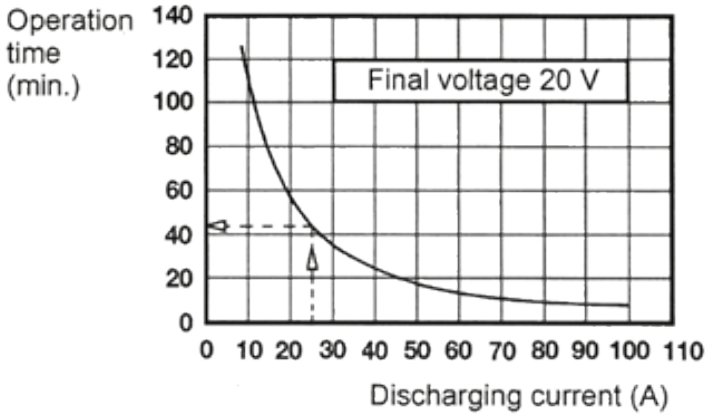
EMERGENCY PROCEDURES

ENGINE FIRE				
1.	Engine on fire	–	DETERMINE	(P/CP)
2.	Fuel stop cock	–	SHUT	(P)
3.	MANUAL FEATHER. Push-button	–	PUSH	(CP)
4.	Fuel fire cock	–	SHUT	(P)
5.	Heating lever	–	SHUT(DOWN)	(P)
6.	EXTINGUISH.-PRIM. push-button	–	PUSH	(P)
7.	TCL	–	IDLE	(CP)
8.	PCL	–	FEATHER	(CP)
9.	DC GENERATOR and AC GENERATOR. switches	–	OFF	(CP)
	If fire continues			
10.	EXTINGUISH.-SEC. Push-button	–	PUSH	(P)
11.	ENGINE STARTING, ELU, FUEL PUMP circuit breakers	–	OFF	(CP)
12.	Land on the nearest airport	–		(P)

COCKPIT OR CABIN FIRE				
1.	Oxygen mask (protective goggles)	–	PUT ON	(P&CP)
2.	FUSTEN SEAT BELTS circuit breaker	–	SWITCH ON	(CP)
3.	Descent	–	INITIATE AS REQUIRED	(P)
4.	Source of fire	–	DETERMINE	(P)
5.	Portable extinguisher	–	USE	(CP)
6.	Cockpit windows	–	OPEN	(P&CP)
	If not succeeded	–		
7.	Land on the nearest airport of force landing	–		(P)

FRONT BAGGAGE COMPARTMENT FIRE				
1.	BAGGAGE COMPARTMENT EXTINGUISHING handle	–	PULL OUT	(CP)
2.	FUSTEN SEAT BELTS	–	SWITCH ON	(CP)
3.	Descent	–	INITIATE AS REQUIRED	(P)
4.	Cockpit windows	–	OPEN AS REQUIRED	(P&CP)

BOTH GENERATORS INOPERATIVE				
1.	LH GENERATOR and RH GENERATOR switches on the overhead panel	–	CHECK SWITCHES ON	(CP)
2.	All circuit breakers not marked with yellow strip	–	SWITCH OFF	(CP)
3.	Batteries discharging current	–	FIND OUT AMPERES	(CP)
4.	Batteries operation time	–	READ FROM Fig below	(P&CP)
5.	Place for landing	–	DETERMINE	(P)



ENGINE FAILURE DURING TAKE-OFF (wing flaps 18°)				
	Below $v_{1\ 18}$ speed	–		
1.	Abort the take-off	–		(P)
	Above $v_{1\ 18}$ speed	–		(CP)
2.	TCL of both engines	–	Check TAKE OFF RATING	(P)
3.	After lift off:	–	CHECK	(CP)
4.	Landing gear	–	UP	(P)
5.	Failed engine propeller feathering	–	CHECK	(P/CP)
6.	If the automatic feathering cycle has not been accomplished	–		(P)
7.	MANUAL FEATHER. Push-button of the inoperative engine	–	PUSH	(P)
8.	ELU (LH + RH) circuit breakers		OFF	(P)
9.	If the automatic feathering cycle has not been feathered even after above measures had been taken then	–		(P)
10.	PCL of the inoperative engine	–	FEATHER	(P)
11.	Airspeed	–	Min. $V_{2\ 18}$	(P)
12.	AUT.BANK CONTROL switch	–	OFF	(P)
13.	At height of 400 ft above runway check take off rating	–		
14.	Increase the airspeed	-	$V_{2\ 0}$ +3 kts	(P)
15.	Wing flaps	-	RETRACT (0°)	(CP)
16.	TCL of operating engine	-	Set continuous OEI rating	(P)

17.	Airspeed	-	$V_{2\ 0}$ up to 1,500 ft above runway	(P)
18.	Inoperative engine	-	CHECK PARAMETERS	(CP)
	If the engine fully stop			(P)
	The following items are valid for inoperative engine			
19.	TCL		IDLE	(CP)
20.	Fuel stop cock		SHUT	(CP)
21.	DC GENERATOR and AC GENERATOR. switches	–	OFF	(CP)
22.	ENGINE STARTING, ELU, FUEL PUMP circuit breakers	–	OFF	(CP)
	If the engine operates at idle and other parameters correspond to idle power then	-		
23.	Propeller Use of emergency fuel control circuit	-	UNFEATHER	(CP)

ENGINE FAILURE DURING TAKE-OFF (wing flaps 0°)				
	Below $v_{1\ 0}$ speed	–		
1.	Abort the take-off	–		(P)
	Above $v_{1\ 0}$ speed	–		(CP)
2.	TCL of both engines	–	Check TAKE OFF RATING	(P)
3.	After lift off:	–	CHECK	(CP)
4.	Landing gear	–	UP	(P)
5.	Failed engine propeller feathering	–	CHECK	(P/CP)
6.	If the automatic feathering cycle has not been accomplished	–		(P)

7.	MANUAL FEATHER. Push-button of the inoperative engine	–	PUSH	(P)
8.	ELU (LH + RH) circuit breakers		OFF	(P)
9.	If the automatic feathering cycle has not been feathered even after above measures had been taken then	–		(P)
10.	PCL of the inoperative engine	–	FEATHER	(P)
11.	Airspeed	–	Min. $V_{2\ 0}$	(P)
12.	AUT.BANK CONTROL switch	–	OFF	(P)
	At height of 400 ft above runway	–		
13.	TCL of operating engine	-	Set continuous OEI rating	(P)
14.	Up to 1,500 ft maintain airspeed	-	$V_{2\ 0}$	(P)
15.	Inoperative engine	-	CHECK PARAMETERS	(CP)
16.	If the engine fully stop			(P)
17.	The following items are valid			

ENGINE FAILURE DURING MISSED APPROACH				
1.	TCL of both engines	–	SET TAKE OFF RATING	(P)
2.	Airspeed	–	Min. $v_{2\ 18}$	(P)
3.	Wing flaps	–	18°	(CP)
4.	Landing gear	–	UP	(P)
5.	Failed engine propeller feathering	–	CHECK	(P/CP)

	If the automatic feathering cycle has not been accomplished	–		(P)
6.	MANUAL FEATHER. Push-button of the inoperative engine	–	PUSH	(P)
7.	ELU (LH + RH) circuit breakers		OFF	(P)
	If the automatic feathering cycle has not been feathered even after above measures had been taken then	–		(P)
8.	PCL of the inoperative engine	–	FEATHER	(P)
9.	Airspeed	–	Min. V_2	(P)
10.	AUT.BANK CONTROL switch	–	OFF	(P)
11.	At height of 400 ft above runway	–	Check take off rating	(P)
12.	Increase the airspeed	-	$V_{2\ 0}$ +3 kts	(P)
13.	Wing flaps	-	RETRACT (0°)	(CP)
14.	TCL of operating engine	-	Set continuous OEI rating	(P)
15.	Airspeed	-	$V_{2\ 0}$ up to 1,500 ft above runway	(P)
	Accomplish the following procedures for inoperative engine			
16.	TCL		IDLE	(CP)
17.	Fuel stop cock		SHUT	(CP)
18.	DC GENERATOR and AC GENERATOR Switches	–	OFF	(CP)
19.	ENGINE STARTING, ELU, FUEL PUMP Circuit Breakers	–	OFF	(CP)

ABNORMAL PROCEDURES

ENGINE SHUTDOWN IN FLIGHT				
1.	Operating engine	–	Continuous OEI rating or lower, as required	(P)
	Procedure on the controls of the opposite engine to be shut down:	–	SHUT	(P)
2.	TCL	–	IDLE	(P)
3.	MANUAL FEATHERING push-button (unless automatic feathering has already taken place)	–	PUSH	(P)
4.	Fuel stop cock	–	SHUT	(P)
5.	DC GENERATOR and AC GENERATOR switches	–	OFF	(P)
	After the gas generator has stopped:	–		(CP)
6.	FUEL MAIN PUMP and WING TIP TANKS circuit breakers	–	OFF	(CP)
7.	STARTING ENGINE, ELU circuit breakers	–	OFF	(CP)
8.	PCL	–	FEATHER	(CP)

MISSED APPROACH WITH ONE ENGINE INOPERATIVE				
1.	Operating engine	–	TAKE OFF RATING	(P)
2.	Propeller of inoperative engine	–	FEATHER	(P)
3.	Perform transition to climb at airspeed	–	$V_{2\ 18}$	(P)
4.	Wing flaps	–	18°	(P)
5.	Landing gear	–	UP	(P)
6.	Search lights	–	OFF	(CP)
	At height of 400 ft above the runway	–		(CP)
7.	Airspeed	–	$V_{2\ 0}$ + 3 KIAS	(CP)
8.	Wing flaps	–	RETRACT	(CP)
9.	Airspeed	–	$V_{2\ 0}$	(P)
10.	TCL of the operating engine	–	Continuous OEI rating	(P)

LANDING WITH ONE ENGINE INOPERATIVE				
	At a height of 50 ft above runway:	–		(P)
1.	Airspeed	–	$V_{REF\ 42}$	(CP)
2.	TCL	–	IDLE	(P)
	At a height of 10 ft above runway:	–		(CP)
3.	Airplane	–	FLARE	(P)
4.	Vertical speed	–	200 to 100 fpm	(CP)
	Immediately after touch-down according to conditions:	–		

5.	Spoilers push-button	–	PUSH and HOLD	(P)
	After nose wheel touch down:	–		
6.	Brakes	–	APPLY	(P)
7.	TCL of the operating engine	–	REVERSE RATING as required	(P)
8.	Below airspeed of approx.	–	30 KIAS	(CP)
9.	Spoilers	–	RELEASE	(P)

IN FLIGHT ENGINE STARTING				
	The sequence is same as in ground starting			
1.	During the starting cycle, switch off all except the most essential electric equipment	–		(CP)
2.	Maximum altitude for in flight engine starting	–	13,000 ft	(P)
3.	ELU circuit breaker of the stopped engine	–	OFF	(P)
4.	Recommended airspeed	–	Between 108 and 119 KIAS	(CP)
5.	Maximum airspeed	–	162 KIAS	(P)
	If flying at an ambient temperature of -10° or lower restart the engine not later than 2 minutes after it has stopped	–		(P)
6.	PCL after engine startup	–	COARSE PITCH (max speed)	(P)
7.	ELU RH or LH circuit breakers	–	ON	(P)

COMPRESSOR SURGING				
1.	TCL	–	IDLE	(P)
	If the ITT rise continues	–		(CP)
2.	Fuel stop cock	–	SHUT	(P)
3.	After the engine has stopped, take the action specified in Engine shutdown in flight	–		(P)

MINIMUM OIL PRESSURE (MINIMUM OIL PRESSURE – amber signal cell)				
1.	Oil pressure on the 3 pointer indicator	–	CHECK	(P)
	If the oil pressure is not within operating range	–		(P)
2.	Engine shutdown in flight procedure	–	PERFORM	(P)

METAL CHIPS IN THE OIL (CHIPS – amber signal cell)				
	In flight with both engines running:			
1.	All parameters of the affected engine	–	CHECK	(P)
2.	Continue the flight while paying particular attention to the parameters of affected engine	–		(P)
	If the oil temperature is above the maximum limit:	–		(P)

3.	Power of the affected engine	–	REDUCE AS REQUIRED	(CP)
	If the parameters of the affected engine continue to fluctuate:	–		(P)
4.	Engine shutdown in flight procedure	–	PERFORM	(P)
	Under unfavorable flight condition (icing conditions, thunderstorms, mountains, etc.) or when flying in one engine inoperative:	–		(P)
5.	Set the power of the affected engine to a level at which the main parameters of the engine will remain within the permissible limit.			(P)
6.	If it is possible to set the power to such level:			(P)
7.	If flying on the both engines:			(P)
8.	Affected engine		STOP	(P)
9.	At the nearest airport		LAND	(P)
10.	If flying on one engine only:			(P)
11.	Affected engine		DO NOT STOP	(P)
12.	Forced landing procedure		PERFORM	(P)

BETA RANGE AND PROPELLER PITCH LOCK SIGNALLING				
	On final approach			
	When the amber BETA RANGE cell (in the Engine section of the CWD) comes on perform the following procedure on the affected engine:	–		(P)
1.	TCL	–	IDLE	(P)
2.	MANUAL FEATHER push-button (under cover)	–	PUSH	(CP)
	After manual feathering and also if propeller has not been feathered:	–		(P)
3.	PCL	–	FEATHER	(P)
	During take-off	–		
	When the amber BETA RANGE cell (in the Engine section of the CWD) comes on:	–		(P)
4.	Below V_1	–	Abort take-off	(P)
	Above V_1	–		(P)
5.	ELU LH, RH	–	Switch off	(P)
6.	TAKE-OFF	–	Complete take-off	(P)
	During other phases of the flight	–		(P)
	When the amber BETA RANGE cell (in the Engine section of the CWD) comes on but amber PROPELLER PITCH LOCK cell does not come on, it is false signaling:	–		(P)
7.	ELU LH, RH	–	Switch off	(P)
8.	No further action is required.	–		

	When the amber BETA RANGE cell (in the Engine section of the CWD) and amber PROPELLER PITCH LOCK cell come on:	–		
9.	ELU LH, RH	–	Switch off	(CP)
10.	Flight	–	continue	(P)
	Before descent, for affected engine:	–		
11.	TCL	–	IDLE	(P)
12.	MANUAL FEATHER push-button (under cover)	–	PUSH	(P)
	After manual feathering and also if propeller has not been feathered:	–		
13.	PCL	–	FEATHER	
14.	Engine	–	SHUT DOWN	
15.	Complete flight with one engine inoperative.	–		

FAILURE OF AUTOMATIC SWITCHING-ON FUEL TRANSFER FROM WING TIP TANKS (ACTUATE TRANSFER – amber signal cell)				
1.	WING TIP TANK FUEL TRANSFER switch for the affected side	–	ON	(CP)
2.	FUEL TRANSFER – green signal cell	–	CHECK ON	(P&CP)

MINIMUM FUEL PRESSURE (FUEL PRESSURE – amber signal cell)				
1.	FUEL PUMP LH (RH) circuit breakers	–	CHECK ON	(CP)
2.	MINIMUM FUEL signal	–	CHECK	(CP)
3.	Fuel quantity in the group of tank in use	–	CHECK	(CP)
4.	FUEL cross feed	–	USE IF NECESSARY	(CP)
5.	FUEL pressure on the three-pointer indicator	–	CHECK	(CP)
	If the engine operates irregularly:	–		(P)
6.	TCL of the faulty engine	–	IDLE	(P)
7.	Engine shutdown in flight procedure	–	PERFORM	(P)

FAILURE OF ONE DC GENERATOR (DC GENERATOR LH/RH – amber signal cell)				
1.	DC GENERATOR switches	–	CHECK ON	(CP)
2.	DC GENERATOR switch of failed unit	–	OFF and then back ON again	(CP)
	If DC GENERATOR is fault:	–		(P)
3.	DC GENERATOR switch of failed unit	–	OFF	(CP)
4.	VA METER selector switch	–	Set first to BATTERY I VA and BATTERY II VA position	(CP)
	Right VA meter	–	CHECK charging rate	(CP)

FAILURE OF ONE AC GENERATOR (AC GENERATOR LH/RH – amber signal cell)				
1.	AC GENERATOR switches	–	CHECK ON	(CP)
2.	AC GENERATOR switch of failed unit	–	OFF and then back ON again	(CP)
	If AC GENERATOR is fault:	–		(P)
3.	AC GENERATOR switch of failed unit	–	OFF	(CP)

FAILURE OF ONE 36 V AC INVERTER (INVERTER 36 V AC I or II – amber signal cell)				
1.	INVERTER 36 V AC I or II switches	–	CHECK ON	(CP)
2.	INVERTER 36 V AC I or II switches	–	OFF and then back ON again	(CP)
	If INVERTER 36 V AC is fault:	–		(P)
3.	INVERTER 36 V AC switch of failed unit	–	OFF	(CP)

FAILURE OF BATTERY CIRCUIT (BATTERY – amber signal cell)				
1.	BATTERY switches	–	CHECK ON	(CP)
2.	VA METER selector switch	–	Set successively to BATTERY I VA and BATTERY II VA	(CP)
3.	Charging of both batteries	–	CHECK	(CP)
4.	BATTERY switch for battery which is not charged	–	OFF	(CP)

BATTERY OVERHEATING (BAT. TEMP I or II – red signal cell)				
1.	BATTERY I (II) switch	–	OFF	(CP)

EMERGENCY EXTENSION OF WING FLAPS 18°				
1.	WING FLAPS control lever	–	18°	(CP)
2.	WING FLAPS EMERGENCY EXTENSION lever	–	DOWN (OPEN)	(CP)
3.	Emergency hydraulic pump	–	Pump until appropriate indication on wing flaps position indicator comes on	(CP)

WING FLAPS RETRACTING FAILURE				
1.	Real position of the flaps	–	CHECK	(P)
2.	If the flaps have remained in the take-off position (18°):	–		(P)
3.	Maintain climb with airspeed	–	124 KIAS	(P)
4.	After climbing maintain the airspeed not exceeding	–	135 KIAS	(P)
5.	Recommended airspeed	–	108 KIAS	(P)
6.	According to PIC decision	–	Continue the flight	(P)

SPONTANEOUS EXTENSION OF ONE ABC TAB DURING TAKE-OFF				
1.	Ailerons	–	LEVEL THE AIRPLANE	(P)
2.	AUT. BANK CONTROL switch	–	OFF	(CP)
	If the ABC tab retracts	–		(P)
3.	Further flight	–	Continue	(P)
	If the ABC tab does not retract	–		(P)
4.	Trim the airplane using the aileron trim and do not exceed	–	111 KIAS	(P)
5.	Decide whether to continue the flight or to land on the airport of departure	–		(P)

EMERGENCY EXTENSION OF LANDING GEAR				
1.	LANDING GEAR lever	–	DOWN position	(P)
2.	LANDING GEAR EMERGENCY EXTENSION lever	–	DOWN	(CP)
3.	Emergency hydraulic pump	–	Pump until the 3 green lights on landing gear position indicator come on and until resistance on pump handle	(CP)
4.	If after the use of emergency hydraulic system some of the landing gear legs are stuck in the intermediate position:	–		(P)
5.	Increase the airspeed to	–	135 KIAS	(P)
6.	Climb	–	To safe altitude	(P)

7.	Wait	–	60 seconds	(P)
8.	Sideslip	–	PERFORM	(P)
9.	If locking of the landing gear leg does not take place	–		(P)
10.	Sideslip	–	Repeat 3 times	(P)
11.	After repeating the sideslip without result:	–		(P)
12.	Airplane swinging with bank of 30 to 45	–	PERFORM (max. 8 times)	(P)

EMERGENCY BRAKING				
1.	PARKING BRAKE lever	–	STOP position	(CP)
2.	Emergency hydraulic pump	–	Pump to build up necessary braking pressure (max. press 45 + 3 kp/c^2)	(CP)

DEFLATED TIRE ON ONE WHEEL				
	During take-off			
1.	Airspeed below or equal V_1	–	INTERRUPT THE TAKE OFF	(P)
2.	Relieve the load on the wheel with faulty tire and use reverse power as required.	–		(P)
3.	Airspeed above V_1	–	CONTINUE THE TAKE-OFF	(P)
4.	Landing gear	–	DO NOT RETRACT	(P)
5.	Wing flaps at altitude 400 ft	–	RETRACT	(P)
6.	Increase the airspeed to	–	135 KIAS	(P)

7.	Do not exceed this airspeed during further climb or cruise.	–		(P)
	During landing			
8.	Relieve the load on the wheel with faulty tire and use reverse power as required.	–		(P)

ONE SECTION OF PNEUMATIC AIRFRAM DEICING FAILURE				
1.	Engagement of the faulty section is accompanied by a rise of the ITT, either above the permissible maximum ITT or by more than 30° above the previous value	–	CHECK	(P)
2.	If yes, switch the function selector to MANUAL and do not use faulty section any more	–		(CP)
3.	As soon as possible leave the potential icing area.	–		(P)

TOTAL FAILURE OF PNEUMATIC AIRFRAM DEICING				
1.	Pneumatic deicing system switch	–	OFF	(CP)
2.	As soon as possible leave the potential icing area.	–		(P)

FAILURE OF PNEUMATIC DEICING TIMER RELAY				
1.	TEST A-B-C push button	–	PUSH	(CP)
2.	If only one of the lights does not come on when it is tested, this means a burnt out bulb filament.	–	Replace the bulb	(Maint crew)
3.	If it is not due to a bulb.	–		(CP)

4.	Function selector of pneumatic deicing	–	MANUAL	(CP)
5.	Selector switch next to lights	–	Set to A, then B, then C	(CP)

ELECTRIC WIND SHIELD HEATING FAILURE				
	If the outer panes of the windshield crack, or sparking is observed in the heater elements or the heater element bus bar	–		(P)
1.	WINDSHIELD HEATING LH or RH circuit breaker	–	OFF	(CP)
2.	Leave the potential icing area.	–		(P)

PROPELLER DEICING FAILURE				
1.	Simultaneous coming on of both amber PROPELLER DEICING cells means failure of main circuit of the propeller deicing cycling switch.	–		(P)
2.	PROP DEICING switch	–	STBY I or STBY II	(CP)
3.	Coming on of one of the amber PROPELLER DEICING cell or the alternate flashing of the amber PROPELLER DEICING cells on the left and right sides.	–		(P)
4.	If engine vibrations become noticeable:	–		(P)
5.	Engine power output	–	REDUCE or STOP ENGINE	(P)

STATIC HEAD FAILURE				
1.	STATIC PRESSURE I or II push-buttons	–	CHECK ON	(P)
2.	The green lights in these push-button must stay on.	–		(P)
3.	If the left hand instruments are affected:	–		(P)
4.	EMERGENCY STATIC PRESSURE red cock	–	OPEN	(P)
5.	If the right hand instruments are affected:	–		(P)
6.	AUTOPILOT (if engaged)	–	DISCONNECT	(P)
7.	Continue the flight without any special measures. Disregard readings of the vertical speed indicator, altimeter and airspeed indicator on the RH instrument panel.	–		(P/CP)

PITOT HEAD FAILURE				
1.	If the left hand instruments are affected:	–		(P)
2.	PITOT PRESSURE black cock	–	Position II	(P)
3.	If the right hand instruments are affected:	–		(P)
4.	AUTOPILOT (if engaged)	–	DISCONNECT	(P)
5.	Continue the flight without any special measures. Disregard readings of the airspeed indicator on the RH instrument panel.	–		(P/CP)