDING GEAR".*

*Indication :*

*If a main landing gear is not in the down position, it is preferable to land with landing gear up (Refer to Chapter 3.7, Paragraph "LANDING WITH GEAR UP").*

## 3.11 - LANDING GEAR AND FLAPS

### RED WARNING LIGHT FLAPS ON

Indicates a dissymmetry of flap deflection. This immediately stops the flap motor and prevents further operation of the flaps

- 1 - "FLAPS" circuit breaker . . . . . **PULL**
- 2 - SHORTEN flight maintaining airspeeds :
  - *IAS ≤ 178 KIAS for deflections between "UP" and "TO" positions*
  - *IAS ≤ 122 KIAS for deflections greater than "TO" position*

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### 3.12 - DEICING SYSTEM

#### LEADING EDGES DEICING FAILURE

Symptoms : Failure on one of the two pneumatic deicing pulses :

- Ice on wing outboard sections
- Or ice on wing inboard sections and stabilizers
- One of the two cycling green lights is not lit

1 - LEAVE icing conditions as soon as possible

2 - "AIRFRAME DE ICE" switch ..... **OFF**

#### PROPELLER DEICING FAILURE

Symptoms : - Propeller deicing green light is not lit  
- Propeller vibrations

1 - REDUCE power

2 - ACTUATE propeller governor lever to vary RPM within operating range

3 - LEAVE icing conditions as soon as possible

3.12 - DEICING SYSTEM

**INERTIAL SEPARATOR FAILURE**

- Symptoms : - Warning light is not lit within 30 seconds following "INERT SEP" switch setting ON
- Neither torque drop, nor increase of ITT observed during maneuver

*LEAVE icing conditions as soon as possible*

**WINDSHIELD DEICING FAILURE**

- Symptoms : - Windshield being covered uniformly by ice
- No perception of heat when touching deiced section
  - Windshield deicing green light is not lit

Symptoms may result from overheat. In that case :

- 1 - "L.WINDSHIELD" switch ..... **OFF / ON**  
**when necessary**
- 2 - "R.WINDSHIELD" switch ..... **OFF / ON**  
**when necessary**

In case of total failure :

- 1 - "CABIN TEMP/°C" selector ..... **Maxi warm**
- 2 - "AIR FLOW" distributor ..... **HOT**

Before landing wait for a sufficient visibility

## 3.12 - DEICING SYSTEM

**WINDSHIELD MISTING OR INTERNAL ICING**

Symptoms : - Mist or ice on windshield internal face

- 1 - "CABIN TEMP/°C" selector ..... **Set to 21 °C  
(12 o'clock position)**
- 2 - "AIR FLOW" distributor ..... **Set to 10 o'clock position**
- 3 - "L. WINDSHIELD" switch ..... **ON**
- 4 - "R. WINDSHIELD" switch ..... **ON**

If not successful, to gain sufficient visibility :

- 5 - "AIR FLOW" distributor ..... **HOT**
- 6 - Manually clean a sufficient visibility area
- 7 - If necessary, clean L.H. side window and conduct a sideslip approach (rudder pedals to the right) in order to get sufficient landing visual references
- 8 - Maintain IAS  $\geq$  90 KIAS

**CAUTION**

**IN CASE OF SIDESLIP APPROACH WITH PEDAL ON THE RIGHT  
DURING A LONG PERIOD, SELECT R.H. FUEL TANK**

3.12 - DEICING SYSTEM

<b>AMBER WARNING LIGHT</b> <span style="border: 1px solid black; padding: 2px 10px;">PITOT 1</span> <span style="border: 1px solid black; padding: 2px 10px;">PITOT 2</span>						
<b>OR</b> <span style="border: 1px solid black; padding: 2px 10px;">STALL HTR</span> <b>ON</b>						
<p>Indicates a heating failure of the corresponding probe</p> <table style="width: 100%; border-collapse: collapse;"><tr><td style="border: 1px solid black; padding: 5px; width: 150px;"><b>PITOT 1</b></td><td style="padding: 5px;">Icing conditions may alter airspeed indications on the airspeed indicator</td></tr></table> <p>1 - AVOID icing conditions</p> <p style="padding-left: 20px;"><i>If it is not possible :</i></p> <p>2 - Perform moderate descent or climb attitudes</p> <p style="padding-left: 20px;"><i>V<sub>MO</sub> overshooting and stall warning lights are always operating</i></p> <table style="width: 100%; border-collapse: collapse;"><tr><td style="border: 1px solid black; padding: 5px; width: 150px;"><b>PITOT 2</b></td><td style="padding: 5px;">V<sub>MO</sub> overshoot warning may be altered by icing conditions</td></tr></table> <p style="padding-left: 20px;"><i>Monitor maximum airspeed ..... ≤ 266 KIAS</i></p> <table style="width: 100%; border-collapse: collapse;"><tr><td style="border: 1px solid black; padding: 5px; width: 150px;"><b>STALL HTR</b></td><td style="padding: 5px;">Correct operation of the aural stall warning may be altered by severe or prolonged icing</td></tr></table> <p style="padding-left: 20px;"><i>MONITOR and MAINTAIN minimum airspeed according to airplane configuration and icing conditions</i></p>	<b>PITOT 1</b>	Icing conditions may alter airspeed indications on the airspeed indicator	<b>PITOT 2</b>	V <sub>MO</sub> overshoot warning may be altered by icing conditions	<b>STALL HTR</b>	Correct operation of the aural stall warning may be altered by severe or prolonged icing
<b>PITOT 1</b>	Icing conditions may alter airspeed indications on the airspeed indicator					
<b>PITOT 2</b>	V <sub>MO</sub> overshoot warning may be altered by icing conditions					
<b>STALL HTR</b>	Correct operation of the aural stall warning may be altered by severe or prolonged icing					



**3.13 - MISCELLANEOUS**

**RUNAWAY OF ONE OF THE THREE ELECTRICAL TRIM TABS**

- 1 - "AP / DISC TRM INT" push button . . . . . **PRESSED AND HOLD**  
The three trim tabs are disconnected and runaway stops
- 2 - "AP / TRIMS MASTER" switch . . . . . **OFF**
- 3 - "AP / DISC TRM INT" push button . . . . . **RELEASED**
- 4 - Pitch trim may be used manually
- 5 - Reduce airspeed if necessary to reduce control forces

*If pitch trim runaway*

- 6 - "AP / TRIMS MASTER" switch . . . . . **AP OFF**  
The pitch trim may be used manually, the two other trim tabs may be used again electrically

*If rudder or aileron trim runaway*

- 7 - PULL circuit breaker corresponding to the defective trim tab
- 8 - "AP / TRIMS MASTER" switch . . . . . **ON**  
Two other trim tabs may be used again electrically

**CRACK IN COCKPIT WINDOW OR WINDOW PANEL**

- 1 - Descend slowly
- 2 - Reduce cabin  $\Delta P$  by selecting a higher cabin altitude and the maximum cabin rate

3.13 - MISCELLANEOUS

**EMERGENCY EXIT USE**

- 1 - Check that the anti-theft safety pin has been removed
- 2 - Lift up the opening handle
- 3 - Pull emergency exit assembly toward oneself to release it from its recess
- 4 - Put the emergency exit door inside fuselage or throw it away from the fuselage through the opening
- 5 - EVACUATE airplane

**EMERGENCY BEACON USE (ELT)**

*Before a forced landing :*

- 1 - On COM VHF 121.5 MHZ or on a known air traffic control frequency, transmit the "MAY DAY" signal if possible

*After landing :*

- 2 - "ELT" remote control switch ..... **ON**  
**(maintain it ON until aid arrives)**

## 3.13 - MISCELLANEOUS

**TOTAL COMMUNICATION FAILURE**

- 1 - Refer to PARTICULAR TRANSPONDER USES procedures
- 2 - Apply air traffic control procedures in case of communications failure :
  - code 7700 during 1 minute, then
  - code 7600
- 3 - Try to restore communications by using all possible combinations of the headset, micro and loudspeaker

**MAIN GYRO HEADING FAILURE**

Use standby compass

**CAUTION**

**"L. WINDSHIELD" AND "R. WINDSHIELD" SWITCHES, AS WELL AS AIR CONDITIONING SYSTEM MUST BE SET TO "OFF" BEFORE COMPASS READING**

3.13 - MISCELLANEOUS

<b>PARTICULAR TRANSPONDER USES</b>	
1 - Check transponder mode selector .....	<b>ON or ALT</b>
2 - Codes selector :	7700 EMERGENCY DISTRESS
	7600 COMMUNICATIONS FAILURE
	7500 HIJACKING

<b>ACCIDENTAL SPINS</b>	
<i>(Voluntary spins are prohibited)</i>	
<i>In case of accidental spins</i>	
1 - Control wheel .....	<b>NEUTRAL : PITCH AND ROLL</b>
2 - Rudder .....	<b>FULLY OPPOSED TO THE SPIN</b>
3 - Power lever .....	<b>IDLE</b>
4 - Flaps .....	<b>UP</b> <b>when rotation is stopped</b>
5 - Level the wings and ease out of the dive	

## 3.13 - MISCELLANEOUS

### OXYGEN USE

#### WARNING

**SMOKING IS STRICTLY PROHIBITED ANY TIME OXYGEN SYSTEM IS USED.  
BEFORE USING OXYGEN, REMOVE ANY TRACE OF OIL, GREASE, SOAP AND OTHER FATTY SUBSTANCES (INCLUDING LIPSTICK, MAKE UP, ETC...)**

#### Front seats

- 1 - Take a mask on the opposite seat side (pilot : R.H. side ; R.H. front passenger : L.H. side) : draw it out of the stowage cup and uncoil tube totally. Press on the red side vanes to inflate the harness. Put the mask on the face.
- 2 - No smokes :  
3-position selector ..... **NORMAL**  
**(100 % as required)**
- 3 - In case of smokes :  
3-position selector ..... **EMERGENCY**  
**Don the smoke goggles**  
**onto the face**
- 4 - "PASSENGERS OXYGEN" switch ..... **ON**
- 5 - Check the oxygen flow indicator for the front seats (the blinker is transparent) and for the rear passengers (the blinker is green).
- 6 - "NORMAL/MASK" micro inverter ..... **MASK**
- 7 - Audio selector selection mode ..... **PILOT or ISO**
- 8 - Perform an emergency descent to the "En route" minimum altitude and, if possible, below 10000 ft.



### 3.13 - MISCELLANEOUS

#### OXYGEN USE (Cont'd)

##### **Passengers**

- 1 - Take a mask.
- 2 - Uncoil tube totally.
- 3 - Pull on the lanyard cord to take out the lanyard pin.
- 4 - Put the mask on the face.

## 3.13 - MISCELLANEOUS

### **AIRSPEED INDICATING SYSTEM FAILURE**

Symptoms : erroneous indication in flight

- 1 - "PITOT 1 HTR" switch ..... **CHECK ON**
- 2 - "PITOT 2 & STALL HTR" switch ..... **CHECK ON**

**If symptoms persist :**

- 3 - "ALTERNATE STATIC" selector ..... **PULL THOROUGHLY**

If symptoms persist, as well as on the airspeed indicator of the R.H instrument panel, carry out a precautionary approach maintaining an adequate speed.

### 3.13 - MISCELLANEOUS

## **FLIGHT INTO SEVERE ICING CONDITIONS**

Severe icing conditions, particularly freezing rain and freezing drizzle, can be identified by :

- unusually extensive ice accumulation on the airframe and windshield in areas not normally observed to collect ice,
- accumulation of ice on the upper surface of the wing aft of the protected area.

Procedures for exiting freezing rain or freezing drizzle conditions :

- 1 - Inform Air Traffic Control to exit severe icing conditions by changing the route or the altitude.
- 2 - Avoid any sudden maneuver on flight controls.
- 3 - Do not engage the autopilot.
- 4 - If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- 5 - If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- 6 - Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- 7 - If the flaps are extended, do not retract them until the airframe is clear of ice.