SECTION 3

EMERGENCY PROCEDURES

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

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 **MASTER WARNING**

or - a flashing amber indicator **MASTER CAUTION**

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.

INTENTIONALLY LEFT BLANK

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 AFTER ROTATION

- ***If altitude does not allow to choose a favourable runway or field : Land straight ahead keeping flaps at TO and without changing landing gear position.***

Before touch-down :

1 - Maintain :

Weight < 6579 lbs (2984 kg)	Weight > 6579 lbs (2984 kg)
IAS > 80 KIAS	**IAS > 85 KIAS**

2 - Power lever ..... **IDLE**

3 - Condition lever ..... **CUT OFF**

4 - Tank selector ..... **OFF**

5 - CRASH lever ..... **PULL DOWN**

- ***If altitude allows to reach a favourable runway or ground :***

1 - LDG ..... **DOWN**

2 - Flaps ..... **AS REQUIRED**

3 - Maintain **:**

Weight < 6579 lbs (2984 kg)	Weight > 6579 lbs (2984 kg)
IAS > 100 KIAS, Flaps UP	**IAS > 105 KIAS, Flaps UP**
IAS > 90 KIAS, Flaps TO	**IAS > 95 KIAS, Flaps TO**

4 - Power lever ..... **IDLE**

5 - Propeller governor lever ..... **FEATHER**

3.3 - ENGINE FAILURES

ENGINE FAILURE AFTER ROTATION (Cont'd)

Before touch-down :

6 - Condition lever ..... **CUT OFF**

7 - Tank selector ..... **OFF**

8 - 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 (Refer to Chapter 3.4)

8 - In case of high altitude (above 12000 ft), undertake an EMERGENCY DESCENT (Refer to Chapter 3.6)

9 - If air start not successful, 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 power 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 > 840°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 Np < 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 might be lower than expected. The airplane repair is mandatory 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 Np ≤ 2000 RPM. The propeller reducer is designed for a max. Np 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 engine reduction gearbox

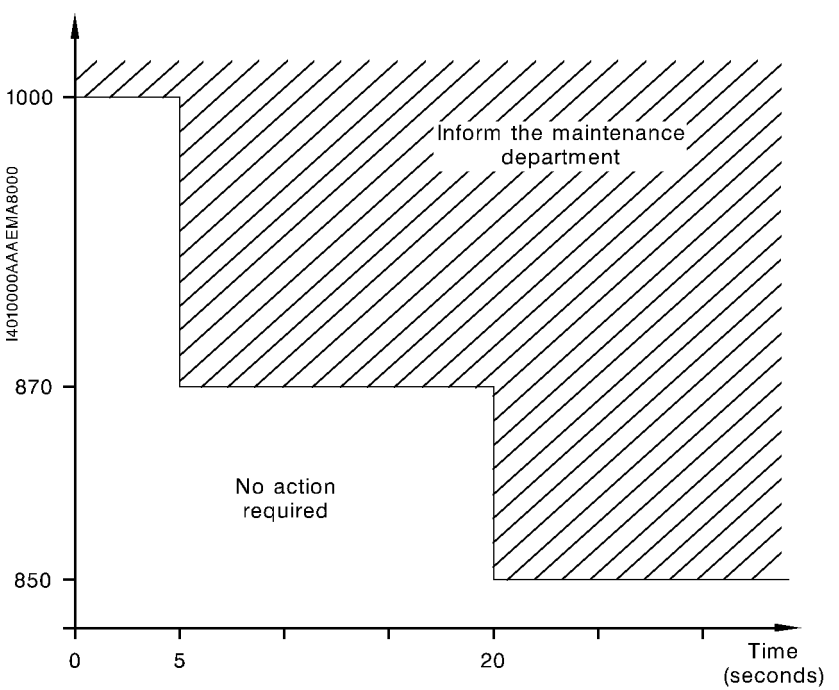
The airplane repair is mandatory before any other flight.

3.3 - ENGINE FAILURES

RED WARNING LIGHT [ITT] ON

Indicates that ITT exceeds 850°C

During an engine start



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 5.8

If ITT remains > 840°C :

3 - Reduce power to maintain ITT < 840°C.

4 - Shorten the flight.

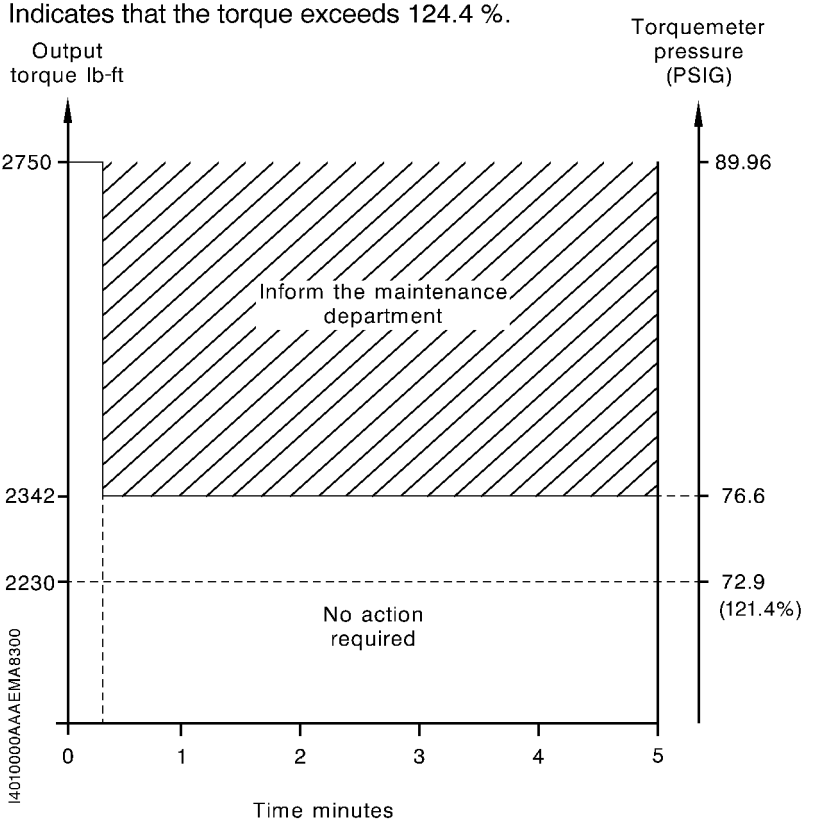
5 - Record the airplane and engine parameters read in case of overtemperature.

6 - Inform maintenance department at the end of the flight.

3.3 - ENGINE FAILURES

RED WARNING LIGHT TRQ ON

Indicates that the torque exceeds 124.4 %.



1 - Reduce power according to "Engine Operation" tables - Chapter 5.8.

2 - Shorten the flight.

3 - Record the airplane and engine parameters read in case of overtorque.

4 - 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 ..... **OFF**

2 - "RADIO MASTER" switch ..... **OFF**

3 - "INT. LIGHTS" panel
All switches ..... **OFF**

4 - "EXT. LIGHTS" panel
All switches ..... **OFF**

5 - "ECS" panel
All switches ..... **OFF**

6 - Tank selector ..... **OFF**

Wait for engine stop due to lack of fuel in the pipes

7 - "GENERATOR" selector ..... **MAIN**

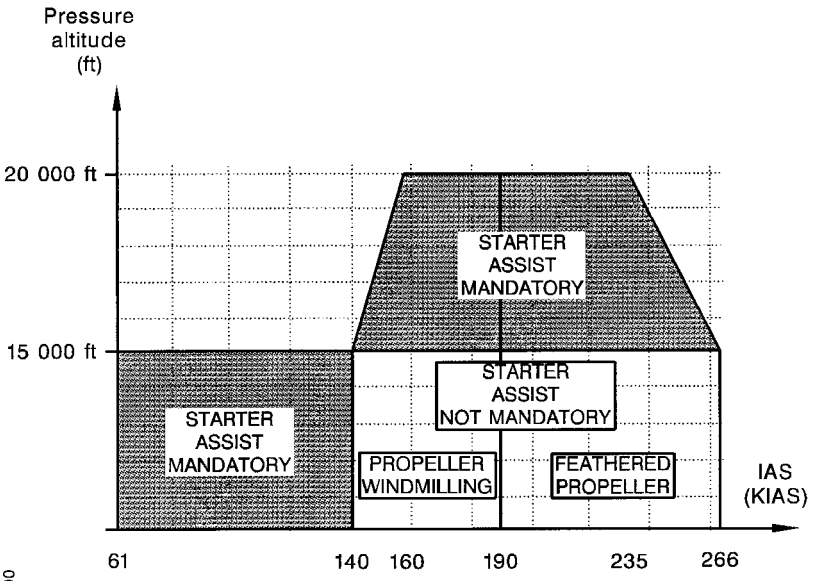
8 - "SOURCE" selector ..... **OFF**

9 - Inform the maintenance department

INTENTIONALLY LEFT BLANK

3.4 - AIR START

AIR START ENVELOPE



I4010000AAAEMA8100

Air start may be attempted at all speeds and all altitudes. However, above 20000 ft or with Ng < 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 SET TO "AUTO" OR "HI" 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 SET TO "AUTO" OR "HI" 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

INTENTIONALLY LEFT BLANK

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

INTENTIONALLY LEFT BLANK

3.6 - EMERGENCY DESCENTS

Two types of descent are considered :

1 - Engine running, maximum descent rate, if necessary

The factors to be considered are :

- Cabin altitude and oxygen duration
- Electrical power endurance
- Distance to appropriate landing area
- Flight conditions IMC, VMC, ICING
- Minimum safe altitude
- Fuel reserves

2 - Engine failure, aircraft flown for maximum range

The pilot is in charge of evaluating the situation and priorities.

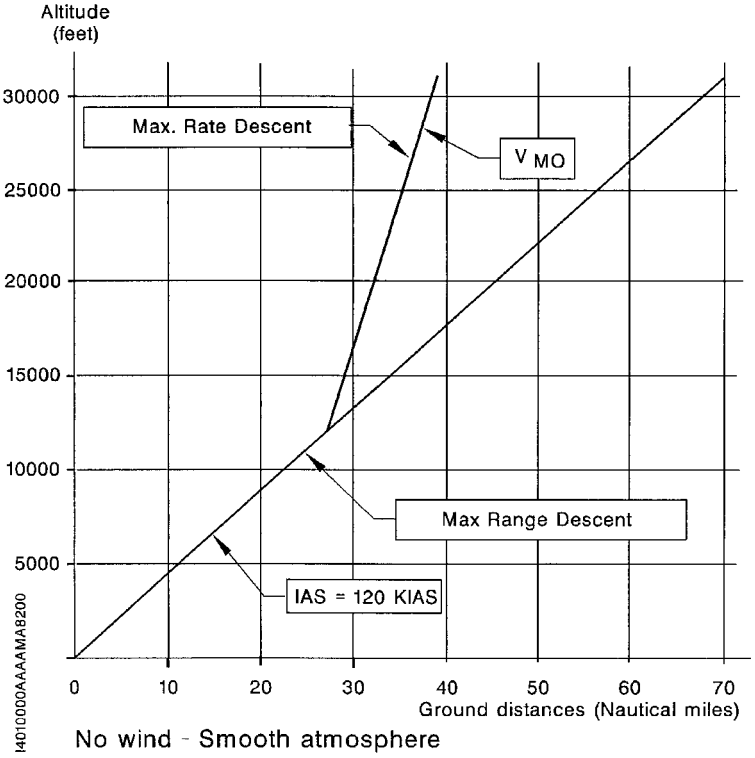


Figure 3.6.1 - EMERGENCY DESCENT PROFILES

3.6 - EMERGENCY DESCENTS

MAXIMUM RATE DESCENT

1 - Power lever	**IDLE**
2 - Oxygen	**If necessary**
3 - Propeller governor lever	**MAX. RPM**

Procedure in smooth air :

4 - Flaps	**UP**
5 - Landing gear	**UP**
6 - Speed	**V_{MO} = 266 KIAS**

Procedure in rough air or in case of structure problem :

7 - Reduce speed	**IAS ≤ 178 KIAS**
8 - Landing gear	**DN**
9 - Flaps	**UP**
10 - Keep	**IAS ≤ 178 KIAS**

MAXIMUM RANGE DESCENT

1 - Power lever	**IDLE**
2 - Propeller governor lever	**FEATHER**
3 - Condition lever	**CUT OFF**
4 - Flaps	**UP**
5 - Landing gear	**UP**
6 - Speed	**IAS = 120 KIAS**

3.6 - EMERGENCY DESCENTS

MAXIMUM RANGE DESCENT (Cont'd)

7 - Oxygen ..... **If necessary**

Check oxygen duration before reaching 12000 ft and check flow to passengers

8 - "DUMP" switch ..... **ACTUATED**

9 - "RAM AIR" control knob ..... **PULLED**

If conditions allow : VMC and non icing conditions :

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

11 - Prepare a forced landing ..... **Refer to Chapter 3.7**

If flight conditions do not allow :

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

13 - Manually disconnect ancillary systems as follows :

- "AIRFRAME DE ICE" switch ..... **OFF**
- "ICE LIGHT" switch ..... **OFF**
- "PROP DE ICE" switch ..... **OFF**
- "R.WINDSHIELD" switch ..... **OFF**
- "PITOT 2 & STALL HTR" switch ..... **OFF**
- "L.LDG / TAXI / R.LDG / PULSE SYST" switches ..... **OFF**
- "STROBE" switch ..... **OFF**
- "BLEED / AIR COND / FAN FLOW" switches ..... **OFF**
- "AUX BP" switch ..... **OFF**
- "FUEL SEL" switch ..... **MAN**
- "AP/TRIMS MASTER" switch ..... **OFF**
- "EHSI" breaker ..... **PULLED**
- VHF 1 / NAV 1 / GPS 1 ..... **OFF**
- MFD ..... **OFF**
- ADF ..... **OFF**
- Stormscope switch ..... **OFF**

3.6 - EMERGENCY DESCENTS

MAXIMUM RANGE DESCENT (Cont'd)

- "CD" player ..... **OFF**
- "INSTR / CABIN / ACCESS" controls ..... **OFF**
- "GYRO INST" panel, all switches ..... **OFF**
- Transponder 2 ..... **OFF**

If icing conditions :

- "PITOT 1 HTR" switch ..... **Checked ON**
- "L.WINDSHIELD" switch ..... **ON**
- Maintain minimum recommended speeds (Chapter 4.5 - "Flight into known icing conditions", Paragraph "Ice protection procedures", Point 3)

If time permits :

- "RADIO + FAN" breaker ..... **PULLED**
- "28 VDC PLUGS" breaker ..... **PULLED**
- "AIR COND" breaker ..... **PULLED**

14 - Prepare a forced landing ..... **Refer to Chapter 3.7**

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 ..... **120 KIAS maintained until favourable ground approach**

If ground allows it :

10 - "ESS BUS TIE" reverse switch ..... **NORMAL in order to have GEAR and FLAPS available**

11 - Landing gear ..... **DN**

If night conditions :

12 - L.LDG / R.LDG ..... **ON**

If ground does not allow it :

13 - Keep landing gear ..... **UP**

14 - When chosen ground is assured ..... **FLAPS LDG**

15 - CRASH lever ..... **PULL DOWN**

3.7 - EMERGENCY LANDINGS

FORCED LANDING (ENGINE CUT OFF) (Cont'd)

16 - Final approach :

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS = 80 KIAS	**IAS = 85 KIAS**

17 - Land flaring out

18 - 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 15 us gal (57 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**

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS = 90 KIAS	**IAS = 95 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**

2 - Flaps ..... **LDG**

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS = 80 KIAS	**IAS = 85 KIAS**

3 - "BLEED" switch ..... **OFF**

4 - "DUMP" switch ..... **ACTUATED**

When runway is assured :

5 - Power lever ..... **IDLE**

6 - Propeller governor lever ..... **FEATHER**

7 - Condition lever ..... **CUT OFF**

8 - Tank selector ..... **OFF**

9 - Flare out

10 - After touch-down, CRASH lever ..... **PULL DOWN**

11 - 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 $\simeq$ 300 ft / min

4 - Adjust elevator by using manual pitch trim wheel

5 - When ground approaches, decrease slope progressively

6 - Reduce power progressively

3.7 - EMERGENCY LANDINGS

LANDING WITH FLAPS MALFUNCTION

For flaps deflections from "UP" to "TO" position :

Proceed as for a normal landing, maintaining approach airspeed :

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS = 100 KIAS	**IAS = 105 KIAS**

Provide for a landing distance increased up to about 60 %

For flaps deflections greater than "TO" position :

Proceed as for a normal landing, maintaining approach airspeed :

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS = 95 KIAS	**IAS = 100 KIAS**

Provide for a landing distance increased up to about 50 %

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 :

Weight < 6579 lbs (2984 kg)	Weight > 6579 lbs (2984 kg)
IAS = 80 KIAS	**IAS = 85 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

3.8 - FUEL SYSTEM

RED WARNING LIGHT FUEL PRESS ON

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 occured 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 18000 ft.

12 - Land as soon as possible.

3.8 - FUEL SYSTEM

AMBER WARNING LIGHT [AUX BP ON] ON

(Indication is normal if "AUX BP" fuel switch is in ON position)

If "AUX BP" fuel switch is in AUTO position :

1 - Reset to ..... **ON**

2 - Then to ..... **AUTO**

If [AUX BP ON] *warning light goes out, continue flight normally*

If [AUX BP ON] *warning light remains on, mechanical booster pump has failed*

In that case :

3 - "AUX BP" fuel switch ..... **ON**

4 - Shorten flight

3.8 - FUEL SYSTEM

AMBER WARNING LIGHT FUEL L. LO OR FUEL R. LO ON

Indicates level drop in the corresponding tank

1 - Corresponding gage ..... **CHECK**

2 - Check the other tank has been automatically selected

If not :

3 - "FUEL SEL" switch ..... **MAN**

4 - Select tanks manually as required

AMBER WARNING LIGHT AUTO SEL ON

Indicates that the mode control automatic timer is off or has failed

1 - "FUEL SEL" switch ..... **AUTO**
CHECK / CORRECT

2 - If it is on AUTO : confirmed failure

3 - "FUEL SEL" switch ..... **MAN**

4 - Select tanks manually as required

3.9 - ELECTRICAL SYSTEM

AMBER WARNING LIGHT [BAT OFF] ON

Indicates that "SOURCE" selector has been positioned on OFF or GPU, or that the battery is disconnected from the mains

1 - If necessary ..... **CORRECT**

2 - If warning persists ..... **SHORTEN FLIGHT**

3 - Monitor airplane mains voltage

3.9 - ELECTRICAL SYSTEM

AMBER WARNING LIGHT [MAIN GEN] ON

Indicates that "GENERATOR" selector has been positioned to OFF or ST-BY, or main generator is cut off

1 - If necessary ..... **CORRECT**

2 - If warning persists ..... **"MAIN GEN" switching confirmed**

3 - "MAIN GENERATOR RESET" push-button ..... **PUSH**

In case of failure :

4 - Disconnect following ancillary electrical systems :

- "AIR COND" switch ..... **OFF**
- "STROBE" switch ..... **OFF**
- "NAV" switch ..... **OFF**
- "CABIN" lights switch ..... **OFF**
- "AP/TRIMS MASTER" switch ..... **AP OFF**
- All equipment not essential ..... **OFF**
- "L.WINDSHIELD" switch
  (above 15 000 ft) ..... **OFF**
- "R.WINDSHIELD" switch
  (above 15 000 ft) ..... **OFF**
- "BLEED" switch
  (before landing and on ground) ..... **OFF**
- Only use landing lights briefly and if necessary.

5 - "GENERATOR" selector ..... **ST- BY**
(RESET if necessary)

3.9 - ELECTRICAL SYSTEM

AMBER WARNING LIGHT [LO VOLT] ON
normal functioning on "MAIN GEN"

1 - Voltmeter voltage ..... **CHECK**

2 - If voltage is < 26 Volts, monitor a possible drop or any indication of battery run-down

In that case :

3 - Disconnect following ancillary electrical systems :

- "AIR COND" switch ..... **OFF**
- "STROBE" switch ..... **OFF**
- "NAV" switch ..... **OFF**
- "CABIN" lights switch ..... **OFF**
- "AP / TRIMS MASTER" switch ..... **AP OFF**
- All equipment not essential ..... **OFF**
- "L.WINDSHIELD" switch (above 15 000 ft) ..... **OFF**
- "R.WINDSHIELD" switch (above 15 000 ft) ..... **OFF**
- "BLEED" switch (before landing and on ground) ..... **OFF**
- Only use landing lights briefly and if necessary.

4 - "GENERATOR" selector ..... **ST-BY (RESET if necessary)**

5 - Voltage and battery charge ..... **MONITOR**

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 - If altitude ≥ 12000 ft : "OXYGEN" switch ..... **ON**

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 ancillary systems as follows :

- "AIRFRAME DE ICE" switch ..... **OFF**
- "ICE LIGHT" switch ..... **OFF**
- "PROP DE ICE" switch ..... **OFF**
- "R.WINDSHIELD" switch ..... **OFF**
- "PITOT 2 & STALL HTR" switch ..... **OFF**
- "L.LDG / TAXI / R.LDG / PULSE SYST" switches ..... **OFF**
- "STROBE" switch ..... **OFF**
- "BLEED / AIR COND / FAN FLOW" switches ..... **OFF**
- "AUX BP" switch ..... **OFF**
- "FUEL SEL" switch ..... **MAN**
- "AP/TRIMS MASTER" switch ..... **OFF**
- "EHSI" breaker ..... **PULLED**

3.9 - ELECTRICAL SYSTEM

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

- VHF 1 / NAV 1 / GPS 1 ..... **OFF**
- MFD ..... **OFF**
- ADF ..... **OFF**
- Stormscope switch ..... **OFF**
- "CD" player ..... **OFF**
- "INSTR / CABIN / ACCESS" controls ..... **OFF**
- "GYRO INST" panel, all switches ..... **OFF**
- Transponder 2 ..... **OFF**

If icing conditions :

- "PITOT 1 HTR" switch ..... **Checked ON**
- "L.WINDSHIELD" switch ..... **ON**
- Maintain minimum recommended speeds (Chapter 4.5 - "Flight into known icing conditions", Paragraph "Ice protection procedures", Point 3)

If time permits :

- "RADIO + FAN" breaker ..... **PULLED**
- "28 VDC PLUGS" breaker ..... **PULLED**
- "AIR COND" breaker ..... **PULLED**

14 - LAND as soon as possible

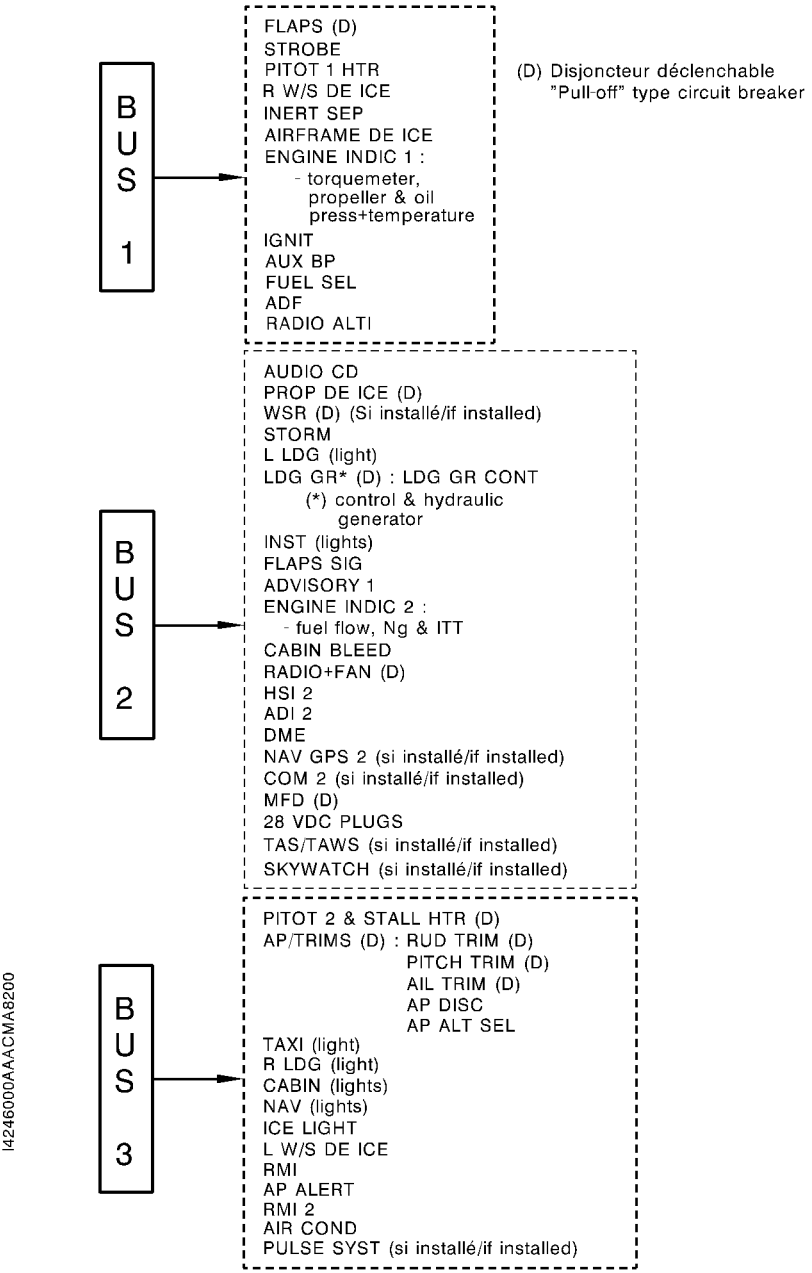


Figure 3.9.1 (1/2) - ELECTRICAL DISTRIBUTION OF BUS BARS

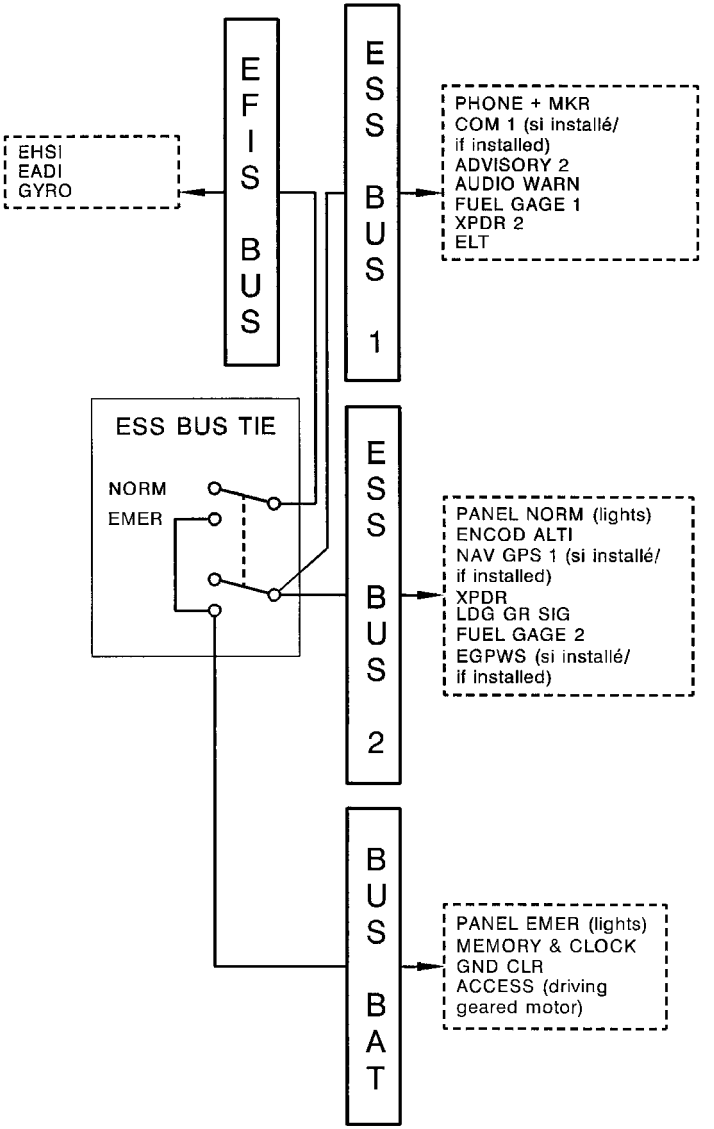


Figure 3.9.1 (2/2) - ELECTRICAL DISTRIBUTION OF BUS BARS

3.9 - ELECTRICAL SYSTEM

"RADIO MASTER" SWITCH FAILURE

In case of "RADIO MASTER" switch misfunction, 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.

INTENTIONALLY LEFT BLANK

3.10 - PRESSURIZATION AND AIR CONDITIONING

RED WARNING LIGHT CAB PRESS ON

1 - Pressurization indicator ..... **CHECK**

If ΔP > 6.2 psi :

2 - "BLEED" switch ..... **OFF**

3 - EMERGENCY DESCENT (Refer to Chapter 3.6)

If cabin altitude > 10000 ft :

4 - Oxygen ..... **Refer to Chapter 3.13**

5 - "BLEED" switch ..... **CHECK AUTO**

6 - "DUMP" switch ..... **CHECK UNDER GUARD**

7 - "RAM AIR" control knob ..... **CHECK PUSHED**

8 - Limit flight altitude to maintain cabin altitude < 12000 ft

9 - If necessary EMERGENCY DESCENT (Refer to Chapter 3.6)

CABIN NOT DEPRESSURIZED AFTER LANDING

ΔP cabin > 0

1 - "DUMP" switch ..... **ACTUATED**

2 - "BLEED" switch ..... **OFF**

3 - "RAM AIR" control knob ..... **PULLED if necessary**

4 - Wait for complete cabin depressurization before opening the door

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 ..... **AUTO**

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 ..... **AUTO**

If [BLEED TEMP] and [BLEED OFF] still ON :

6 - 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

RED WARNING LIGHT [DOOR] ON

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 ΔP 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

AMBER WARNING LIGHT VACUUM LO **ON**

Suction gage indicator ..... **CHECK**

Low vacuum may lead to misfunctioning of leading edge deicing, pressurization and gyroscopic vacuum-operated instruments ..... **MONITOR**

If necessary, fly to an altitude ≤ 12000 ft and if possible return to VMC conditions

"BLEED" switch ..... **OFF**

3.10 - PRESSURIZATION AND AIR CONDITIONING

DEFOG MALFUNCTION

If moisture starts to quickly cover the inside of the windscreeen 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 ..... **$\leq$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 ≤ 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 ≤ 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 - Flap control lever ..... **UP**

3 - SHORTEN flight maintaining airspeeds :
- *IAS ≤ 178 KIAS* *for deflections between "UP" and "TO" positions*
- *IAS ≤ 122 KIAS* *for deflections greater than "TO" position*

4 - For landing, refer to Chapter 3.7, Paragraph "LANDING WITH FLAPS MALFUNCTION".

FLAPS MALFUNCTION

In case of blockage of flaps or inoperant flap control lever between "UP" and "TO" positions, with no flaps warning light illumination :

1 - "FLAPS" circuit breaker ..... **PULL**

2 - Flap control lever ..... **UP**

3 - SHORTEN flight maintaining airspeeds :
- *IAS ≤ 178 KIAS* *for deflections between "UP" and "TO" positions*
- *IAS ≤ 122 KIAS* *for deflections greater than "TO" position*

4 - For landing, refer to Chapter 3.7, Paragraph "LANDING WITH FLAPS MALFUNCTION".

INTENTIONALLY LEFT BLANK

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 - For landing with flaps LDG, maintain :

Weight < 6250 lbs (2835 kg)	Weight > 6250 lbs (2835 kg)
IAS $\geq$ 90 KIAS	**IAS $\geq$ 95 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

AMBER WARNING LIGHT PITOT 1 PITOT 2

OR STALL HTR **ON**

Indicates a heating failure of the corresponding probe

PITOT 1 Icing conditions may alter airspeed indications on the airspeed indicator

1 - AVOID icing conditions

If it is not possible :

2 - Perform moderate descent or climb attitudes

V_{MO} overshooting and stall warning lights are always operating

PITOT 2 V_{MO} overshoot warning may be altered by icing conditions

Monitor maximum airspeed ..... ***$\leq$266 KIAS***

STALL HTR Correct operation of the aural stall warning may be altered by severe or prolonged icing

MONITOR and MAINTAIN minimum airspeed according to airplane configuration and icing conditions

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 ΔP 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

PARTICULAR TRANSPONDER USES

1 - Check transponder mode selector ..... **ON or ALT**

2 - Codes selector :

7700	EMERGENCY DISTRESS
7600	COMMUNICATIONS FAILURE
7500	HIJACKING

ACCIDENTAL SPINS

(Voluntary spins are prohibited)

In case of accidental spins

1 - Control wheel ..... **NEUTRAL : PITCH AND ROLL**

2 - Rudder ..... **FULLY OPPOSED TO THE SPIN**

3 - Power lever ..... **IDLE**

4 - Flaps ..... **UP when rotation is stopped**

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 THROROUGHLY**

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.