PART 4

CHAPTER 2 — AIRFRAME EMERGENCY PROCEDURES

(Completely revised by AL6)

Contents

1 General

(a) The location of malfunctioning procedures covered in Part 1 is shown in Table 1. The airframe emergency procedures are covered in the Flight Reference Cards under the following headings:

(i) Hydraulic Failure.
(ii) Controls Restriction.
(iii) Electrical Failures.
(iv) Electrical and Hydraulic Failure.
(v) Fuel System Failures.
(vi) Pressurisation.
(vii) Oxygen.
(viii) Tailplane and Trim.
(ix) Landing Gear Malfunctions.

(b) Additional information on airframe emergency procedures is given in the following paragraphs.

2 Tailplane Trim Malfunctions

(a) If the main tailplane trim motor fails or runs away, raise the standby trim switch cover fully to isolate the

Table 1 — Location of Malfunctioning Procedures in Part 1

System	*Chapter*	*Para*
Fuel System		
Booster Pump Failure	1	16
Transfer Failure	1	17
Fuel Gauge Errors	1	18
Proportioner Malfunction	1	19
Electrical System		
Inverter Failure	3	11
Single Generator Failure	3	12
Double Generator Failure	3	13
Hydraulic System		
Hydraulic Failure	4	2
Powered Flying Controls and Trimmers		
Hydrobooster Failures	5	11
Tailplane Malfunctioning	5	12
Other Aircraft Controls and Flight Instruments		
Landing Gear Emergency Operation ...	6	5
Flap Emergency Operation	6	7
Wheelbrakes	6	9
Brake Parachute	6	10
Flight Instruments	6	12
General Equipment and Lighting		
Canopy (emergency opening)	7	1
Canopy Jettisoning	7	2
Cabin Pressurisation	7	3
Emergency Lighting	7	5
Oxygen System		
Emergency Oxygen	8	12
Radio and Radar		
Main UHF Failure	9	1
Intercom (amplifier failure)	9	3

main motor and use the standby trim; the standby trim motor operates at about one-third of the rate of the main motor. If these actions fail to stop a runaway, isolate the main motor by tripping the circuit breaker on the starboard shelf and continue using the standby trim. If the airspeed is above the flap limiting speed, check that the flaps have not been lowered inadvertently.

(b) If the tailplane runs away to the fully nose-down position, recovery to level flight can be made without difficulty below about 0·86M but above this speed, elevator jack stalling may be experienced. If this occurs, after isolating the main trim motor, throttle back and extend the airbrake to reduce speed.

(c) If electrical power is not available, control of the tailplane is lost. Following a double generator failure, the aircraft should be trimmed load-free before the batteries are exhausted.

(d) If both the main and standby motors fail:

(i) *In Power.* The aircraft can be controlled throughout the speed range with full nose-down trim and up to about 420 knots with full nose-up trim.

(ii) *In Manual.* Full nose-down trim can be held between 350 and 150 knots; there may be insufficient elevator control to prevent the nose falling if more than 30° of flap is lowered for landing. Full nose-up trim can be held below 250 knots and full flap can be lowered for landing.

3 Tailplane Interconnection Malfunctions

If the tailplane interconnection malfunctions, raise the standby trim switch cover fully to isolate the main trim motor and tailplane interconnection and use the standby trim. Switch off the tailplane interconnection and lower the standby trim switch cover. Check the normal trimming action; if the malfunction is still present, reselect and use the standby trim.

4 Aileron Trim Malfunction in Manual

(a) If the aileron trim appears to be inoperative when in Manual, trimming may be possible using the other trim switch. If this is also ineffective and the aircraft is out of trim laterally, reselect Power without delay and remain in Power.

(b) If the aircraft is out of trim laterally and it is not possible to reselect Power, reduce speed to below 200 knots and use rudder trim to assist in maintaining the wings level. Full rudder trim counteracts full aileron trim up to about 220 knots; above 250 knots, control may be lost. In the circuit, the additional aileron force required with full aileron trim is moderate if the speed is kept below 175 knots.