

BOMBARDIER

To: Dash 8, Model 314 Operators
Date: May 24, 2017
Subject: PSM 1–83–1B, Model 314, Dash 8, Quick Reference Handbook

Attached is a copy of Revision 30 to the Model 314 Quick Reference Handbook, dated MAY 24/17. Insert the attached revised pages using the List of Effective Pages (pages 15.1 and 15.2) as a guide. Remove and destroy superseded pages. Record the insertion of Revision 30 in the Log of Revisions at the front of the manual.

Highlights of the procedural and editorial changes in Revision 30 are follows:

- Page 9.8, Electrical:
 - The #1 DC Gen and #2 DC Gen caution light procedure is revised to change the second bullet item from “DC Gen(s) (affected)” to “DC Gen 1 and 2”.
- Page 12.7 (Mod 8/2781), Hydraulic Power:
 - Rudder System No.2 is removed from the Lost Services in the #2 HYD ISO VLV caution light procedure.
- Pages 13.4 and 13.5, Ice and Rain / Stall Protection:
 - The Deice Boot Failure and the Propeller Deicing Failure procedures are revised to remove the decision (rhomb) symbols, decision lines and Yes/No boxes.
- Pages 15.1 and 15.2, List of Effective Pages:
 - The List of Effective Pages (15.1 and 15.2) are updated for the revised pages.

Operators are encouraged to review the revised pages in their entirety.

Depending on the Modification status of the airplane, pilots and operators may retain both “Mod 8/1983” and “Mod 8/2781” pages in their copy of the QRH or just the pages appropriate to the modification status of the airplane. Variant pages not required may be discarded. Pilots and operators must ensure that the appropriate checklist is used and are urged to read the PREFACE at the front of the manual for further details.

Technical Publications Department
Bombardier Customer Services

LOG OF REVISIONS

RECORD INSERTION OF ALL REVISIONS IN THE LOG OF REVISIONS BELOW:					
REV NO.	REVISION DATE	ENTERED BY	REV NO.	REVISION DATE	ENTERED BY
1	JUNE 30/95	BBD	18	OCT 27/10	BBD
2	OCT 20/95	BBD	19	NOV 26/10	BBD
3	FEB 1/96	BBD	20	JAN 14/11	BBD
4	MAY 3/96	BBD	21	FEB 18/11	BBD
5	AUG 2/96	BBD	22	JUL 14/11	BBD
6	DEC 2/96	BBD	23	NOV 9/11	BBD
7	MAY 30/97	BBD	24	AUG 24/12	BBD
8	JAN 5/98	BBD	25	JUN 07/13	BBD
9	AUG 28/98	BBD	26	FEB 20/14	BBD
10	SEPT 8/00	BBD	27	SEP 02/14	BBD
11	AUG 3/01	BBD	28	FEB 26/16	BBD
12	JUNE 1/02	BBD	29	SEP 12/16	BBD
13	FEB 3/03	BBD	30	MAY 24/17	BBD
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15	APR 13/07	BBD			
16	FEB 11/09	BBD			
17	JUN 15/09	BBD			

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QRH PREFACE

PURPOSE

The Dash 8 Quick Reference Handbook (QRH) is designed to assist trained pilots to verify that the proper procedures have been carried out.

The QRH provides the flight crew with information derived from the DOT Approved Airplane Flight Manual (AFM) to operate the airplane in most Normal and Non-normal/Emergency situations. It is the Operator's responsibility to ensure the checklists are applicable to their type of operation. In the event of an inconsistency between any checklist and the approved AFM, the AFM takes precedence.

Pilots must be aware that checklists cannot be created for all conceivable situations and are not intended to preclude good judgement. In some cases deviation from the checklists may, at the discretion of the PIC, be necessary. Under all circumstances, the first priority is to maintain safety of the airplane for the duration of the flight.

PRESENTATION

- Abbreviations do not have periods and are pluralized by an 's' in lower case (ECUs, RMIs, CBs).
- Revision bars located on the right hand margin of the page indicate changes incorporated in the latest revision.
- With some exceptions, only the most current modification status is reflected in the checks. (See Preface page iii for exceptions.)
Operators are responsible for ensuring the checklists are applicable to the Mod status of their airplanes.
- With the exception of APU, TCAS and EFIS, options normally covered in AFM with Supplements are not addressed.

TERMINOLOGY

The following are terms unique to the QRH.

- Flap set/ind
This response is intended to include a particular flap setting.
- Altimeters set
Set means check or set the pilot's, copilot's and standby altimeters.
- Bleed Air refers to the selector and the switch and will have a response such as: On / Max or On / Norm.
- Bleed Selector refers only to the selector and will have a response of either Min, Norm or Max.

QRH PREFACE

ABBREVIATIONS

&	And
Auto	Automatic
CB	Circuit Breaker
Diff	Differential
Gen	Generator
Hyd	Hydraulic
Max	Maximum
MCP	Maximum Continuous Power
MTOP	Maximum Take-off Power
Norm	Normal
Prop	Propeller
Qty	Quantity
req'd	Required
stby	Standby
Sys	System

NORMAL CHECKLIST

The Normal checklists are organized by phase of flight and assume completion of the previous checklist.

An unshaded box separating procedural steps (i.e. START APPROVED), defines a logical break that allows partial completion of the checklist until further action is appropriate.

PERFORMANCE

The Performance section contains abbreviated engine torque tables, unfactored landing distance tables, performance graphs, and speed tables.

NON-NORMAL/EMERGENCY CHECKLISTS

The Non-normal/Emergency checklists contain only those items and procedures that differ from the normal operations of the airplane.

The Non-normal/Emergency checklist assumes that if an indicating light associated with a system is not illuminating, the integrity of the bulb is checked prior to referring to the checklist.

Each Non-normal/Emergency situation addressed in the checklist will be arranged as required in the following format:

1. Items enclosed within a box shall be given due consideration as immediate items to be accomplished in order to respond to the emergency situation. These boxed items may be completed by either following the checklist or from memory, as required by individual company approved procedures.

2. Checklist items specific to the malfunction.

3. Landing Considerations: This information is specific to the malfunction and is used to supplement the normal operations of the airplane. The Landing Considerations must be reviewed as part of the approach briefing.

4. The statement "Land immediately at the nearest suitable airport" is defined as:

- Land at the nearest airport that offers sufficient landing distance available and if required, emergency services to support the emergency or abnormality.


QRH PREFACE

5. The statement “Land at the nearest suitable airport” is defined as:

- The airplane may continue to the destination airport or the nearest airport where maintenance services are available.

6. The statement “Maintenance action required prior to next flight” is defined as:

- “Next Flight” is referring to the immediate or imminent take-off after discovery.

A flow pattern concept is used throughout the QRH as applicable, utilizing the decision (rhomb) symbol ().

This decision symbol indicates a flow pattern which points to two or more possible courses of action. The procedure is completed once the (– **END** –) symbol is reached.

Following completion of the appropriate Non-normal/Emergency checklist, the Normal checklist will be used as modified by the Non-normal/Emergency checklist for the remainder of the flight.

Non-normal/Emergency checklists are referenced on the Chapter 4 tab divider. Each section also contains a Table of Contents with boxed items being memory checks. Caution and Warning Light annunciations are shown capitalized in bold type within quotation marks.

The last page of the QRH is an illustration of the Caution and Warning Lights panel with a page reference for that particular Caution or Warning Light.

MOD 8/1983 and MOD 8/2781

Mod 8/1983 and Mod 8/2781 both introduce an automatic isolation of the rudder hydraulic circuit in the event of low hydraulic pressure in No. 2 hydraulic system. No. 2 Stby Hyd pump continues to operate within this isolated circuit and thus provides continuous hydraulic pressure. Mod 8/1983 and Mod 8/2781 impact various Non-normal/Emergency checklists in the QRH. Mod 8/1983 and Mod 8/2781 pages are provided for the specific QRH checklists affected. All of these variant pages may be retained in the QRH if the pilot is operating a mixed fleet of Mod airplanes. Pilots and operators must ensure that the appropriate QRH page is utilized depending on the Modification status of the airplane.

The specific QRH pages affected may be determined from the LOEP (pages 15.1 and 15.2). The applicability of these pages is indicated on the bottom of each page as follows:

MOD 8/1983 ONLY

OR

MOD 8/2781 ONLY

QRH PREFACE

MODSUM 8Q100813 or 8Q110193

Modsum MS8Q100813 and 8Q110193 introduce an Auto Ignition System. On standard aircraft, ignition for engine starting is controlled by engine start control circuits with the ignition system in the Normal Mode. On aircraft with Modsum 8Q100813 or 8Q110193 incorporated, engine starting is controlled with the ignition switch in the Auto Mode. The ignition switch is marked OFF–AUTO–MANUAL. An auto relight system is armed when IGNITION 1 or IGNITION 2 switch on the ENGINE START panel is selected to AUTO. If, during engine operation, the NH speed falls below 60% a switch in the NH indicator closes. This switch causes power to be supplied to the ignition circuit. While the NH speed remains below 60%, the ignition circuit is powered and the spark igniters operate continuously. When the engine speed increases to above 60% the NH indicator switch opens and causes power to be removed from the ignition circuit. This function of the Auto ignition switch selection is disabled when the condition lever is in the FUEL OFF position.

MODSUM 8Q100880

Modsum 8Q100880 installs an Enhanced Ground Proximity Warning System in lieu of the Ground Proximity Warning System. As a service to operators, reference to the both systems will be retained in the QRH despite the GPWS not being the current production standard for Series 300 airplanes.

DASH 8 – COCKPIT PREPARATION

PREFLIGHT

- External Check completed
- Documentation check
- Locking Devices remove

COCKPIT PREPARATION – CAPTAIN

- Safety Equipment check serviceable & secure
- Escape Hatch secure
- Oxygen Masks / Qty check
- Circuit Breakers check
- Alt Gear Doors / L/G Inhibit switch closed / Normal

For DC External Power

- Battery Master / Main & Aux on
- Main Bus Tie Tie
- DC Ext Power on
- Bus Voltage check
- Recirc Fans on

For APU Power

- Battery Master / Main & Aux on
- Main Bus Tie Tie
- Caution / Advisory Lights test
- APU Pwr on
- APU Fuel Valve Open
- APU Fire Detection test
- APU Pwr off then on
- APU Fuel Valve Open
- Position Lights on
- APU Start press
- APU Run on
- APU Gen press
- APU Generator Volts / Load check
- Battery Temperature check
- Recirc Fans on
- APU Bleed (20 Sec) as req'd

**COCKPIT PREPARATION – CAPTAIN
(Cont'd)**

For Battery Power Only

DC Gen 1 and 2	on	█
Main Bus Tie	Tie	
Ice Protection	Off	
External Lighting	Off	
Ignition 1 and 2	Norm (Auto)	
Recirc Fans	on	█
Bleed Air 1 and 2	Min / Off	
Emergency Lights	Arm	
Passenger Signs	on	█
ECU Modes / Selector	On / TOP	
Autofeather	off	█
Alternate Feather	Norm	
Emerg Brake / Pressure	on/check	█
Power levers	Flt Idle	
Condition levers	Fuel Off	█
Briefing	review	

START APPROVED

Battery Master / Main & Aux	on	█
*Fire Detection	test	
*Beta Lockout	test	
Doors / Fueling Lights	out	█
Anti-Collision	Red	
Engine	clear for start	

Note: *Unfeather propeller of first engine and delay start of second engine for 30 secs. Complete cockpit preparation before proceeding to AFTER START check list.*

*System Check Once Every 24 Hours Flying Day

**COCKPIT PREPARATION – CAPTAIN
(Cont'd)**

- DC Gen 1 and 2 on
- Ice Protection / WS Heat & Wipers Off
- Landing / Taxi Lights Off
- ELT as req'd
- *Fire Detection test
- Fuel Valves Open
- Baggage Smoke Warning test
- Panel Lighting as req'd
- Ignition 1 and 2 Norm (Auto)
- Cabin Altitude Controls set
- Exterior Lights as req'd
- Emergency Lights Arm
- Passenger Signs as req'd
- Caution / Advisory Lights test
- Temp Controls set
- Bleed Air 1 and 2 Min / Off
- AC External Off
- Inverters Primary / left / Secondary
- AC Gen 1 and 2 on
- GPWS Override norm
- Nosewheel Steering Off
- Stall Warning 1 and 2 test
- *Beta Lockout test
- CB & Panel Lighting as req'd
- Smoke Goggles check
- Clock check
- Stick Pusher Shut-off norm
- GPWS test
- PFCS norm
- Flight Guidance Controller check
- Advisory Display Unit check
- Flight Instruments check
- Altimeters set

*System Check Once Every 24 Hours Flying Day

COCKPIT PREPARATION – CAPTAIN (Cont'd)

Stby Attitude Indicator erect
 PFCS Indicator check
 Static Source Normal
 Alt Pre-selector set
 Standby Altimeter set
 Engine Intake Bypass Doors as req'd
 ECU Modes / Selector On / TOP

Caution: *To ensure engine uptrim in the event of an engine failure, the Engine ECU selector must be at TOP.*

Engine Instruments check
 Landing Gear Sel/ Lights/Horn check
 Fuel Temp check
 Alternate Feather Norm
 Autofeather off
 Fuel Transfer Off
 Tank Aux Pumps 1 and 2 Off
 Fuel Qty check
 Pitch & Roll Disc in
 Radios / Nav Aids set
 AHRS (if applicable) test
 GPWS Landing Flap (if applicable) as req'd
 Radar Off
 Trims check/set
 Emerg Brake / Pressure on/check
 Control Lock On
 Power levers Flt Idle
 Condition levers Fuel Off
 *EFIS Control Panel test
 Audio Panel set
 TCAS test

*System Check Once Every 24 Hours Flying Day

**COCKPIT PREPARATION –
FIRST OFFICER**

Audio Panel	set
*EFIS Control Panel	test
Radios / Nav Aids	set
AHRS (if applicable)	test
Stick Pusher Shut-off	norm
Clock	set
Synchrophase	Off
Anti-Skid	On
Advisory Display	check
Flight Instruments	check
Manual PTU	off
Stby Hyd Press 1 and 2	Norm
Hyd Qty	check
Roll Spoiler Pressure switches	norm
Static Source	Normal
Smoke Goggles	check
CB and Panel Lighting	as req'd
Oxygen Press	check
Forward Outflow Valve	Normal

*System Check Once Every 24 Hours Flying Day

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DASH 8 – NORMAL CHECKLIST

ORIGINATING BEFORE START

GPU / APU on
Recirc Fans on
External Check completed
Cockpit Preparation completed
Briefing completed

BEFORE START

Escape Hatch closed
Alt Gear Door / L/G Inhibit switch closed / Normal
Circuit Breakers check
Battery Master / Main & Aux on
Passenger Signs on
Emergency Lights Arm
Anti-Skid On
ECU Modes / Selector On / TOP
Fuel Transfer / Qty Off / check
Emerg Brake / Pressure on / check
Power levers Flight Idle
Condition levers Fuel Off
Take-off Data reviewed

START APPROVED

Door / Fueling Lights out
APU Bleed off
Anti-Collision Red
Engine clear for start

AFTER START

- Ext Pwr / APU Off
- Main Bus Tie Off
- Bleed Air 1 and 2 on / Norm
- Condition levers Min
- Battery Temps check
- DC / AC Volts and Load check
- Stby Hyd Press 1 and 2 on
- Hyd Press & Qty check
- Flap select
- Deice Pressure check
- Rudder Travel full travel
- Nosewheel Steering on
- Windshield Heat / Plt Wdo Heat as req'd
- Advisory Display check
- Radar / Nav / Comm set
- Transponder as req'd
- Flight Instruments check
- Yaw Damper on / check

Note: *If Flap 0° Take-off is intended, set Take-off Switch as required*

***SYSTEM CHECK
ONCE EVERY 24 HRS – FLYING DAY**

- Beta Lockout test
- Beta Backup test
- Autofeather & Power Uptrim test
- Manual PTU test
- Fire Detection test
- Rudder Actuator test
- EFIS Control Panel test
- Ice Protection as req'd

TAXI CHECK

Taxi Light as req'd
Altimeters set
Flight Instruments check
Tank Aux Pumps 1 and 2 On
Autofeather Select
Flap set / ind
Trims 3 set
Condition levers Max
Pitot Static Heat on
Ice Protection as req'd
Caution / Warning Lights check
Flight Clearances reviewed
Cabin secure

LINE UP

F/A Notification as req'd
Bleed Air 1 and 2 Min / as req'd
Anti-Collision White
Transponder / TCAS on
Flight Controls check / free
Landing / Taxi Lights on / Off

Note: *Before entering icing conditions see page 2.7.*

AFTER TAKEOFF

- Landing Gear Up
- Flap 0
- Bleed Air 1 and 2 on / as req'd
- Autofeather off
- Climb Power set
- Synchrophase On
- Stby Hyd Press 1 and 2 Norm
- Tank Aux Pumps 1 and 2 Off
- Engine Temps & Pressures check
- Ice Protection as req'd
- Cabin Press & Temp Controls check
- Passenger Signs as req'd

CRUISE

- Altimeters set
- Power set
- Cabin Press check
- Lights as req'd

DESCENT

- Altimeters set
- Approach / Landing Briefing review
- Cabin Alt Controls set
- Ice Protection as req'd

Note: Before entering icing conditions see page 2.7.

APPROACH

- Altimeters set
- Lights as req'd
- GPWS Landing Flap (if applicable) select
- Fuel Transfer Off
- Tank Aux Pumps 1 and 2 on
- Stby Hyd Press 1 and 2 on
- Hyd Press & Qty check
- Passenger Signs on
- Caution / Warning Lights check
- Cabin secure

Note: Before entering icing conditions see page 2.7

LANDING

- Ice Protection as req'd
- Landing Gear Down / 3 green
- Flap set / ind
- Synchrophase Off
- Condition levers Max
- Bleed Air 1 and 2 Min / as req'd
- F/A Notification as req'd

AFTER LANDING

Control Lock On
Transponder as req'd
Radar stby
Flap 0
Tank Aux Pumps 1 and 2 Off
Yaw Damper off
Anti-Collision Red
Lights as req'd
Ice Protection Off
Main Bus Tie Tie
APU (if applicable) as req'd
Bleed Air 1 and 2 as req'd

SHUTDOWN

Taxi Light Off
Emerg Brake on
Stby Hyd Press 1 and 2 Norm
Power levers Flight Idle
Condition levers Start & Feather
Passenger Signs Off
Nosewheel Steering Off
Radar Off
Transponder stby
Bleed Air 1 and 2 Min / Off
APU / GPU as req'd
Emergency Lights Off
Condition levers (30 Sec) Fuel Off
Lights as req'd
Battery Master as req'd

LAST FLIGHT

Recirc Fans as req'd
Anti-Skid Off
Main & Aux Battery Off
Battery Master Off

FLIGHT IN ICING CONDITIONS

Take-off In Icing Conditions:

Take-off With Increased V_1 , V_R , V_2 :

- Increase V_{CLIMB} and Take-Off Field lengths as follows:

FLAP	INCREASE V_1, V_R, V_2, V_{FRI}	INCREASE V_{CLIMB}	INCREASE TOD, TOR, ASD
0/5	+ 5 KTS	–	15%
10	+ 7 KTS	–	20%
15	+ 10 KTS	–	30%
0	–	+ 15 KTS	–

Holding, Approach and Landing in Icing Conditions:

Note: Flap must be set at 0 when holding in icing conditions

- Increase Speeds and Landing Field lengths as follows:

FLAP	INCREASE V_{APP} & V_{GA}	INCREASE V_{REF}	INCREASE LFL	HOLDING
10	+ 15 KTS	–	–	–
15	+ 10 KTS	+ 10 KTS	16%	–
35	–	+ 5 KTS	10%	–
0	–	–	–	1.3 V_s + 15 Kts

Holding, Approach and Landing After Flight in Icing Conditions and with Suspected Accumulation on Unprotected Surfaces (Ice Protection Systems “Off”):

- Increase speeds as follows:
 - V_{APP} & V_{GA} for Flap 5 increase 5 KTS.

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FLIGHT IN ICING CONDITIONS

Take-off with INCR REF SPEED Switch incorporated:

At 400 ft AGL (commencement of third segment):

- Increase speed to $V_{CLIMB} + 15$ kt
- INCR REF SPEED Switch INCR REF SPEED

Caution: *If airspeed is not increased before INCR REF SPEED Switch is selected to INCR REF SPEED, stall warning may occur.*

- Airframe Mode Selector Fast

At 400 ft AGL: Continuation of second segment;

- Increase Speeds as follows:

FLAP	INCREASE V_2, V_{FRI}
0/5	+ 5 kt
10	+ 7 kt
15	+ 10 kt

- INCR REF SPEED Switch INCR REF SPEED

Caution: *If airspeed is not increased before INCR REF SPEED Switch is selected to INCR REF SPEED, stall warning may occur.*

- Airframe Mode Selector Fast

Holding, Approach and Landing in Icing Conditions:

Note: *Flap must be set at 0 when holding in icing conditions*

- Increase Speeds and Landing Field lengths as follows:

FLAP	INCREASE V_{APP} & V_{GA}	INCREASE V_{REF}	INCREASE LFL	HOLDING
10	+ 15 KTS	–	–	–
15	+ 10 KTS	+ 10 KTS	16%	–
35	–	+ 5 KTS	10%	–
0	–	–	–	1.3 Vs+ 15 Kts

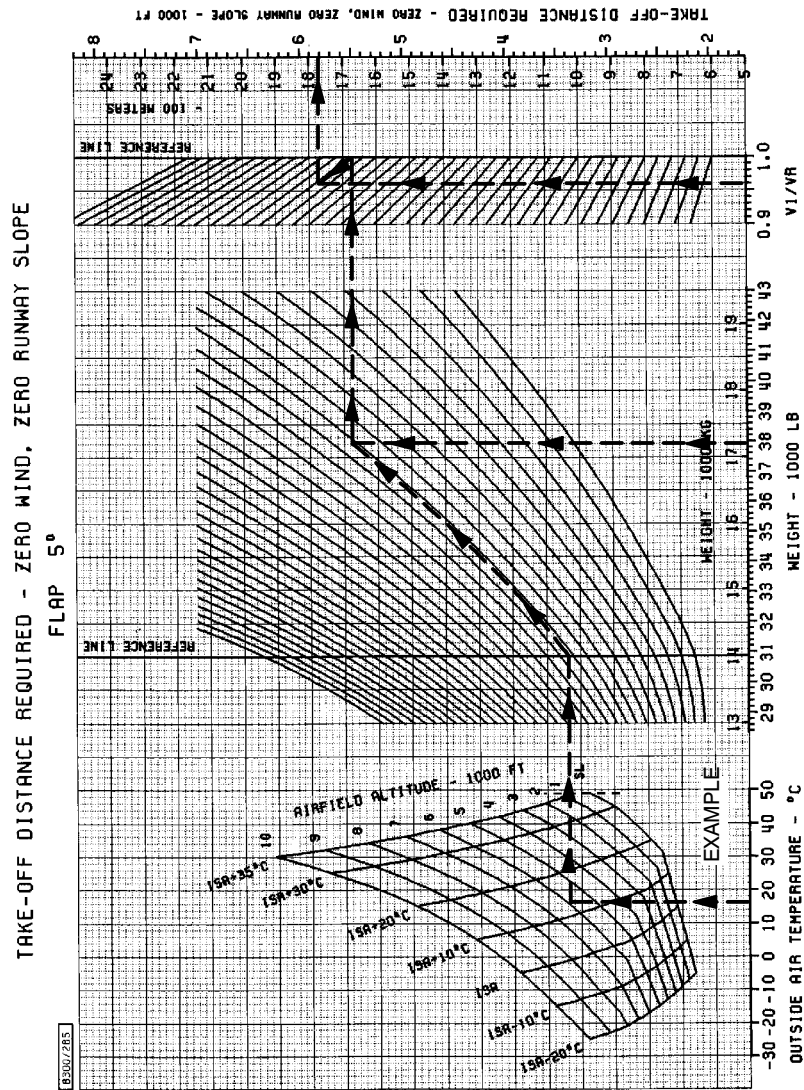
Holding, Approach and Landing After Flight in Icing Conditions and with Suspected Accumulation on Unprotected Surfaces (Ice Protection Systems “Off”):

- Increase speeds as follows:
 - V_{APP} & V_{GA} for Flap 5 increase 5 KTS.

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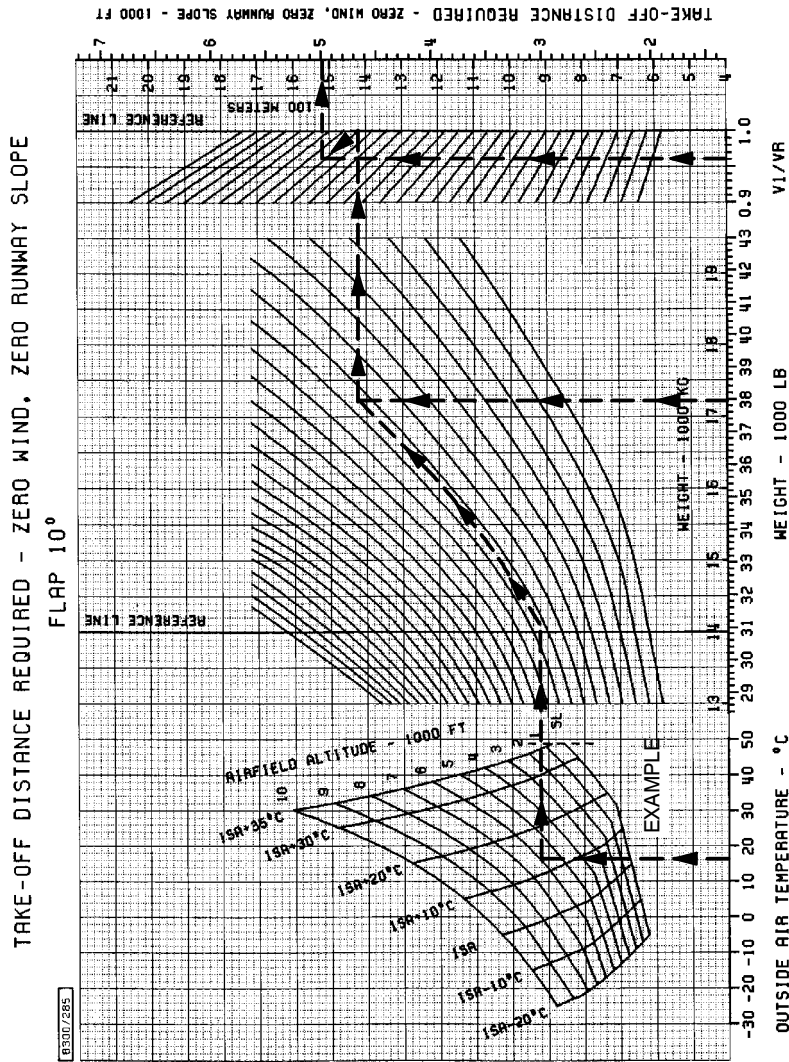
DASH 8 MODEL 314

TAKE-OFF DISTANCE REQUIRED FLAP 5 ZERO WIND ZERO RUNWAY SLOPE



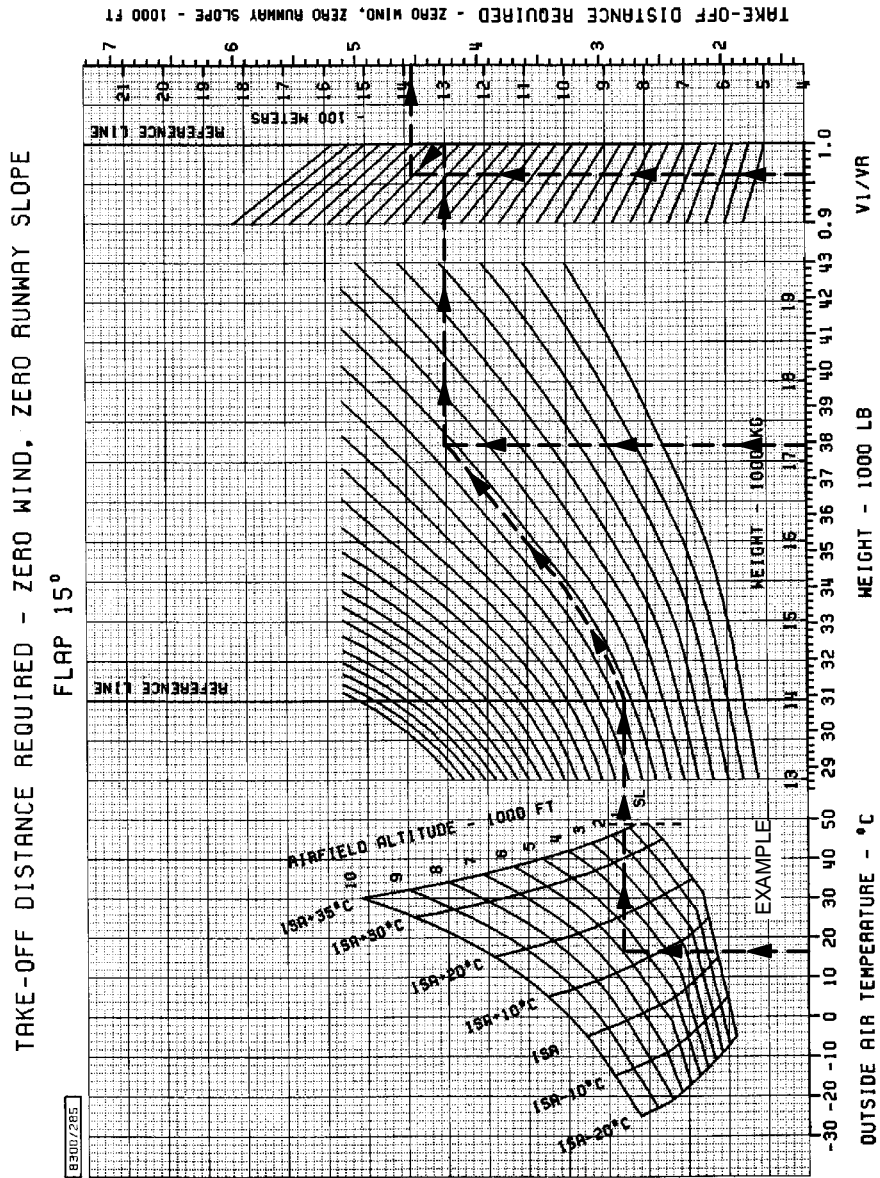
DASH 8 MODEL 314

TAKE-OFF DISTANCE REQUIRED
FLAP 10
ZERO WIND
ZERO RUNWAY SLOPE



DASH 8 MODEL 314

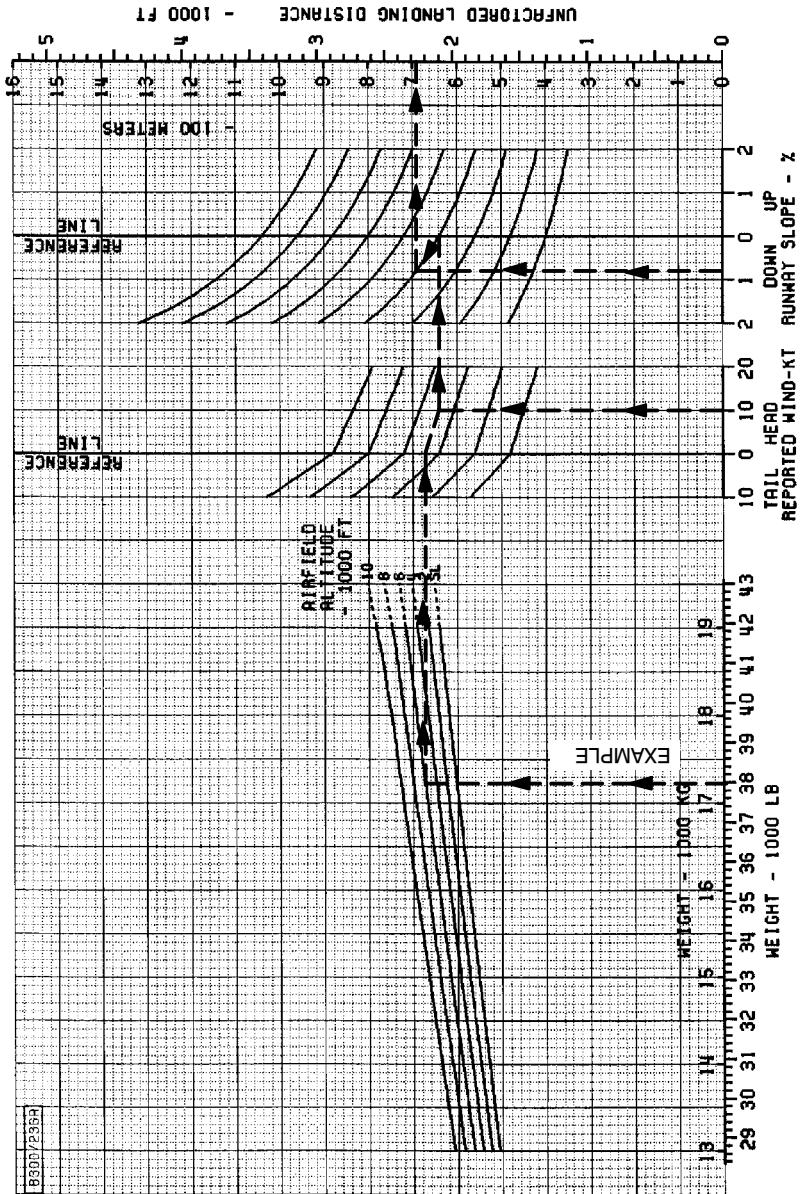
TAKE-OFF DISTANCE REQUIRED FLAP 15 ZERO WIND ZERO RUNWAY SLOPE



DASH 8 MODEL 301/311/314/315

UNFACTORED LANDING DISTANCE FLAP 15

(SEE PAGE 3.6 FOR LANDING FIELD LENGTH REQUIRED)

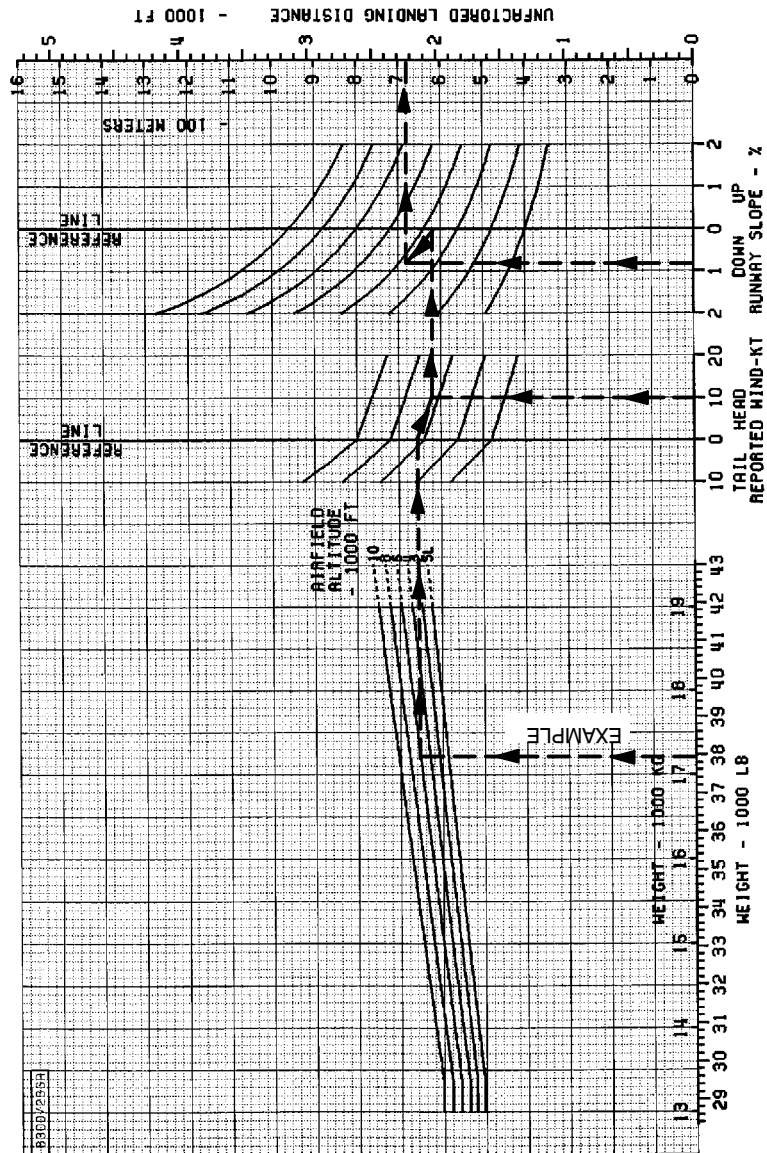


DASH 8 MODEL 301/311/314/315

UNFACTORED LANDING DISTANCE

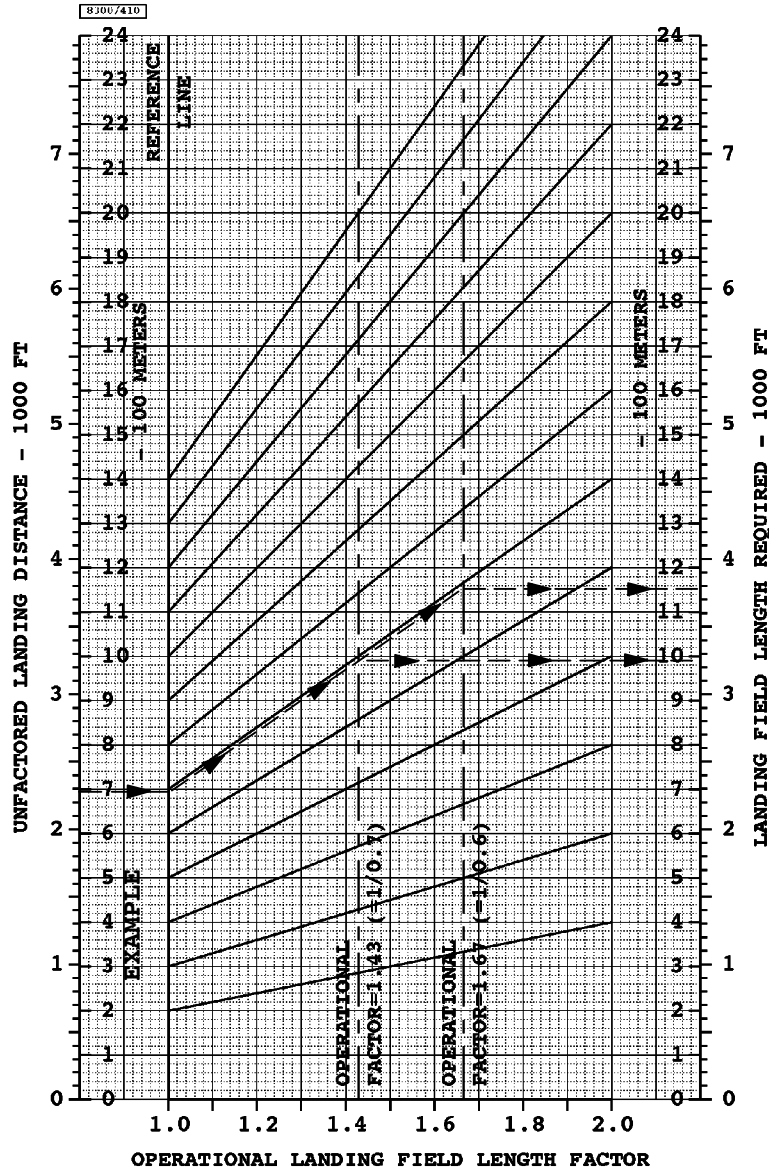
FLAP 35

(SEE PAGE 3.6 FOR LANDING FIELD LENGTH REQUIRED)



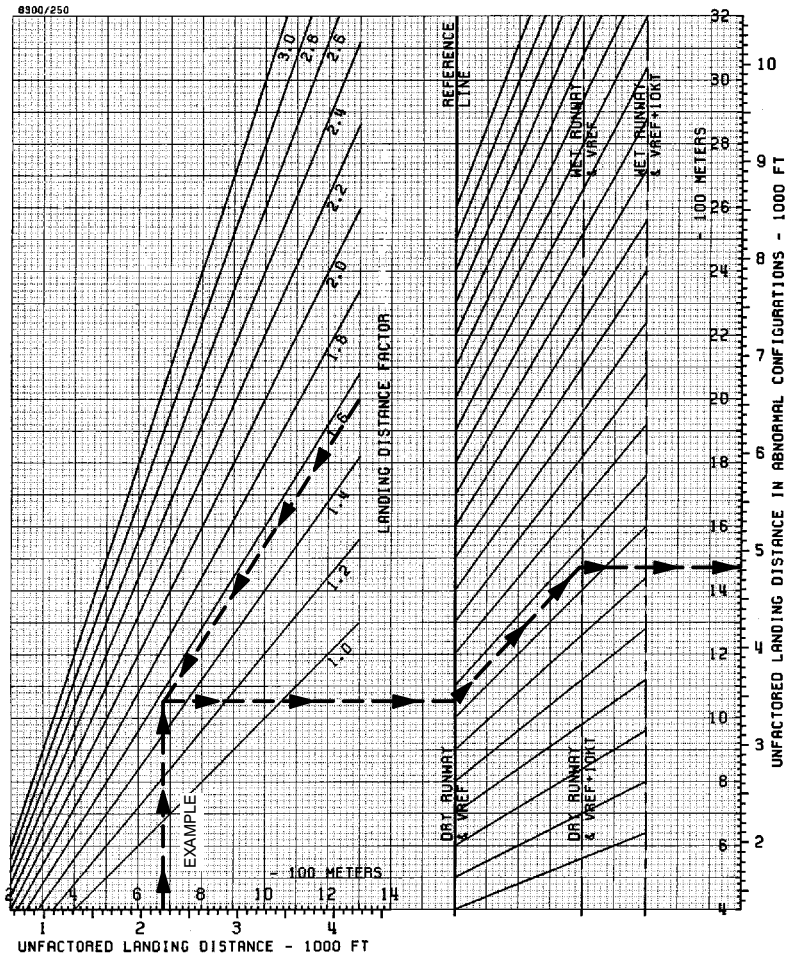
DASH 8 MODEL 301/311/314/315

LANDING FIELD LENGTH REQUIRED



DASH 8 MODEL 301/311/314/315

UNFACTORED LANDING DISTANCE IN ABNORMAL CONFIGURATIONS



(FROM PAGE 3.4 OR 3.5)

DASH 8 MODEL 311/314/315

SPEED VERSUS WEIGHT

SPEED VERSUS WEIGHT

WEIGHT 1000		FLAP 0		FLAP 5		FLAP 10		FLAP 15		FLAP 35	
		1.3VS	1.4VS	1.3VS	1.4VS	1.3VS	1.4VS	1.3VS	1.4VS	1.3VS	1.4VS
KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS
13.2	29	111	119	103	111	95	102	91	98	85	91
13.6	30	113	122	105	113	97	104	92	99	86	92
14.1	31	115	124	107	115	98	105	94	101	87	94
14.5	32	117	126	109	117	100	107	95	102	89	95
14.9	33	119	128	110	118	101	109	97	104	90	97
15.4	34	121	129	112	120	103	111	98	106	91	98
15.9	35	122	131	113	122	104	112	100	107	93	100
16.3	36	124	133	115	124	106	114	101	109	94	101
16.8	37	126	135	117	126	107	115	103	110	95	103
17.2	38	128	137	118	127	109	117	104	112	97	104
17.7	39	129	139	120	129	110	119	105	113	98	105
18.1	40	131	141	121	131	111	120	107	115	99	107
18.6	41	133	142	123	132	113	122	108	116	100	108
19.1	42	134	144	124	134	114	123	109	118	101	109
19.5	43	136	146	126	135	115	124	111	119	102	110

DASH 8 MODEL 311/314/315

LANDING /GO-AROUND SPEEDS (KIAS)

GO AROUND (V_{GA})

WEIGHT 1000	FLAP	
	10	15
13.2	29	89
13.6	30	89
14.1	31	91
14.5	32	92
14.9	33	94
15.4	34	95
15.9	35	97
16.3	36	98
16.8	37	99
17.2	38	101
17.7	39	102
18.1	40	103
18.6	41	105
19.1	42	106
19.5	43	107

APPROACH (V_{APP})

WEIGHT 1000	FLAP	
	10	15
13.2	29	95
13.6	30	96
14.1	31	98
14.5	32	100
14.9	33	101
15.4	34	103
15.9	35	104
16.3	36	106
16.8	37	107
17.2	38	109
17.7	39	110
18.1	40	112
18.6	41	113
19.1	42	114
19.5	43	115

MINIMUM V_{REF}

WEIGHT 1000	FLAP	
	15	35
13.2	29	91
13.6	30	92
14.1	31	94
14.5	32	95
14.9	33	97
15.4	34	98
15.9	35	100
16.3	36	101
16.8	37	103
17.2	38	104
17.7	39	106
18.1	40	107
18.6	41	108
19.1	42	109
19.5	43	111

V_{REF} = 1.3V_S

NORMAL TAKE-OFF POWER

DASH 8 MODEL 314

STATIC

PRESS ALT FEET	SAT °C = OAT °C									
	-30	-20	-10	0	10	20	30	40	45	49
10000	-	90	86	82	77	71	64	-	-	-
9000	-	93	89	85	80	74	67	-	-	-
8000		97	95	88	83	77	70	-	-	-
7000			97	92	86	80	73	-	-	-
6000				96	90	83	76	-	-	-
5000					93	87	79	72	-	-
4000					97	90	82	75	-	-
3000					◆	94	86	78	-	-
2000						97	89	81	77	-
1000							93	85	80	-
SL							97	88	84	80

CONDITIONS: BLEED AIR OFF.
 N_p 1200.
 ◆◆◆ Denotes ISA Line
 - dashes indicate numbers outside charted values.

NORMAL TAKE-OFF POWER

DASH 8 MODEL 314

IN FLIGHT 70 KIAS

PRESS ALT FEET	SAT °C = OAT °C									
	-30	-20	-10	0	10	20	30	40	45	49
12000	85	81	77	73	68	63	-	-	-	-
11000	-	84	80	76	72	65	-	-	-	-
10000	-	88	84	80	75	69	63	-	-	-
9000	-	92	87	83	78	72	65	-	-	-
8000		95	91	86	81	75	68	-	-	-
7000			95	90	84	78	71	-	-	-
6000				93	88	81	74	-	-	-
5000					91	85	77	70	-	-
4000					95	88	80	73	-	-
3000					◆	92	84	76	-	-
2000						95	87	79	75	-
1000							91	83	78	-
SL							95	86	82	78

CONDITIONS: BLEED AIR OFF.
 N_p 1200.
 ◆◆◆ Denotes ISA Line
 - dashes indicate numbers outside charted values.

MAXIMUM TAKE-OFF POWER

DASH 8 MODEL 314

IN FLIGHT 100 KIAS

PRESS ALT FEET	SAT °C = OAT °C									
	-30	-20	-10	0	10	20	30	40	45	49
12000	94	90	86	82	76	70	-	-	-	-
11000	-	94	90	86	80	73	-	-	-	-
10000	-	98	94	89	84	77	70	-	-	-
9000	-	103	98	93	87	81	73	-	-	-
8000		105	102	97	91	84	76	-	-	-
7000			105	101	95	87	79	-	-	-
6000				104	98	91	83	-	-	-
5000					102	94	86	78	-	-
4000					105	99	90	81	-	-
3000						103	94	85	-	-
2000		AREA OF CONSTANT 105% TORQUE				105	98	89	84	-
1000							102	93	88	-
SL						105	97	91	87	-

CONDITIONS: BLEED AIR OFF. ◆ ◆ ◆ Denotes ISA Line
 NP 1200.
 AIRSPEED 100 KIAS.
 DE-ICING ON or OFF
 - dashes indicate numbers outside charted values.

MAXIMUM CONTINUOUS POWER

DASH 8 MODEL 301/311/314/315 IN FLIGHT 120 KIAS

PRESS ALT FEET	SAT °C = OAT °C										
	-50	-40	-30	-20	-10	0	10	20	30	40	
25000	58	57	54	51	49	46	-	-	-	-	
24000	61	59	56	53	51	48	-	-	-	-	
23000	64	62	58	55	53	50	-	-	-	-	
22000	-	64	61	58	55	52	-	-	-	-	
21000	-	67	63	60	57	54	-	-	-	-	
20000	-	70	66	63	60	56	52	-	-	-	
19000	-	73	69	65	63	59	54	-	-	-	
18000	-	75	72	68	65	61	57	-	-	-	
17000	-	-	74	71	67	63	59	-	-	-	
16000	-	-	78	74	70	66	62	-	-	-	
15000	-	-	81	77	73	69	64	58	-	-	
14000	-	-	84	80	76	72	67	61	-	-	
13000			88	83	79	75	70	64	-	-	
12000			90	87	83	78	73	67	-	-	
11000				90	87	82	77	70	-	-	
10000					90	85	80	74	67	-	
9000					90	89	83	77	70	-	
8000						90	87	80	73	-	
7000							90	83	76	-	
6000								90	87	79	
5000									90	82	75
4000									90	85	78
3000									90	89	81
2000		AREA OF CONSTANT 90% TORQUE							90	85	
1000									90	88	
SL										90	

INCREASE TORQUE BY 1% FOR EVERY 15 KTS ABOVE 120 KIAS. MAX. 90%.

CONDITIONS: FOR ALL WEIGHTS ◆ ◆ ◆ Denotes ISA Line
 BLEED AIR ON.
 NP 1200.
 DE-ICING ON or OFF
 - dashes indicate numbers outside charted values.

TYPE II CLIMB TORQUE (%)
DASH 8 MODEL 301/311/314/315 **900 RPM**

PRESS ALT FEET	TYPE II KIAS	SAT °C = OAT °C										
		-50	-40	-30	-20	-10	0	10	20	30	40	50
25000	135	72	68	65	62	58	53	-	-	-	-	-
24000	139	75	72	68	65	61	57	-	-	-	-	-
23000	143	79	75	72	68	64	59	-	-	-	-	-
22000	147	83	79	75	71	67	62	56	-	-	-	-
21000	151	-	83	79	75	71	65	59	-	-	-	-
20000	155	-	87	82	79	74	69	62	-	-	-	-
19000	159	-	91	86	82	78	72	65	-	-	-	-
18000	163	-	95	90	86	81	75	68	62	-	-	-
17000	165	-	96	95	89	85	79	71	65	-	-	-
16000	165	-	-	96	93	88	82	75	68	-	-	-
15000	165	-	-	-	96	93	85	78	71	-	-	-
14000	165	-	-	-	-	96	89	81	74	-	-	-
13000	165	-	-	-	-	-	92	84	77	-	-	-
12000	165	-	-	-	-	-	96	87	80	72	-	-
11000	165	-	-	-	-	-	96	90	83	75	-	-
10000	165	-	-	-	-	-	-	93	86	78	-	-
9000	165	-	-	-	-	-	-	96	89	81	-	-
8000	165	-	-	-	-	-	-	-	93	85	-	-
7000	165	-	-	-	-	-	-	-	96	88	-	-
6000	165	-	-	-	-	-	-	-	-	92	82	-
5000	165	-	-	-	-	-	-	-	-	95	85	-
4000	165	-	-	-	-	-	-	-	96	89	-	-
3000	165	-	-	-	-	-	-	-	-	92	-	-
2000	165	-	-	-	-	-	-	-	-	96	85	-
1000	165	-	-	-	-	-	-	-	-	96	89	-
SL	165	-	-	-	-	-	-	-	-	-	92	-

CONDITIONS: FOR ALL WEIGHTS. ◆ ◆ ◆ Denotes ISA Line
 BLEED AIR ON.
 DE-ICING ON or OFF.
 - dashes indicate numbers outside charted values.

TYPE II CLIMB TORQUE (%)
DASH 8 MODEL 301/311/314/315 **1050 RPM**

PRESS ALT FEET	TYPE II KIAS	SAT °C = OAT °C										
		-50	-40	-30	-20	-10	0	10	20	30	40	50
25000	135	64	61	58	55	52	47	-	-	-	-	-
24000	139	67	64	61	58	54	50	-	-	-	-	-
23000	143	71	67	64	61	57	52	-	-	-	-	-
22000	147	74	70	67	64	60	55	-	-	-	-	-
21000	151	-	74	70	67	63	58	-	-	-	-	-
20000	155	-	77	73	70	66	61	55	-	-	-	-
19000	159	-	81	77	73	69	64	57	-	-	-	-
18000	163	-	84	80	76	72	67	60	-	-	-	-
17000	165	-	88	84	80	75	70	63	-	-	-	-
16000	165	-	91	87	83	78	72	66	60	-	-	-
15000	165	-	96	91	86	81	76	69	62	-	-	-
14000	165	-	-	94	89	85	79	71	65	-	-	-
13000	165	-	-	96	94	88	82	74	67	-	-	-
12000	165	-	-	-	96	91	85	77	70	63	-	-
11000	165	-	-	-	-	96	88	80	73	66	-	-
10000	165	-	-	-	-	96	91	83	75	68	-	-
9000	165	-	-	-	-	-	95	87	80	71	-	-
8000	165	-	-	-	-	-	96	90	82	74	-	-
7000	165	-	-	-	-	-	-	93	85	77	-	-
6000	165	-	-	-	-	-	-	96	90	80	71	-
5000	165	-	-	-	-	-	-	-	93	83	74	-
4000	165	-	-	-	-	-	-	-	96	87	77	-
3000	165	-	-	-	-	-	-	-	96	90	80	-
2000	165	-	-	-	-	-	-	-	-	94	83	-
1000	165	-	-	-	-	-	-	-	-	96	87	76
SL	165	-	-	-	-	-	-	-	-	90	80	-

CONDITIONS: FOR ALL WEIGHTS. ◆ ◆ ◆ Denotes ISA Line
 BLEED AIR ON.
 DE-ICING ON or OFF.
 - dashes indicate numbers outside charted values.

MAXIMUM CRUISE TORQUE CHART
DASH 8 MODEL 301/311/314/315 **900 RPM**

PRESS ALT FEET	SAT °C = OAT °C										
	-50	-40	-30	-20	-10	0	10	20	30	40	50
25000	75	71	66	62	56	-	-	-	-	-	-
24000	79	74	70	65	59	-	-	-	-	-	-
23000	83	79	74	69	63	55	-	-	-	-	-
22000	88	82	77	72	66	59	-	-	-	-	-
21000	-	87	82	76	70	62	-	-	-	-	-
20000	-	91	86	80	73	65	58	-	-	-	-
19000	-	96	90	84	77	68	61	-	-	-	-
18000	-	-	96	88	81	73	65	-	-	-	-
17000	-	-	-	92	85	76	68	-	-	-	-
16000	-	-	-	96	89	80	71	63	-	-	-
15000	-	-	-	-	93	84	75	67	-	-	-
14000	-	-	-	-	96	88	78	70	-	-	-
13000	-	-	-	-	-	92	82	73	-	-	-
12000	-	-	-	-	-	95	86	76	-	-	-
11000	-	-	-	-	-	96	89	80	72	-	-
10000	-	-	-	-	-	-	93	83	74	-	-
9000	-	-	-	-	-	-	96	87	77	-	-
8000	-	-	-	-	-	-	-	91	81	-	-
7000	-	-	-	-	-	-	-	95	84	-	-
6000	-	-	-	-	-	-	-	96	88	-	-
5000	-	-	-	-	-	-	-	-	92	81	-
4000	-	-	-	-	-	-	-	-	96	85	-
3000	-	-	-	-	-	-	-	-	96	89	-
2000	-	-	-	-	-	-	-	-	-	92	-
1000	-	-	-	-	-	-	-	-	-	94	-
SL	-	-	-	-	-	-	-	-	96	89	-

CONDITIONS: A.U.W. 39,680 LB. ● ● ● Denotes ISA Line
 FLAP O.
 BLEEDS ON.
 - dashes indicate numbers outside charted values.

MAXIMUM CRUISE TORQUE CHART
DASH 8 MODEL 301/311/314/315 **1050 RPM**

PRESS ALT FEET	SAT °C = OAT °C										
	-50	-40	-30	-20	-10	0	10	20	30	40	50
25000	68	64	60	56	50	-	-	-	-	-	-
24000	72	67	63	59	53	-	-	-	-	-	-
23000	76	71	67	62	56	49	-	-	-	-	-
22000	79	74	70	65	59	52	-	-	-	-	-
21000	-	79	74	68	62	55	-	-	-	-	-
20000	-	82	77	72	66	58	51	-	-	-	-
19000	-	86	81	75	69	61	54	-	-	-	-
18000	-	90	85	79	72	64	58	-	-	-	-
17000	-	95	89	83	76	68	60	-	-	-	-
16000	-	96	93	86	79	71	63	55	-	-	-
15000	-	96	96	91	83	74	66	58	-	-	-
14000	-	-	96	96	87	78	69	61	-	-	-
13000	-	-	96	96	91	81	72	64	-	-	-
12000	-	-	96	96	95	85	75	67	-	-	-
11000	-	-	96	96	96	89	79	70	-	-	-
10000	-	-	-	95	96	93	82	73	65	-	-
9000	-	-	-	94	95	96	86	77	68	-	-
8000	-	-	-	92	94	96	90	80	71	-	-
7000	-	-	-	90	92	94	92	83	74	-	-
6000	-	-	-	-	91	92	94	87	77	-	-
5000	-	-	-	-	89	91	92	91	81	70	-
4000	-	-	-	-	87	89	91	92	85	74	-
3000	-	-	-	-	86	88	89	91	88	77	-
2000	-	-	-	-	-	86	87	89	91	81	-
1000	-	-	-	-	-	84	86	87	89	84	73
SL	-	-	-	-	-	83	84	86	87	88	76

CONDITIONS: A.U.W. 39,680 LB. ● ● ● Denotes ISA Line
 FLAP O.
 BLEEDS ON.
 - dashes indicate numbers outside charted values.

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AIR CONDITIONING, PRESSURIZATION AND PNEUMATICS

RAPID DEPRESSURIZATION / EMERGENCY DESCENT 4.3

UNPRESSURIZED FLIGHT (Bleeds On) 4.3

RAM VENTILATION (Bleeds Off) 4.3

“CABIN PRESS” (Warning Light) 4.4

CABIN PRESSURIZATION FAILURE 4.4

“CABIN PACK HOT” or
“FLT COMPT PACK HOT”
 (Caution Light) 4.5

“CABIN DUCT HOT” or
“FLT COMPT DUCT HOT”
 (Caution Light) 4.5

“#1 BLEED HOT” or **“#2 BLEED HOT”**
 (Caution Light) 4.5

“PASS DOOR”, “BAG DOOR”
“FWD EXIT DOOR” or **“SERV DOOR”**
 (Warning Light) 4.6

CRACKED WINDSHIELD 4.6

EMERGENCY OPENING OF FLIGHT
 COMPARTMENT DOOR (Door Jammed) 4.6

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**RAPID DEPRESSURIZATION/
EMERGENCY DESCENT**

- Oxygen Masks on / 100%
 - Mic Switch Mask
 - Passenger Signs on
- EMERGENCY DESCENT, accomplish as req'd:**
- Power levers Flt Idle
 - Condition levers Max
 - Airspeed V_{mo}

IF an immediate descent to an altitude where oxygen is not required cannot be conducted; within 5 minutes of donning oxygen masks:

- Oxygen Masks Norm

Note: *If structural integrity is in doubt, limit airspeed as much as possible and avoid high maneuvering loads.*

**UNPRESSURIZED FLIGHT
(Bleeds On)**

- Auto / Man / Dump Dump
- Bleed Air 1 and 2 on / Max
- Oxygen Masks as req'd

**RAM VENTILATION
(Bleeds Off)**

- Recirc Fans Off
- Bleed Air 1 and 2 Min / Off
- Auto / Man / Dump Man
- Man knob Fully clockwise (INCR)
- Fwd Outflow Valve Open

Note: *Ram ventilation is most effective above 150 KIAS.*

**“CABIN PRESS”
(Warning Light)**

OR

**CABIN PRESSURIZATION
FAILURE**

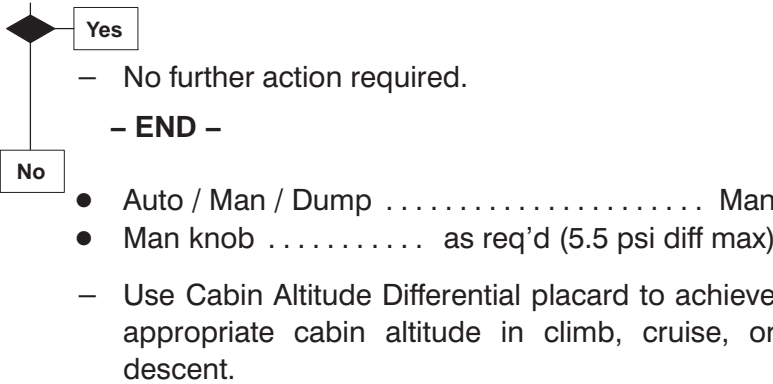
(Loss of cabin pressure and/or pressurization controller
“FAULT” light illuminated)

- Bleed Air 1 and 2 on / Norm
- Cabin Pack and Flt Comp Pack Auto
- Auto / Man / Dump Auto
- Man knob fully counter-clockwise
- Fwd Outflow Valve Normal
- Cabin Alt indicator check

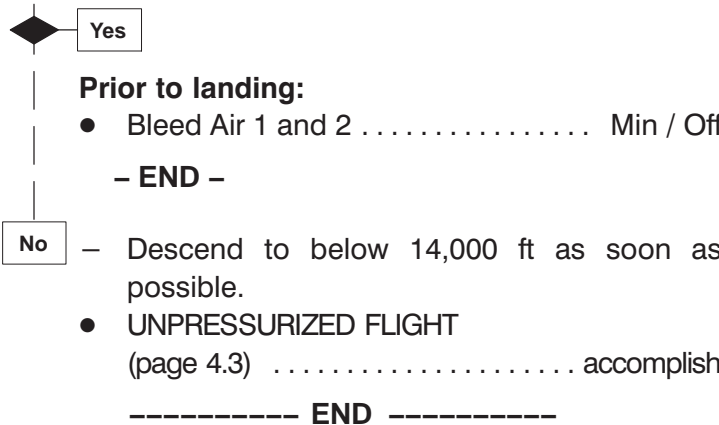
IF cabin altitude exceeds 8,000 ft:

- Bleed Selector Max

Control of pressurization is regained:



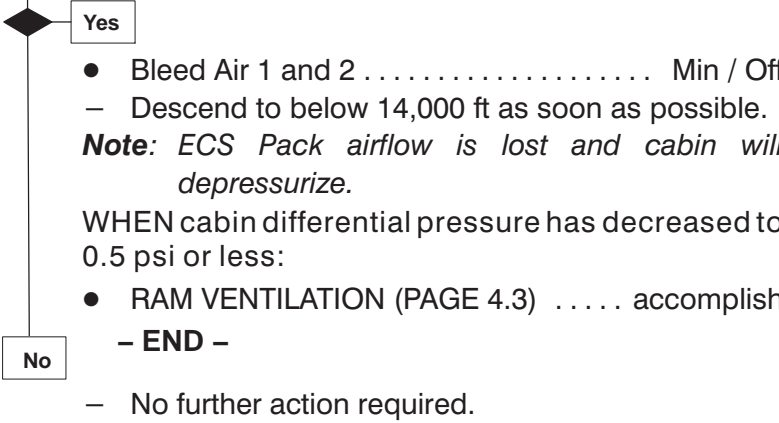
Control of pressurization is regained:



**“CABIN PACK HOT” or
“FLT COMPT PACK HOT”
(Caution Light)**

- Cabin Pack or Flt Comp Pack Off

Caution Light continues to cycle:

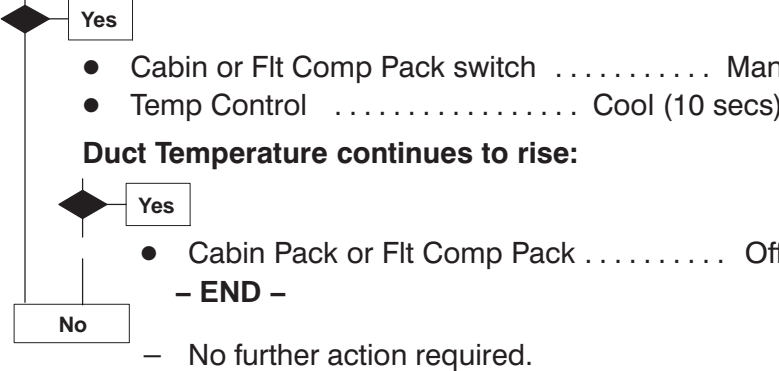


----- END -----

**“CABIN DUCT HOT” or
“FLT COMPT DUCT HOT”
(Caution Light)**

- CAB or FC Duct .. monitor temperature in affected duct

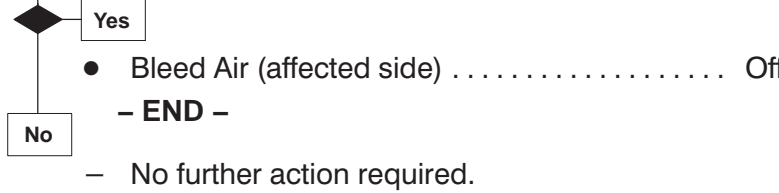
Duct Temperature continues to rise:



----- END -----

**“#1 BLEED HOT” or “#2 BLEED HOT”
(Caution Light)**

Caution Light continues to cycle:



----- END -----

**“PASS DOOR”, “BAG DOOR”,
“FWD EXIT DOOR” or “SERV DOOR”
(Warning Light)**

Warning: *Remain clear of affected door.
Do not attempt to secure affected door.*

- Passenger Signs on
- Cabin depressurize
- Land immediately at nearest suitable airport.
- UNPRESSURIZED FLIGHT (Page 4.3) .. accomplish

CRACKED WINDSHIELD

- Airspeed reduce (190 KIAS max)
- Auto / Man / Dump Man
- Man knob INCR (2.5–3.0 psi Diff max)
- Descend to below 14,000 ft if practical.
- Use Man Knob to maintain 2.5–3.0 psi Diff, or less, in descent.

Prior to landing:

- Bleed Air 1 and 2 Min / Off

**EMERGENCY OPENING OF
FLIGHT COMPARTMENT DOOR
(Door Jammed)**

- Unlock and push or step down on bottom hinge pin.
- Unlock and pull down upper hinge pin.
- Unlock and lift middle hinge pin.
- Push flight compartment door at hinge side.

Note: *It may require a large force to open the flight compartment door.*

- Rotate the flight compartment door counter-clockwise and stow against the lavatory.

Note: *Upon forcing the flight compartment door open, it may fall straight aft and lay flat on the cabin floor.*

APU, ENGINES AND PROPELLERS

ON GROUND NON-NORMAL	5.3
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EVACUATION	5.3
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ENGINE FAIL/ FIRE /SHUTDOWN (In Flight)	5.14

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ON GROUND NON-NORMAL

- When airplane comes to a stop:
- Emerg Brake set
- Engine fire:**
- ENGINE FIRE (On Ground)
(Page 5.3) accomplish
- Engine failure:**
- Power levers Flt Idle
 - Condition lever (affected) Fuel Off
 - Pull Fuel Off handle (affected) pull
 - Tank Aux Pump (affected) Off
- Other failure:**
- Appropriate Abnormal / Emergency
procedure(s) accomplish

**ENGINE FIRE
(On Ground)**

- Emerg Brake set
 - Power levers Flt Idle
 - Condition levers Fuel Off
 - Pull Fuel Off handle (affected) pull
 - Tank Aux Pumps (1 and 2) Off
 - Extg switch Fwd Btl
- Wait up to 30 secs, If fire persists:
- Extg switch Aft Btl
 - EVACUATION (Page 5.3) accomplish

EVACUATION

- Emerg Brake set
- Power levers Flt Idle
- Condition levers Fuel Off
- Pull Fuel Off handles pull
- Emergency Lights On
- Fasten Seat Belts Off
- Evacuation initiate
- AC/DC Ext Pwr and APU Off
- Battery Master Off

ABORTED ENGINE START

- FAILURE TO LIGHT UP (within 10 secs)**
- Condition lever Fuel Off
 - Ignition (affected engine) Off
- Motor engine for 15 seconds:
- Start Select off

- IMMINENT OVERTEMPERATURE OR HUNG START**
- Condition lever Fuel Off
- IF ITT does not decrease immediately:
- Pull Fuel Off Handle pull
 - Ignition (affected engine) Off
- Motor engine for 15 seconds:
- Start Select off

CLEARING AN ENGINE:
(To Remove Internally Trapped Fuel)

- Condition lever Fuel Off
- Power lever Flt Idle
- Ignition (affected engine) Off
- Start Select (affected engine) select
- Start press

Caution: *Observe Starter Cranking Limits.*

After desired engine rotation complete:

- Start Select off
- IF a subsequent engine start is to be attempted:
- Ignition (affected engine) Norm (Auto)

NO STARTER CUT – OUT

(START Light remains illuminated)

- Start Select off
- Note:** *ENGINE START and SELECT lights will take approximately 5 seconds to go out.*
- DC Ext Power Off
- Carry out remaining portions of normal checklist Shutdown procedure.
- Note:** *Maintenance action required prior to next flight.*

APU FIRE

– Confirm APU Automatic Shutdown (APU RUN Advisory Light out and APU BTL discharges.)
IF APU BTL or APU FIRE Advisory Light remains illuminated:

- Extg switch Extg

- POST APU AUTOMATIC SHUTDOWN (below) accomplish

POST APU AUTOMATIC SHUTDOWN

- APU Bleed Off
- APU Gen Off
- APU Pwr Off

Caution: *Do not restart the APU following an automatic shutdown if the FIRE Advisory Light is illuminated.*

APU START FAILURE

(APU FLR Advisory Light illuminates during APU Start)

APU START and APU STARTER advisory lights go out:



Yes

- APU Pwr off then on

Note: After an APU start attempt, APU start will remain disabled for approximately 2 minutes.

- Wait 2 minutes, then attempt second APU start.

Note: Observe APU Starter cranking limits.

– END –

No

- APU STARTER FAILURE (below) accomplish

APU STARTER FAILURE

(APU RUN with APU STARTER Advisory Light illuminated)

- APU Gen On
- Main Battery Off
- DC Ext Pwr Off
- DC Gen 1 and 2 Off
- AC Ext Pwr Off
- AC Gen 1 and 2 Off
- APU Pwr off

----- END -----

“APU” (Caution Light)

APU Failure (APU FLR Advisory Light):

- Confirm APU Automatic Shutdown.
 - POST APU AUTOMATIC SHUTDOWN
(Page 5.5) accomplish █
- END -

APU GEN Overheat (GEN OHT Advisory Light):

- Confirm APU Automatic Shutdown.
- POST APU AUTOMATIC SHUTDOWN
(Page 5.5) accomplish █

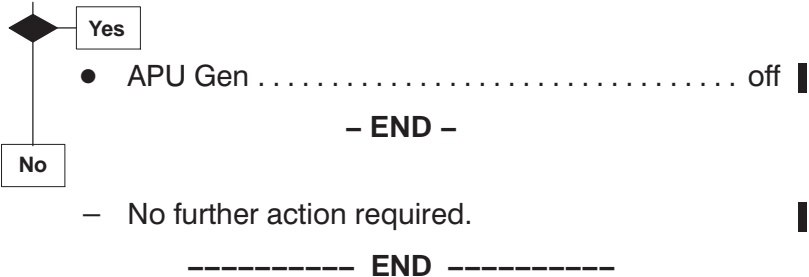
APU Rear Bay Overheat (RBYOHT Advisory Light):

- Confirm APU Automatic Shutdown.
 - Post APU AUTOMATIC SHUTDOWN
(Page 5.5) accomplish █
- END -

APU GEN Failure (GEN WARN Advisory Light):

- APU Gen off then On █

GEN WARN Advisory Light remains illuminated:



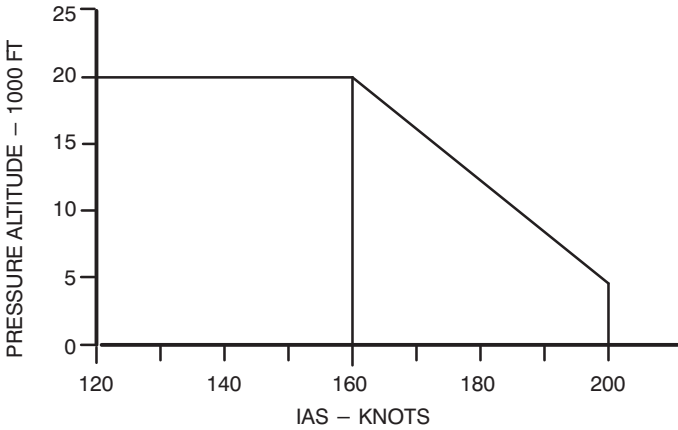
APU BLEED AIR OVERHEAT

(FLT COMPT DUCT HOT or CABIN DUCT HOT or CABIN PACK HOT or FLT COMPT PACK HOT Caution Light)

- APU Bleed off █

ENGINE AIRSTART

ENGINE AIRSTART ENVELOPE



- Synchronphase Off
- Affected Engine:
- Power lever Flt Idle
 - Condition lever Fuel Off
 - Pull Fuel Off Handle push in
 - Ignition Manual
 - Bleed Air Off
 - Tank Aux Pump on
 - Autofeather off
 - Alternate Feather Norm
 - Main Bus Tie Tie
 - Conduct Normal Start
- When Engine Stabilizes:
- Condition lever Min
 - Alternate Feather (if req'd) Unfeather
- When Propeller Np Stabilizes:
- Power levers as req'd
 - Condition levers as req'd
 - DC / AC Volts and Load check
 - Synchronphase On
 - Tank Aux Pumps 1 and 2 Off
 - Stby Hyd Press 1 and 2 Norm
 - Bleed Air 1 and 2 as req'd
 - Ignition 1 and 2 Norm (Auto)
 - Main Bus Tie Off

**OIL PRESSURE BELOW 40 PSI or
“#1 ENG OIL PRESS” or
“#2 ENG OIL PRESS”
(Warning Light)**

Affected Engine:
● ENGINE FAIL / FIRE / SHUTDOWN
(Page 5.14) accomplish

**LOW OIL PRESSURE
(40 – 55 psi)**

Affected Engine:
● Power lever Flt Idle

To reduce inflight drag:
● Condition lever Start&Feather

IF oil pressure decreases to below 40 psi:
● OIL PRESSURE BELOW 40 PSI
(Page 5.9) accomplish

**“#1 ENG MANUAL” or “#2 ENG MANUAL”
(Caution Light)**

Affected Engine:

- ECU Mode Manual
- Power lever as req'd

Note: *Avoid rapid power lever movement.
Symmetric torque may require asymmetric
power lever positions.*

Landing Considerations:

- DO NOT retard affected Power lever below DISC on landing.

– END –

PROPELLER OVERSPEED

- Above 400 ft AGL:
- Synchrophase Off
 - Airspeed reduce toward minimum speed appropriate to flap configuration and flight conditions
- Affected Engine:
- Power lever Flt Idle
 - Condition lever Start&Feather
 - Alternate Feather (if req'd) feather
- IF propeller does not feather:
- DO NOT SHUT DOWN ENGINE.
 - Alternate Feather Norm
 - Condition levers Max
 - Power lever (affected engine) .. Advance. Do not exceed 1212 rpm
 - Power lever (non affected engine) .. as required to maintain desired flight profile.
 - Land immediately at nearest suitable airport.
- IF propeller feathers:
- ENGINE FAIL / FIRE / SHUTDOWN
(page 5.14) accomplish

Note: *Power and Power levers will be asymmetric.*

UNSCHEDULED PROPELLER FEATHERING

(May be indicated by high torque)

- Above 400 ft AGL:
- Affected Engine:
- Power lever Flt Idle
 - ENGINE FAIL / FIRE / SHUTDOWN
(page 5.14) accomplish

**PROPELLER GROUND RANGE
ADVISORY LIGHT CYCLING**

- Power levers advance above Ft Idle

Caution: *Avoid Power Lever positions that result in illumination of the Ground Range Advisory light.*

Landing Considerations:

- DO NOT select affected Power lever below Ft Idle on landing.
- Anticipate greater than normal braking requirements due to increased propeller thrust at Ft Idle setting.

Landing Distance Factor:

Flap 15	1.21
Flap 35	1.32

**PROPELLER RPM CYCLING
AT 1000 RPM**

(Power Lever Micro Switch Failure with Beta Lockout System incorporated)

Above 400 ft AGL:

- Autofeather off
- Power levers reduce to climb setting
- Condition levers Min / 900Np
- Check RPM of affected propeller stops cycling.

Note: *The Power lever of the affected engine will require adjusting when retarding the condition levers.*

- Continue flight with condition levers at Min / 900Np.

Landing Considerations:

- Land using Flap 15
- Land with condition levers at Min / 900Np

Landing Distance Factor:

Flap 15	1.14
-------------------	------

Go-Around from Final Approach:

- Condition levers Max
- Power levers advance to NTOP ensuring peak torque on affected engine does not exceed 100%.

Note: *The RPM of the affected propeller will commence cycling above 1000Np.*

Note: *Power lever positions will be asymmetric with NTOP set on the non-affected engine.*

When Clear of Obstacles:

- Condition levers Min / 900Np
- Check RPM of the affected propeller stops cycling.

**“CHECK FIRE DET”
(Warning Light)
and
“FAULT A” or “FAULT B”
(Advisory Light)**

(Fire Detector Loop Failure)

- Loop Select knob set to non-illuminated
fault position

**Inter Compressor Case Fire Detector Loop Active
(Mod 8/1835):**

IF FAULT A Advisory Light was illuminated:

- Land at nearest suitable airport.

– END –

**Inter Compressor Case Fire Detector Loop Deactivated
(MS 8Q101545 or MS 8Q101573):**

- No further action required.

– END –

**ENGINE FAIL/ FIRE/ SHUTDOWN
(In Flight)**

- Affected Engine:
- Power lever Flt Idle
 - Condition lever Fuel Off
 - Alternate Feather (if req'd) feather
 - Pull Fuel Off Handle pull
 - Tank Aux Pump Off
- IF Fire:
- Extg switch (affected engine) Fwd Btl
- IF Fire Persists, Wait Up To 30 seconds:
- Extg switch (affected engine) Aft Btl

Warning: *When Autofeather is selected off, uptrim power is cancelled.*

Caution: *Propeller will unfeather if Autofeather is selected off before condition lever is selected to Fuel Off.*

- Autofeather off
- Power levers operate together as req'd
- Ignition:
 - Operating Engine Manual (Auto)
 - Affected Engine Off
- Bleed Air:
 - Operating Engine as req'd
 - Affected Engine Off
- Synchrophase Off
- Stby Hyd Press 1 and 2 on
- Tank Aux Pump (Operating Engine) on
- Transfer fuel as required to maintain fuel balance

No. 1 Engine is inoperative:

Landing Considerations:

Landing Distance Factor:

- Flap 15 1.40
- Flap 35 1.40

----- END -----

No. 2 Engine is inoperative:

– Prior to selecting Landing Gear Down:

- Manual PTU on

Landing Considerations:

Landing Distance Factor:

- Flap 15 1.40
- Flap 35 1.40

----- END -----

MOD 8/1983 ONLY

**“CHECK FIRE DET”
(Warning Light)
and
“FAULT A” or “FAULT B”
(Advisory Light)**

(Fire Detector Loop Failure)

- Loop Select knob set to non-illuminated
fault position

**Inter Compressor Case Fire Detector Loop Active
(Mod 8/1835):**

IF FAULT A Advisory Light was illuminated:

- Land at nearest suitable airport.

– END –

**Inter Compressor Case Fire Detector Loop Deactivated
(MS 8Q101545 or MS 8Q101573):**

- No further action required.

– END –

**ENGINE FAIL/ FIRE/ SHUTDOWN
(In Flight)**

- Affected Engine:
- Power lever Flt Idle
 - Condition lever Fuel Off
 - Alternate Feather (if req'd) feather
 - Pull Fuel Off Handle pull
 - Tank Aux Pump Off
- IF Fire:
- Extg switch (affected engine) Fwd Btl
- IF Fire Persists, Wait Up To 30 seconds:
- Extg switch (affected engine) Aft Btl

Warning: *When Autofeather is selected off, uptrim power is cancelled.*

Caution: *Propeller will unfeather if Autofeather is selected off before condition lever is selected to Fuel Off.*

- Autofeather off
- Power levers operate together as req'd
- Ignition:
 - Operating Engine Manual (Auto)
 - Affected Engine Off
- Bleed Air:
 - Operating Engine as req'd
 - Affected Engine Off
- Synchrophase Off
- Stby Hyd Press 1 and 2 on
- Tank Aux Pump (Operating Engine) on
- Transfer fuel as required to maintain fuel balance

No. 1 Engine is inoperative:

Landing Considerations:

Landing Distance Factor:

- Flap 15 1.40
- Flap 35 1.40

----- END -----

No. 2 Engine is inoperative:

– Prior to selecting Landing Gear Down:

- Manual PTU on
- Landing Gear Down / 3 Green
- Manual PTU off

Landing Considerations:

Landing Distance Factor:

- Flap 15 1.40
- Flap 35 1.40

----- END -----

MOD 8/2781 ONLY

AUTO FLIGHT

FLIGHT INSTRUMENTS AND NAVIGATION

AHRS FAILURES	6.3
EFIS MALFUNCTIONS	6.4
“FLT DATA RECORDER” (Caution Light)	6.5
“GPWS” (Caution Light)	6.5
ABNORMAL INDICATIONS OF AIRSPEED, ALTITUDE AND VERTICAL AIRSPEED	6.5

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AHRS FAILURES

**HDG (Flag)
SLAVE (Advisory Light)**

Electro–Mechanical HSI:

- Fly the aircraft by reference to the HSI displaying the non–affected source of heading data.

Affected Side:

- HDG / DG press
- DG SLEW manually slew

Note: *Manually slew HSI heading to align with RMI heading at intervals of less than 5 min or when HDG MISMATCH message is presented on advisory display.*

EFIS:

- Fly the aircraft by reference to the HSI displaying the non–affected source of heading data.

Affected Side:

- HDG REV select HDG 1 or 2 (as appropriate)

BASIC (Advisory Light)

Electro–Mechanical HSI:

- Fly the aircraft by reference to the ADI displaying the non–affected source of attitude data.

Note: *Loss of valid true airspeed data from the air data computers will result in automatic entry into basic mode, as indicated by illumination of the BASIC annunciator on the applicable AHRS controller, and appearance of the ATT flag on the affected ADI.*

Affected ADI prone to acceleration errors.

EFIS:

- Fly the aircraft by reference to the EADI displaying the non–affected source of attitude data.

Affected Side:

- ATT REV select ATT 1 or 2 (as appropriate)

AUXPR (Advisory Light)

- No crew action req'd.

Note: *Loss of primary power source and switch to backup source. System will automatically revert to primary when it becomes available.*

EFIS MALFUNCTIONS

SYMBOL GENERATOR FAILURE

(Failure is indicated by a red “x” centered across both EADI and EHSI screens together with a red “SG FAIL” message or blank EADI and EHSI screens)

- Fly the aircraft by reference to the operative EADI / EHSI.

Affected Side:

- REVN switch press
- HSI SEL select unaffected side.

CRT DISPLAY FAILURE

(Failure is indicated by a blank screen on the affected EHSI or EADI screen)

- Fly the aircraft by reference to the operative EADI / EHSI.

To present a composite display on the serviceable screen:

Affected Side:

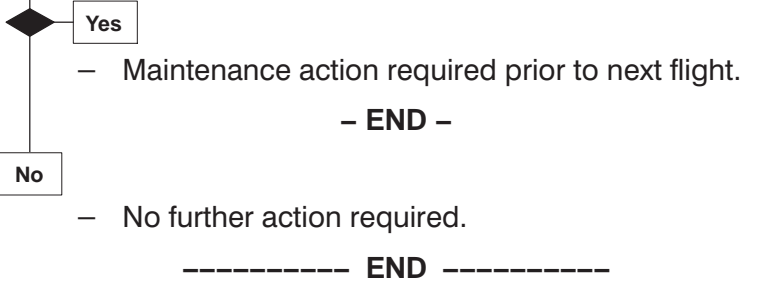
- EHSI or EADI dim control knob Off

Note: *ILS/MLS approaches are not permitted using composite display.*

**“FLT DATA RECORDER”
(Caution Light)**

- Anti-Collision Light Red or White

Caution Light remains on:



“GPWS” (Caution Light)

(Loss of GPWS Terrain Display and Audible Warnings)

- Establish and use alternate means to ensure required clearance from terrain is maintained.

**ABNORMAL INDICATIONS OF
AIRSPEED, ALTITUDE AND
VERTICAL SPEED**

- Static Source selector (affected side) Alternate
- IF switching the Static Source Selector to Alternate does not correct the abnormal indications:
- Fly the aircraft by reference to the flight instruments on the unaffected side.
 - Land at nearest suitable airport.

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FUSELAGE FIRE, SMOKE or FUMES █

“SMOKE” (Warning Light) 7.2 █

FUSELAGE FIRE, SMOKE or FUMES 7.2 █

SMOKE or FUMES REMOVAL
(UNKNOWN SOURCE) 7.6 █

**“SMOKE”
(Warning Light)**

OR

FUSELAGE FIRE, SMOKE or FUMES

- Oxygen Masks on / 100%
- Smoke Goggles (if applicable) on
- Mic Switch Mask
- Recirc Fans Off

- Prepare to land the aircraft without delay while completing fire suppression and/or smoke or fumes evacuation procedures.

Known Source of Fire, Smoke or Fumes:

Flight Compartment:

Note: *If an electrical source of fire, smoke or fumes is positively identified, remove power to source if possible.*

- Extinguish fire with portable fire extinguishers.
- If it cannot be visibly verified that the fire has been completely extinguished whether the smoke has cleared or not, land immediately at nearest suitable airfield or landing site.

To remove smoke or fumes:

- Cabin Alt Man knob turn towards INCR

Note: *Flight compartment airflow will carry the smoke or fumes forward.*

IF additional assistance to remove smoke or fumes is required:

Note: *This step will de-pressurize the aircraft rapidly.*

- Fwd Outflow Valve Open
- Descend to below 14,000 ft as soon as possible.

– END –

CONTINUED ON NEXT PAGE

Cabin:

- Emergency Lights if req'd
- Evacuate passengers from affected area.
- Extinguish fire with portable fire extinguishers.

Note: *If a pilot is required to fight the fire, protective breathing equipment must be donned prior to exiting the flight compartment.*

- If it cannot be visibly verified that the fire has been completely extinguished whether the smoke has cleared or not, land immediately at nearest suitable airfield or landing site.

To encourage smoke or fume dissipation:

- Baggage Compartment Door open

Note: *Cabin airflow will carry the smoke or fumes aft.*

IF assistance to remove smoke or fumes from the cabin is required:

Note: *This step will de-pressurize the aircraft rapidly.*

- Auto / Man / Dump Dump
- Descend to below 14,000 ft as soon as possible.

– END –

Baggage Compartment:

To locate and extinguish a fire in the baggage compartment:

- Baggage Compartment Light On
- Extinguish fire with portable fire extinguishers.

Note: *If a pilot is required to fight the fire, protective breathing equipment must be donned prior to exiting the flight compartment.*

- If it cannot be visibly verified that the fire has been completely extinguished whether the smoke has cleared or not, land immediately at nearest suitable airfield or landing site.

IF assistance to remove smoke or fumes from the baggage compartment or cabin is required:

Note: *This step will de-pressurize the aircraft rapidly.*

- Auto / Man / Dump Dump
- Descend to below 14,000 ft as soon as possible.

– END –

Unknown Source of Fire, Smoke or Fumes:

PROCEDURE ON NEXT PAGE

Unknown Source of Fire, Smoke or Fumes:

Note: *To prepare for and manage an immediate landing, the Unknown Source of Fire, Smoke or Fumes procedure may be terminated prior to completion.*

Bleed Source or Air Conditioning Suspected:

- Bleed Air 1 Off

Wait up to 1 minute.

Improvement:



- Leave Bleed Air 1 in the Off position.
- IF necessary to assist in removal of smoke or fumes:
- SMOKE or FUMES REMOVAL (Page 7.6) accomplish

- END -



- Bleed Air 1 on
- Bleed Air 2 Off

Wait up to 1 minute.

Improvement:



- Leave Bleed Air 2 in the Off position.
- IF necessary to assist in removal of smoke or fumes:
- SMOKE or FUMES REMOVAL (Page 7.6) accomplish

- END -



- Bleed Air 2 on
- Flt Comp Pack Off

Wait up to 1 minute.

Improvement:



- Leave Flt Comp Pack in the Off position.
- IF necessary to assist in removal of smoke or fumes:
- SMOKE or FUMES REMOVAL (Page 7.6) accomplish

- END -



- Flt Comp Pack Auto / Man
- Cabin Pack Off

Wait up to 1 minute.

CONTINUED ON NEXT PAGE

Improvement:



- Leave Cabin Pack in the Off position.

IF necessary to assist in removal of smoke or fumes:

- SMOKE or FUMES REMOVAL (Page 7.6) accomplish

– END –



- Cabin Pack Auto / Man

Source of Fire, Smoke or Fumes cannot be Identified:

- DC Gen 1 and 2 Off
- AC Gen 1 and 2 Off
- Storm/Dome Lights Storm (if req'd)
- Main & Aux Batteries Off
- Emergency Lights On then Off (until req'd)
- Land immediately at the nearest suitable airport.

Caution: *Battery duration for operation of essential services is 30 minutes.*

Note: *Automatic control of cabin altitude is lost. Cabin differential pressure will increase until the safety outflow valve opens.*

To depressurize the aircraft and establish ram ventilation:

Note: *This procedure will de-pressurize the aircraft rapidly.*

- Auto / Man / Dump Man
- Man knob fully clockwise (INCR)
- Fwd Outflow Valve Open

Note: *Ram ventilation is most effective above 150 KIAS.*

- Descend to below 14,000 ft as soon as possible.

----- END -----

SMOKE or FUMES REMOVAL (UNKNOWN SOURCE)

- If it cannot be visibly verified that the fire has been completely extinguished whether the smoke has cleared or not, land immediately at nearest suitable airfield or landing site.

Note: *Carry out this procedure only when directed by the Unknown Source of Fire, Smoke or Fumes checklist.*

- Recirc Fans Off
- Bleed Air (unaffected) on / Max

Note: *Leave affected Bleed Air switch in the Off position.*

To encourage smoke or fume dissipation from the cabin:

- Baggage Compartment Door open

IF necessary to remove smoke or fumes from the flight compartment:

- Man knob turn towards INCR

IF additional assistance to remove smoke or fumes from the flight compartment is required:

Note: *This step will de-pressurize the aircraft rapidly.*

- Fwd Outflow Valve Open
- Descend to below 14,000 ft as soon as possible.

EMERGENCY LANDING, FORCED LANDING

EMERGENCY LANDING (Both Engines Operating)	8.3
FORCED LANDING (Both Engines Inoperative)	8.5

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**EMERGENCY LANDING
(Both Engines Operating)**

- Cabin secure
- IF possible ensure no passengers are seated in the plane of the propellers.
- GPWS cb – B9 (EGPWS cb – B3)
(Left Upper cb panel) pull
- Emergency Lights On
- Auto / Man / Dump Dump
- ELT On
- Shoulder Harness lock

Review appropriate Landing Considerations:
Landing Gear Extended Page 8.3
Landing Gear Retracted Page 8.3
Ditching Page 8.4

LANDING GEAR EXTENDED:

Landing Considerations

When airplane comes to a stop:

- Emerg Brake on
- Condition levers Fuel Off
- Pull Fuel Off Handles pull
- Battery Master Off
- Evacuate airplane

LANDING GEAR RETRACTED:

- Ldg Gear Horn cb (Left Lower panel – E5) pull

Landing Considerations

- Flap 35
- Maintain V_{REF} until immediately prior to flare.
- DO NOT exceed 6° nose up during flare.
- Touch down with minimum speed and minimum rate of descent without stalling.

After ground contact:

- Condition levers Fuel Off
- Pull Fuel Off Handles pull
- Battery Master Off

When airplane comes to a stop:

- Evacuate airplane

CONTINUED ON NEXT PAGE

EMERGENCY LANDING (cont'd)
(Both Engines Operating)

DITCHING

- Synchrophase Off
- Condition levers Max
- Bleed Air 1 and 2 Off
- Ldg Gear Horn cb (Left Lower panel – E5) pull
- Flap 35

Landing Considerations

- DO NOT select landing gear down.
- In rolling swell surface conditions attempt to ditch along and parallel to the crests as much into wind as swell line permits. In other water surface conditions land into wind.
- Maintain V_{REF} until immediately prior to flare.
- Set rate of descent to 200 to 300 FPM.
- Commence flare to achieve zero vertical velocity immediately prior to water contact.
- Maintain pitch attitude of 10° nose up.
- Touchdown with minimum speed and minimum rate of descent without stalling.
- A transient nose–up pitching motion may result following touchdown. Overcorrection of this tendency could result in porpoising or nosing in.

After water contact:

- Condition levers Fuel Off
- Pull Fuel Off Handles pull
- Battery Master Off

When airplane comes to a stop:

- Evacuate Airplane

Warning: *DO NOT open the front door on the lower side.*

**FORCED LANDING
(Both Engines Inoperative)**

- Flap (if possible) 0
- Airspeed 1.3 Vs

Note: *With flap 0, landing gear retracted, propellers feathered and zero wind, 2.5 nautical miles can be travelled for every 1000 feet of altitude loss.*

All hydraulic, pneumatic and non-essential electrical services will be inoperative.

- Attempt engine airstart:
- Engine Airstart (page 5.8) accomplish

When all attempts to achieve a successful airstart have failed:

- Cabin secure █
- Main & Aux Batteries Off
- Passenger Signs on █
- Emergency Lights On
- ELT On
- Shoulder Harness lock █

- Make the approach and landing into wind.
- Extending landing gear will steepen the glide angle and decrease the glide distance.

Review Appropriate Landing Considerations:

- Landing Gear Extended Page 8.6
- Landing Gear Retracted Page 8.6
- Ditching Page 8.7

CONTINUED ON NEXT PAGE

**FORCED LANDING (cont'd)
(Both Engines Inoperative)**

LANDING GEAR EXTENDED:

Landing Considerations

IF the available surface is appropriate extend landing gear allowing sufficient time for alternate gear extension.

- Maintain 1.3 Vs until immediately prior to flare.
- Commence flare to achieve zero vertical velocity immediately prior to ground contact.
- Touchdown with minimum speed and minimum rate of descent without stalling.

- ALTERNATE LANDING GEAR EXTENSION
(page 14.3) accomplish

Prior to touchdown:

- Battery Master Off

After touchdown:

- Emerg Brake apply intermittently

When airplane comes to a stop:

- Evacuate Airplane

LANDING GEAR RETRACTED:

Landing Considerations

- Maintain 1.3 Vs until immediately prior to flare.
- Commence flare to achieve zero vertical velocity immediately prior to ground contact.
- DO NOT exceed 6° nose up during flare.
- Touchdown with minimum speed and minimum rate of descent without stalling.

Prior to touchdown:

- Battery Master Off

When airplane comes to a stop:

- Evacuate Airplane

CONTINUED ON NEXT PAGE

**FORCED LANDING (cont'd)
(Both Engines Inoperative)**

DITCHING:

Landing Considerations

- DO NOT select landing gear down.
- In rolling swell surface conditions attempt to ditch along and parallel to the crests as much into wind as swell line permits. In other water surface conditions land into wind.
- Maintain 1.3 Vs until immediately prior to flare.
- Commence flare to achieve zero vertical velocity immediately prior to water contact.
- Maintain pitch attitude of 10° nose up.
- Touchdown with minimum speed and minimum rate of descent without stalling.
- A transient nose-up pitching motion may result following touchdown. Overcorrection of this tendency could result in porpoising or nosing in.

After water contact:

- Battery Master Off

When airplane comes to a stop:

Warning: *DO NOT open the front door on the lower side.*

- Evacuate Airplane

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ELECTRICAL

BUS

LOSS OF MAIN DC BUS POWER	9.3
“DC BUS” (Caution Light)	9.3
MAIN DC BUS FAULT	9.4
LOSS OF AC BUS POWER	9.5
“L AC BUS” or “R AC BUS” (Caution Light)	9.5
“L 26 AC” or “R 26 AC” (Caution Light)	9.6

GENERATOR

LOSS OF GENERATED POWER	9.7
“#1 DC GEN” and “#2 DC GEN” and either “#1 AC GEN” and “#2 AC GEN” or “L TRU” and/or “R TRU” (Caution Lights)	9.7
“#1 DC GEN” and “#2 DC GEN” (Caution Lights)	9.8
“#1 DC GEN” or “#2 DC GEN” and “L TRU” and “R TRU” (Caution Lights)	9.8
“#1 DC GEN” or “#2 DC GEN” (Caution Light)	9.8
“#1 DC GEN HOT” or “#2 DC GEN HOT” (Caution Light)	9.9
“#1 AC GEN” or “#2 AC GEN” (Caution Light)	9.9
“#1 AC GEN HOT” or “#2 AC GEN HOT” (Caution Light)	9.9
“L TRU” or “R TRU” or “L TRU HOT” or “R TRU HOT” (Caution Light)	9.9

INVERTER

“PRI INV” (Caution Light)	9.10
“SEC INV” (Caution Light)	9.10
“AUX INV” (Caution Light)	9.10
“PRI INV”, “SEC INV”, “AUX INV”, “L26 AC” and “R26 AC” (Caution Lights)	9.11

BATTERY

“MAIN BATTERY” or “AUX BATTERY” (Caution Light)	9.12
“MAIN BAT HOT” or “AUX BAT HOT” (Warning Light)	9.12
“EMER LTS DISARMED” (Caution Light) ...	9.12

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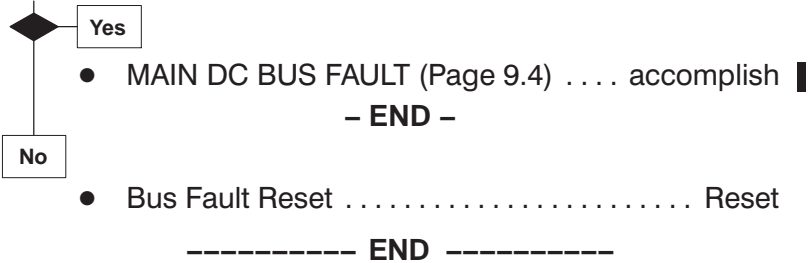
LOSS OF MAIN DC BUS POWER

Lost Services:

<u>LEFT MAIN DC BUS</u>	<u>RIGHT MAIN DC BUS</u>
Rud Sys Isol 1	Rud Sys Isol 2
Ovrhd, Glareshied, Plt Lts	Cntr Console, Eng Inst Lts,
L Appr, L Flare, Taxi Lts	Co-Plt Lts
Take-off Warning	R Appr, R Flare, Anti-Col Lts
Overspeed Warning	Cabin Lights
Landing Gear Warning	Clock 2
Door Warning	Touched Runway Warning
Static Port Heater 2	Pitot Heater 2
Cabin Pressurization	Static Port Heater 2
Auto Cabin Temp Control	Alternate Feather
Man. Flt Com Temp Cntrl	Brake Pressure Indicator
Bleed Sys Control 1	Man. Cabin Temp Control,
Nosewheel Steer Ind	Auto Flt Comp Temp Cntrl
Fuel Flow Ind Eng 1	Bleed Sys Control 2
Rudder Speed Ind	Anti-Skid
Auxilliary Inverter	Nosewheel Steer Control
Elev Horn Heater Warning	Fuel Flow Indication Eng 2
SAT FLEX Indicator	Deice Boot Lights
GPWS, Advisory Display 1	Copilot Windshield Heat
FGC 1 and Yaw Damper	Rudder Speed
DME 1, RNAV 1	Weather Radar
	Observer Audio
	Advisory Display 2
	AHRS 2, ADC 2, VHF 2
	FGC 2 and Yaw Damper
	ATC 2, RAD ALT 2
	VOR 2, DME 2, RNAV 2
	EADI 2, EHSI 2, SYM GEN 2

“DC BUS” (Caution Light)

Other associated Caution lights are illuminated:



MAIN DC BUS FAULT

Left Main DC Bus Fault:

(“DC BUS”, “#1 DC GEN”, “AUX INV” and “AUX BATTERY” Caution Lights are illuminated)

- Aux Battery Off
- DC Gen 1 Off
- Bus Fault Reset Reset

– Leave selected switches in the OFF position.

DC BUS Caution Light remains illuminated:

◆ Yes

- Land at the nearest suitable airport.
- Refer to LOSS OF MAIN DC BUS POWER (Page 9.3) for a list of lost services.

– END –

□ No

- No further action required.

----- END -----

Right Main DC Bus Fault:

(“DC BUS”, “#2 DC GEN”, and MAIN BATT Caution Lights, and “TOUCHED RUNWAY” Warning Lights are illuminated)

- Main Battery Off
- DC Gen 2 Off
- Bus Fault Reset Reset

– Leave selected switches in the OFF position.

DC BUS Caution Light remains illuminated:

◆ Yes

- Land at the nearest suitable airport.
- Refer to LOSS OF MAIN DC BUS POWER (Page 9.3) for a list of lost services.

Landing Considerations:

- Anti-Skid will be inoperative, use Manual Technique for braking.

Caution: *Excessive brake application can result in skidding and tire failure.*

Manual Technique – for maximum deceleration, brakes should be applied intermittently with momentary release at about 1 second intervals.

Landing Distance Factor:

Flap 15	1.93
Flap 35	1.93

– END –

□ No

- No further action required.

----- END -----

LOSS OF AC BUS POWER

Lost services:

<u>L AC BUS</u>	<u>R AC BUS</u>
L Aux Fuel Pump	R Aux Fuel Pump
L Prop Deicing	R Prop Deicing
L Alpha Vane Heater	R Alpha Vane Heater
L TRU	L Standby Hydraulic Pump
Pilot's Side Window Heat	R TRU
Pilot's Windshield Heat	Copilot's Windshield Heat
L Engine Intake Heater	R Engine Intake Heater
Copilot's Windshield Heat	R Elevator Horn Heat
L Elevator Horn Heat	

“L AC BUS” or “R AC BUS” (Caution Light)

- Airspeed V_{REF} (min)
- Maintain airspeed appropriate for icing conditions and other failures if applicable.
- Fuel transfer from the tank associated with the affected fuel aux pump is unavailable.
- Affected windshield will not be de-misted or anti-iced.
- Avoid icing conditions.
- Refer to LOSS OF AC BUS POWER (Page 9.5) for a list of lost services.

IF icing conditions are encountered:

- Flap 0°
- Airspeed 173 KIAS (min)
- Condition levers Max
- Affected propeller and engine intake will not be anti-iced.
- Monitor affected engine performance.
- Exit icing conditions as soon as possible.

FOR remainder of flight (affected engine):

- Engine Intake Bypass Door open
- Ignition Manual (Auto)

IF landing in icing conditions:

- Land using Flap 15

Minimum Hold Speed:

Flap 0 173 KIAS

Approach, V_{REF} and V_{GA} Speeds:

Flap 15 add 15 KTS

Landing Distance Factor:

Flap 15 1.46

MOD 8/1983 ONLY

**“L 26 AC” or “R 26 AC”
(Caution Light)**

- Aux Inverter select operating side

Note: *Power is lost on 26 V AC Bus with possible loss of 115 V AC Bus.*

Possible Lost Services:

L 115 V AC

FDR REC
ADVSY 1 FAN
GPWS
Attendant Panel Lighting

R 115 V AC

CVR REC
ADVSY 2 FAN
Weather Radar

L 26 V AC

VHF NAV 1
ADF 1
PFCS IND
HYD QTY 1 IND and TRANS
HSI 1
ADI 1
RMI 1
RMI 2
ALT 1
SYMBOL GEN #1 (EFIS A/C)
STALL WARNING #1
EGPWS (MS 8Q100880)

R 26 V AC

VHF NAV 2
HYD QTY 2 IND and TRANS
HSI 2
ADI 2
RMI 1
RMI 2
ADF 2
ALT 2
SYMBOL GEN #2 (EFIS A/C)
STALL WARNING #2

LOSS OF AC BUS POWER

Lost services:

L AC BUS	R AC BUS
L Aux Fuel Pump	R Aux Fuel Pump
L Prop Deicing	R Prop Deicing
L Alpha Vane Heater	R Alpha Vane Heater
L TRU	L Standby Hydraulic Pump
Pilot’s Side Window Heat	R TRU
Pilot’s Windshield Heat	Copilot’s Windshield Heat
L Engine Intake Heater	R Engine Intake Heater
Copilot’s Windshield Heat	R Elevator Horn Heat
L Elevator Horn Heat	
R Standby Hydraulic Pump	

“L AC BUS” or “R AC BUS” (Caution Light)

- Airspeed V_{REF} (min)
- Maintain airspeed appropriate for icing conditions and other failures if applicable.
- Fuel transfer from the tank associated with the affected fuel aux pump is unavailable.
- Affected windshield will not be de-misted or anti-iced.
- Avoid icing conditions.
- Refer to LOSS OF AC BUS POWER (Page 9.5) for a list of lost services.

IF icing conditions are encountered:

- Flap 0°
- Airspeed 173 KIAS (min)
- Condition levers Max
- Affected propeller and engine intake will not be anti-iced.
- Monitor affected engine performance.
- Exit icing conditions as soon as possible.

FOR remainder of flight (affected engine):

- Engine Intake Bypass Door open
- Ignition Manual (Auto)

IF landing in icing conditions:

- Land using Flap 15

Minimum Hold Speed:

Flap 0 173 KIAS

Approach, V_{REF} and V_{GA} Speeds:

Flap 15 add 15 KTS

Landing Distance Factor:

Flap 15 1.46

MOD 8/2781 ONLY

**“L 26 AC” or “R 26 AC”
(Caution Light)**

- Aux Inverter select operating side

Note: *Power is lost on 26 V AC Bus with possible loss of 115 V AC Bus.*

Possible Lost Services:

L 115 V AC

FDR REC
ADVSY 1 FAN
GPWS
Attendant Panel Lighting

R 115 V AC

CVR REC
ADVSY 2 FAN
Weather Radar

L 26 V AC

VHF NAV 1
ADF 1
PFCS IND
HYD QTY 1 IND and TRANS
HSI 1
ADI 1
RMI 1
RMI 2
ALT 1
SYMBOL GEN #1 (EFIS A/C)
STALL WARNING #1
EGPWS (MS 8Q100880)

R 26 V AC

VHF NAV 2
HYD QTY 2 IND and TRANS
HSI 2
ADI 2
RMI 1
RMI 2
ADF 2
ALT 2
SYMBOL GEN #2 (EFIS A/C)
STALL WARNING #2

LOSS OF GENERATED POWER

**“#1 DC GEN” and “#2 DC GEN”
and either
“#1 AC GEN” and “#2 AC GEN” or “L TRU” and/or “R TRU”
(Caution Lights)**

(Loss of BOTH DC Generators and BOTH AC Generators or loss of BOTH DC Generators and ONE or BOTH TRUs)

- DC, AC Gens (affected) . . . Off then on (individually)

IF Caution Lights remain on:

- DC, AC Gens (affected) Off
- Storm/Dome Lights Storm (if req'd)
- Main & Aux Batteries Off
- Emergency Lights On then Off (until req'd)
- Land immediately at nearest suitable airport.

Caution: *Battery duration for operation of essential services is 30 minutes.*

Note: *Automatic control of cabin altitude is lost. Cabin differential pressure will increase until the safety outflow valve opens.*

When below 14,000 ft, de-pressurize cabin:

- Auto / Man / Dump Man
- Man knob fully clockwise (INCR)
- Forward Outflow Valve Open

Landing Considerations:

- Anti-Skid will be inoperative, use Manual Technique for braking.

Caution: *Excessive brake application can result in skidding and tire failure.*

Manual Technique – for maximum deceleration, brakes should be applied intermittently with momentary release at about 1 second intervals.

Landing Distance Factor:

Flap 15	1.93
Flap 35	1.93

**“#1 DC GEN” and “#2 DC GEN”
(Caution Lights)**

(Loss of BOTH DC Generators)

- DC Gen 1 and 2 Off then on (individually)
- IF Caution Lights remain on:

- DC Gen 1 and 2 Off
- Main and Aux Battery Off

Note: *With the Battery Master switch off, failure of one TRU will cause loss of all electrical power until the Battery Master switch is selected On.*

- Battery Master Off

– Land at nearest suitable airport.

IF All DC electrical power is subsequently lost:

- Battery Master on

Note: *The AHRS will require 3 minutes to initialize after Battery Master is selected ON.*

- LOSS OF GENERATED POWER
(Page 9.7) accomplish

**“#1 DC GEN” or “#2 DC GEN”
and
“L TRU” and “R TRU”
(Caution Lights)**

(Loss of ONE DC Generator and BOTH TRUs)

- Emergency Lights On then Off (until req'd)

Note: *All secondary bus services are inoperative.*

**“#1 DC GEN” or “#2 DC GEN”
(Caution Light)**

(Loss of ONE DC Generator)

- Gen switch (affected) Off then on

Caution Light remains on:



- Gen switch (affected) Off

– END –



– No further action required.

----- END -----

**“#1 DC GEN HOT” or
“#2 DC GEN HOT”
(Caution Light)**

(Overheat of ONE DC Generator)

- Gen switch (affected) Off

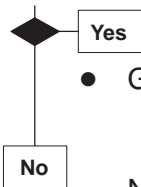
Note: *Continued operation of the associated engine is permissible for the remainder of the flight.
The affected GEN HOT Caution Light may remain illuminated for the remainder of the flight.*

**“#1 AC GEN” or “#2 AC GEN”
(Caution Light)**

(Loss of ONE AC Generator)

- Gen switch (affected) Off then on

Caution Light remains on:



- Gen switch (affected) Off

- END -

- No further action required.

Note: *After selecting the affected AC Control Gen switch On, it may be necessary to select the Synchrophase switch Off and back to On to maintain propeller synchronization.*

----- END -----

**“#1 AC GEN HOT” or
“#2 AC GEN HOT”
(Caution Light)**

(Overheat of ONE AC Generator)

- Gen switch (affected) Off

Note: *Continued operation of the associated engine is permissible for the remainder of the flight.
The affected GEN HOT Caution Light may remain illuminated for the remainder of the flight.*

**“L TRU” or
“R TRU”
“L TRU HOT” or
“R TRU HOT”
(Caution Light)**

(Loss or Overheat of ONE TRU)

- Affected TRU cb (Right Upper cb panel) pull

**“PRI INV”
(Caution Light)**

- Primary Inverter Off
- Auxiliary Inverter L

**“SEC INV”
(Caution Light)**

- Secondary Inverter Off
- Auxiliary Inverter R

**“AUX INV”
(Caution Light)**

- Auxiliary Inverter Off

With MODSUM 8Q101917 incorporated

Note: With the AUXILIARY INVERTER switch selected L or R and a failure of the primary, secondary or auxiliary inverter, both associated inverters may indicate failed (Illumination of PRI INV and AUX INV or SEC INV and AUX INV caution lights). Selection of PRI INV or SEC INV switch OFF, may result in the AUX INV caution light extinguishing.

If AUX INV Caution Light remains on:

- Auxiliary Inverter Off

**“PRI INV”,
“SEC INV”,
“AUX INV”,
“L26 AC” and “R26 AC”
(Caution Lights)**

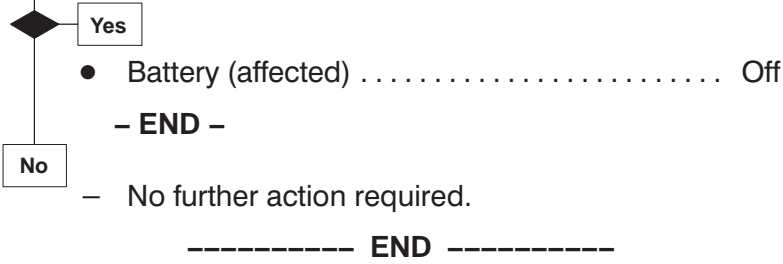
(Multiple Inverter Failure – with MS 8Q101917 not
incorporated)

- 115V Bus Tie CB (top row Left Upper
cb panel) pull
 - Determine the inoperative inverters by reference to the
illuminated PRI INV and/or SEC INV and/or AUX INV
caution lights.
 - Inverter switches (affected) Off
- IF AUX Inverter operative:
- Auxiliary Inverter L or R
toward the illuminated L26 AC or R26 AC caution light
- WHEN one or more inverters are operating:
- 115V Bus Tie cb push in
 - Monitor operating inverter volts and loads for normal
operation.

**“MAIN BATTERY” or “AUX BATTERY”
(Caution Light)**

- Battery (affected) Off then on

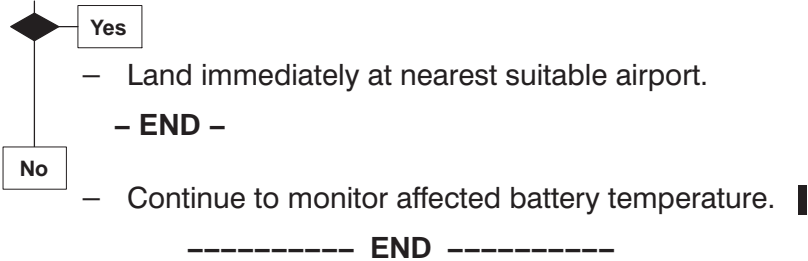
Caution Light remains on:



**“MAIN BAT HOT” or
“AUX BAT HOT”
(Warning Light)**

- Battery Temperature Monitor confirm overheat
- Battery (affected) Off

Battery temperature continues to rise:



**“EMER LTS DISARMED”
(Caution Light)**

- Emergency Lights Arm

FLIGHT CONTROLS

ROLL

ROLL CONTROL JAM	10.3
AILERON TRIM TAB RUNAWAY	10.3
ROLL CONTROL MALFUNCTION	10.4
“ROLL SPLR INBD HYD” or “ROLL SPLR OUTBD HYD” (Caution Light)	10.4
“ROLL SPLR INBD HYD” and “ROLL SPLR OUTBD HYD” (Caution Light)	10.5

PITCH

PITCH CONTROL JAM	10.6
ELEVATOR CONTROL MALFUNCTION	10.7

FLAP

ABNORMAL FLAP LANDING	10.8
“FLAP DRIVE” (Caution Light)	10.8
“FLAP POWER” (Caution Light)	10.9

RUDDERS

RUDDER JAM	10.10
RUD 1 or RUD 2 PUSH OFF (Switchlight On)	10.10
“#1 RUD HYD” or “#2 RUD HYD” (Caution Light)	10.11
“RUD PRESS” or “RUD FULL PRESS” (Caution Light)	10.11
RUDDER TRIM ACTUATOR RUNAWAY	10.11

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ROLL CONTROL JAM

- Autopilot disengage
- Roll Disc Handle pull and turn 90°
- Control Wheels both pilots attempt roll control
- Pilot with free control wheel will fly the aircraft.

Caution: *With the ROLL DISC handle pulled, the autopilot must not be engaged.*

Right Control Wheel free:

Note: *Roll control will be degraded and forces will be normal.*

IF continuous illumination of SPLR 1 and SPLR 2 PUSH OFF switchlights:

- Illuminated switchlights push both Off

Landing Considerations:

- Land at airport with minimum crosswind and turbulence using Flap 15.

– END –

Left Control Wheel free:

Note: *Roll control forces will be low and tendency to overcontrol should be avoided.*

Landing Considerations:

- Land at airport with minimum crosswind and turbulence using Flap 15 or 35.

----- END -----

AILERON TRIM TAB RUNAWAY

- Airspeed reduce
- Aileron Trim opposite to runaway

WHEN trim is at neutral position or IF trim actuator cannot be reversed:

- Ail Trim Act cb (Left Lower cb panel – J7) pull

ROLL CONTROL MALFUNCTION

(Airplane Rolls with No Control Wheel Input)

- Roll control apply to hold wings level
IF continuous illumination of SPLR 1 or SPLR 2
PUSHOFF switchlights in wings–level flight:
- Illuminated switchlight push Off

Landing Considerations:

- Land at an airport with minimum crosswind and turbulence using Flap 15 or 35.

- IF SPLR 1 or SPLR 2 PUSH OFF switchlights do not illuminate continuously in wings–level flight:
- Power apply
 - Airspeed increase

Landing Considerations:

- Land at an airport with minimum crosswind and turbulence using Flap 15 or 35.

Approach and V_{REF} Speeds:

Flap 15 or 35 1.4 Vs

Landing Distance Factor:

Flap 15 1.23

Flap 35 1.28

**“ROLL SPLR INBD HYD” or
“ROLL SPLR OUTBD HYD”
(Caution Light)**

- Roll Spoiler Pressure (affected system) push Off

Landing Considerations:

- Land using Flap 15 or 35

Approach and V_{REF} Speeds:

Flap 15 or 35 V_{REF} + 6 Kts

Landing Distance Factor:

Flap 15 1.21

Flap 35 1.21

Note: Illumination of the ROLL SPLR INBD HYD caution light at an airspeed above 135kts or greater may be indicative of a spoiler cable failure.

**“ROLL SPLR INBD HYD” and
“ROLL SPLR OUTBD HYD”
(Caution Lights)**

(Spoiler Cable Failure)

- SPLR 1 and SPLR 2 switchlights push Off **█**

Landing Considerations:

- Land at an airport with minimum crosswind and turbulence using Flap 15.

PITCH CONTROL JAM

- Autopilot disengage
 - Flap and Airspeed maintain at time of jam
 - Control Columns both pilots attempt to overcome jam
- IF unable to overcome jam:
- Relax control column force
 - Pitch Disc Handle pull and turn 90°
 - Control Columns both pilots attempt pitch control
 - Pilot with free control column will fly the aircraft.

Caution: *With pitch disconnect handle pulled, the autopilot must not be engaged.*

Note: *Elevator forces will be lighter than normal and pitch control degraded.*

IF jam occurs below 150 KIAS:

- Airspeed 150 KIAS (max)

IF jam occurs above 150 KIAS:

- Airspeed airspeed at time of jam (max)

IF elevator is free and floating:

- Airspeed 180 KIAS (max)

Landing Considerations:

- Land with flap setting at time of jam at an airport with minimum crosswind and turbulence.

IF Flap 0, 5 or 10 landing:

- GPWS Flap Override press

Approach and V_{REF} Speeds:

Flap 0, 5, 10 or 15 1.3 V_S

Landing Distance Factor:

Flap 0 (use Flap 35 chart) 1.54
 Flap 5 (use Flap 35 chart) 1.31
 Flap 10 (use Flap 35 chart) 1.18
 Flap 15 1.10

Caution: *Avoid pitch attitudes in excess of 6° at touchdown.*

If reverse power is required, care should be taken to ensure that engine torque limit in reverse is not exceeded.

ELEVATOR CONTROL MALFUNCTION

(Loss of elevator and manual trim control)

- Stby Elevator Trim Arm
- Nose Down / Nose Up as req'd

Warning: *The standby elevator trim rate is slow. Monitor the effect of a change in trim setting before initiating another change.*

Note: *Elevator Trim pointer will not indicate trim position.*

- One pilot to control pitch with Stby Elevator Trim switch and engine power controls.
- Other pilot to control roll throughout the approach and landing (maximum bank angle 15°).
- Minimize power changes.
- If possible, shift C.G. aft subject to normal limits.

Landing Considerations:

- Land at an airport with minimal crosswind and turbulence in VMC conditions.
- Land using Flap 15.
- Select Flap 5 and trim aircraft to not less than 1.4 Vs Flap 5 before proceeding to select Flap 15.
- Select Flap 15 and trim aircraft to not less than 1.4 Vs.
- Stabilize aircraft on approach and in landing configuration Flap 15, prior to passing 1000 ft AGL.
- No configuration change may be made after the approach has been commenced.

Approach and V_{REF} Speeds:

Flap 5 and 15 1.4 V_S

Landing Distance Factor:

Flap 15 1.15

Warning: *Power changes during approach should be limited to small amounts and the airplane should be trimmed before a subsequent power change is made.*

DO NOT flare or reduce power to Flight Idle prior to touchdown.

ABNORMAL FLAP LANDING

Flap failed between 0 and 15:



Yes

- GPWS Flap Override press

Landing Considerations:

- Disengage autopilot at 500 ft AGL if Flap 0 (1500 ft AGL if Flap between 0 and 15).
- Nosewheel should be promptly brought into contact with the ground following main wheel contact.

Approach and V_{REF} Speeds:

Flap 0 1.3 V_S |

Landing Distance Factor:

Flap 0 (use Flap 35 chart) 1.54

Caution: *Avoid pitch attitudes in excess of 6° at touchdown.*

If reverse power is required, care should be taken to ensure that engine torque limit in reverse is not exceeded.

- END -

No

Flap failed between 15 or 35:

Landing Considerations:

- The smaller flap angle must be used when calculating landing performance.

----- END -----

**“FLAP DRIVE”
(Caution Light)**

- No crew action req'd. |

Note: *Flap will continue to operate normally and may be used to complete the flight.*

**“FLAP POWER”
(Caution Light)**

- #1 Hyd Qty and Press check

System 1 Pressure is low and Quantity is normal:



Yes

- Stby Hyd Press 1 on
- Flap as req'd

Note: *Operation of flap with No. 1 standby hydraulic pump may cause illumination of FLAP Power caution light.*

- END -

No

System 1 Pressure is low and Quantity is depleted:

Note: *With complete loss of hydraulic fluid, flap will remain in selected position.*

- No. 1 HYDRAULIC SYSTEM FAILURE (PAGE 12.4) accomplish

----- END -----

RUDDER JAM

(Restricted Rudder Pedal Movement)

Warning: *Should the rudder pedal (rudder jam) suddenly break free, do not apply rudder pedal input in the opposite direction.*

- Affected rudder pedal . . . apply normal push force

Rudder pedal moves as required:

- Affected rudder pedal reduce push force and allow rudder to centre

- END -

Rudder pedal does not respond to normal push force (rudder remains jammed or rudder jam reoccurs):

- Use roll control as required for directional control.
- Airspeed 1.3 V_S (min)

- Landing Considerations:**
- Nosewheel Steering Off
 - Land at an airport with minimum crosswind and turbulence using Flap 15 or 35.
 - Small amounts of asymmetric power may be used to maintain directional control on approach.
 - Use asymmetric braking and power, as required, to maintain directional control after touchdown.

Approach and V_{REF} Speeds:

Flap 15 or 35	1.3 V _S
-------------------------	--------------------

Landing Distance Factor:

Flap 15	1.40
Flap 35	1.40

- AFTER LANDING:**
- Nosewheel Steering on
- END -----

**RUD 1 or RUD 2 PUSH OFF
(Switchlight On)**

- Illuminated switchlight push off
- Airspeed 200 KIAS (max)

Caution: *Avoid abrupt or excessive rudder movements above 150 KIAS.*

**“#1 RUD HYD” or “#2 RUD HYD”
(Caution Light)**

- Affected RUD 1 or RUD 2 switchlight push off
- Airspeed 200 KIAS (max)

Caution: *Avoid abrupt or excessive rudder movements above 150 KIAS.*

**“RUD PRESS” or
“RUD FULL PRESS”
(Caution Light)**

- Airspeed 200 KIAS (max)

Caution: *Avoid abrupt or excessive rudder movements above 150 KIAS.*

**RUDDER TRIM ACTUATOR
RUNAWAY**

- Rudder Trim opposite to runaway

WHEN trim is at the neutral position or IF the trim actuator cannot be reversed:

- Rud Trim Act cb (Left Lower cb panel – F7) pull

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FUEL

“#1 TANK FUEL LOW” or “#2 TANK FUEL LOW” (Caution Light)	11.3
“#1 ENG FUEL PRESS” or “#2 ENG FUEL PRESS” (Caution Light)	11.3
ABNORMAL FUEL TEMPERATURE (Below 11° C or Above 57° C)	11.4
FUEL TRANSFER FAILURE	11.4
“#1 FUEL FLTR BYPASS” or “#2 FUEL FLTR BYPASS” (Caution Light)	11.4
“FUELING ON” (Caution Light)	11.4

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**“#1 TANK FUEL LOW” or
“#2 TANK FUEL LOW”
(Caution Light)**

- Fuel Quantity check

Affected tank fuel content is low:

Yes

- Check for external and internal fuel leaks.

Note: *A check of the cabin will be necessary to identify a possible internal fuel leak.*

Fuel leak confirmed:

Yes

- ENGINE FAIL / FIRE / SHUTDOWN
(Page 5.14) accomplish
- END –

No

- Transfer fuel from unaffected tank.
- Monitor fuel quantity.
- END –

No

- Maintain level attitude as much as possible.
- Tank Aux Pump (affected engine) on
- Monitor fuel quantity.

IF “ENG FUEL PRESS” Caution Light illuminates:

- ENGINE FAIL / FIRE / SHUTDOWN
(Page 5.14) accomplish
- END -----

**“#1 ENG FUEL PRESS” or
“#2 ENG FUEL PRESS”
(Caution Light)**

- Tank Aux Pump (affected side) on

Caution Light remains on:

Yes

- Tank Aux Pump (affected side) Off
- Check for external leaks and for fuel odour within airplane.

IF either is confirmed:

- ENGINE FAIL / FIRE / SHUTDOWN
(page 5.14). accomplish
- END –

No

- No further action required.
- END -----

**ABNORMAL FUEL TEMPERATURE
(Below 11° C or Above 57° C)**

- Tank Aux Pump (affected side) on
 - Continue flight but maintain level attitude as much as possible.
 - Monitor fuel temperature and fuel pressure.
- IF fuel temperature does not return to normal:
- Maintenance action required before next flight.

FUEL TRANSFER FAILURE

Tank Aux Pump Fails to Automatically Activate:

Tank Aux Pump Advisory Light Fails to illuminate:

- Tank Aux Pump (affected side) on
- When transfer is complete:
- Tank Aux Pump (affected side) Off
 - Fuel Transfer Off

– END –

One or Both Fuel Transfer Valve Advisory Lights not at OPEN:

- Fuel Transfer Off
- Consider the effects of maximum lateral fuel asymmetry or low fuel level.

– END –

**“#1 FUEL FLTR BYPASS” or
“#2 FUEL FLTR BYPASS”
(Caution Light)**

- Monitor fuel flow, ITT and N_H. If erratic, indicates contamination has passed filter.
- Maintenance action required before next flight.

**“FUELING ON”
(Caution Light)**

- This is a normal indication during ground refueling operations.

Note: *Fuel transfer is not possible.*

HYDRAULIC POWER

#1 and #2 HYDRAULIC SYSTEM FAILURE	12.3	
No. 1 HYDRAULIC SYSTEM FAILURE LOSS of ALL FLUID from No. 1 HYDRAULIC SYSTEM	12.4	
“#1 ENG HYD PUMP” (Caution Light)	12.5	
No. 2 HYDRAULIC SYSTEM FAILURE LOSS of ALL FLUID from No. 2 HYDRAULIC SYSTEM	12.6	
“#2 ENG HYD PUMP” (Caution Light)	12.7	
“#1 HYD FLUID HOT” or “#2 HYD FLUID HOT” (Caution Light)	12.8	
“#1 STBY HYD PUMP HOT” or “#2 STBY HYD PUMP HOT” (Caution Light)	12.8	
“#2 SPU AUX PWR” (Caution Light)	12.8	

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#1 and #2 HYDRAULIC SYSTEM FAILURE

(Loss of all Hydraulic systems, except Rudder No. 2)

- Autopilot disengage
- Stby Hyd Press 1 Norm
- 2 on
- Airspeed ... 1.4 Vs (min) but not less than 105 KIAS
- Use aileron, elevator and rudder to control the aircraft

Warning: Max airspeed is 200 KIAS.

Caution: Avoid abrupt or excessive rudder movements above 150 KIAS.

IF flap is at 0, 5 or 10:

- GPWS Flap Override press

Lost Services:

- Rudder System No. 1
- Normal Landing Gear Retraction and Extension
- Outboard and Inboard Roll Spoilers
- Nosewheel Steering
- Flap
- Normal/Anti-skid Brakes

Landing Considerations:

- Land immediately at the nearest suitable airport with minimum crosswind and turbulence.
- Alternate Landing Gear Extension (page 14.3) accomplish when required
- Use asymmetric power, as required, to maintain directional control after touchdown.
- Use Emergency Brake to stop aircraft (approximately 6 brake applications available).
- Use of maximum reverse power for stopping may cause directional deviation.

Approach and V_{REF} speeds:

- Flap 0 and 5 1.4 Vs
- Flap 10 and 15 1.4 Vs (105 KIAS min)

Landing Distance Factor:

- Flap 0 (use Flap 35 chart) 2.63
- Flap 5 (use Flap 35 chart) 1.64
- Flap 10 (use Flap 35 chart) 1.46
- Flap 15 1.45

Caution: Pitch attitudes in excess of 6° in the landing flare may cause the fuselage to contact the runway.

Excessive application of emergency braking can result in skidding and tire failure.

Landing with one engine inoperative, use Discing commensurate with directional control.

No. 1 HYDRAULIC SYSTEM FAILURE

**LOSS of ALL FLUID from
No. 1 HYDRAULIC SYSTEM**

(#1 ENG HYD PUMP caution light and no quantity indicated on #1 HYD QTY Gauge)

- Stby Hyd Press 1 Norm
- Airspeed 200 KIAS (max)

Caution: *Avoid abrupt or excessive rudder movements above 150 KIAS.*

IF Flap failed between 0 and 15:

- GPWS Flap Override press

Lost services:

- Inboard Roll Spoilers
- Rudder System No. 1
- Flap
- Normal / Anti-skid Brakes

Landing Considerations:

- Disengage autopilot at 500 ft AGL if Flap 0 (1500 ft AGL if Flap between 0 and 15).
- Use Emergency Brake to stop aircraft (unlimited brake applications available).

Approach and V_{REF} Speeds:

Flap 0 1.4 V_S

Landing Distance Factor:

Flap 0 (use Flap 35 chart) 2.63

Caution: *Avoid pitch attitudes in excess of 6° at touchdown.*

Excessive application of emergency braking can result in skidding and tire failure.

If reverse power is required, care should be taken to ensure that engine torque limit in reverse is not exceeded.

**#1 ENG HYD PUMP
(Caution Light)**

(No pressure may be indicated in the No. 1 Hydraulic system)

- #1 Hyd Qty check IF system 1 quantity is normal:
- Stby Hyd Press 1 on
 - Monitor pressure and quantity in the No. 1 Hydraulic system for normal indications.

Landing Considerations:

- Flap extension and retraction is slower than normal.
- Flap Power caution light may come in during flap operation.

No. 2 HYDRAULIC SYSTEM FAILURE

**LOSS of ALL FLUID from
No. 2 HYDRAULIC SYSTEM**

(#2 ENG HYD PUMP caution light and no quantity indicated on #2 HYD QTY Gauge)

- Stby Hyd Press 2 on

Lost Services:

- Normal Landing Gear Retraction and Extension
- Outboard Roll Spoilers
- Nosewheel Steering
- Emerg Brakes (if Park Brake pressure indicator shows depleted pressure)

Landing Considerations:

- Alternate Landing Gear Extension
(Page 14.3) accomplish when required
- Use asymmetric power and braking, as required, to maintain directional control after touchdown.

Approach and V_{REF} speeds:

Flap 15	$V_{REF}+6$ KTS
Flap 35	$V_{REF}+6$ KTS

Landing Distance Factor:

Flap 15	1.21
Flap 35	1.21

**#2 ENG HYD PUMP
(Caution Light)**

(No pressure may be indicated in the No. 2 Hydraulic system)

- #2 Hyd Qty Indicator check

IF system 2 quantity is normal:

- Stby Hyd Press 2 on
- Monitor pressure and quantity in the No. 2 Hydraulic System for normal indications.

Landing Considerations:

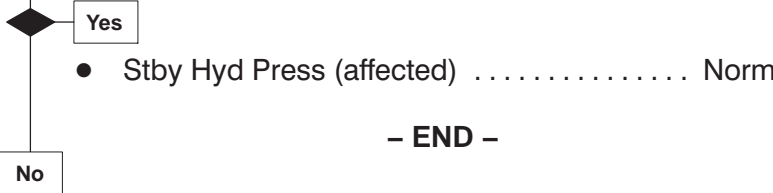
- Prior to selecting Landing Gear Down:
 - Manual PTU on

**“#1 HYD FLUID HOT” or
“#2 HYD FLUID HOT”
(Caution Light)**

- Pressure and Quantity monitor

**“#1 STBY HYD PUMP HOT” or
“#2 STBY HYD PUMP HOT”
(Caution Light)**

Flap Selector Lever set at 0:



Flap Selector Lever set greater than 0:

- No crew action req'd.

----- END -----

**“#2 SPU AUX PWR”
(Caution Light)**

- No crew action req'd.

Note: *Maintenance action required prior to next flight..*

HYDRAULIC POWER

**“#1 HYD ISO VLV” and
“#2 HYD ISO VLV”**
(Caution Lights) 12.3

No. 1 HYDRAULIC SYSTEM FAILURE
LOSS of ALL FLUID from No. 1 HYDRAULIC
SYSTEM 12.4

“#1 HYD ISO VLV”
(Caution Light) 12.5

“#1 ENG HYD PUMP”
(Caution Light) 12.5

No. 2 HYDRAULIC SYSTEM FAILURE
LOSS of ALL FLUID from No. 2 HYDRAULIC
SYSTEM 12.6

“#2 HYD ISO VLV”
(Caution Light) 12.7 |

“#2 ENG HYD PUMP”
(Caution Light) 12.7 |

**“#1 HYD FLUID HOT” or
“#2 HYD FLUID HOT”**
(Caution Light) 12.8 |

**“#1 STBY HYD PUMP HOT” or
“#2 STBY HYD PUMP HOT”**
(Caution Light) 12.8 |

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**“#1 HYD ISO VLV” and
“#2 HYD ISO VLV”
(Caution Lights)**

(Loss of all hydraulic systems, except rudder)

- Autopilot disengage
 - Stby Hyd Press 1 and 2 on
 - Airspeed 1.4Vs (min) but not less than 105 KIAS
 - Use aileron, elevator and rudder to control the aircraft
- If flap is at 0, 5 or 10:
- GPWS Flap Override press

Lost Services:

- Normal Landing Gear Retraction and Extension
- Outboard and Inboard Roll Spoilers
- Nosewheel Steering
- Flap
- Normal/Anti-skid Brakes

Landing Considerations:

- Land immediately at the nearest suitable airport with minimum crosswind and turbulence.
- Alternate Landing Gear Extension
(Page 14.3) accomplish when required
 - Use asymmetric power, as required, to maintain directional control after touchdown.
 - Use Emergency Brake to stop aircraft (approximately 6 brake applications available).
 - Use of maximum reverse power for stopping may cause directional deviation.

Approach and V_{REF} speeds:

Flap 0 and 5	1.4 Vs
Flap 10 and 15	1.4 Vs (105 KIAS min)

Landing Distance Factor:

Flap 0 (use Flap 35 chart)	2.63
Flap 5 (use Flap 35 chart)	1.64
Flap 10 (use Flap 35 chart)	1.46
Flap 15	1.45

Caution: *Pitch attitudes in excess of 6° in the landing flare may cause the fuselage to contact the runway.*

Excessive application of emergency braking can result in skidding and tire failure.

Landing with one engine inoperative, use discing commensurate with directional control.

No. 1 HYDRAULIC SYSTEM FAILURE

LOSS of ALL FLUID from No. 1 HYDRAULIC SYSTEM

("#1 ENG HYD PUMP" and "#1 HYD ISO VLV" Caution Lights and no quantity indicated in the No. 1 Hydraulic System)

Note: "#1 HYD ISO VLV" Caution Light may go out with very low hydraulic fluid quantity in the No. 1 Hydraulic System.

- Stby Hyd Press 1 Norm
- Airspeed 200 KIAS (max)

IF Flap failed between 0 and 15:

- GPWS Flap Override press

Lost Services:

- Inboard Roll Spoilers
- Rudder System No. 1
- Flap
- Normal / Anti-Skid Brakes

Landing Considerations:

- Disengage autopilot at 500 ft AGL if Flap 0 (1500 ft AGL if Flap between 0 and 15).
- Use Emergency Brake to stop aircraft (unlimited brake applications available).

Approach & V_{REF} speeds:

Flap 0 1.4 V_S

Landing Distance Factor:

Flap 0 (use Flap 35 chart) 2.63

Caution: Avoid pitch attitudes in excess of 6° at touchdown.

Excessive application of emergency braking can result in skidding and tire failure.

If reverse is required, care should be taken to ensure that engine torque limit in reverse is not exceeded.

**#1 HYD ISO VLV
(Caution Light)**

(Partial loss of fluid from the No. 1 Hydraulic System)

- Monitor quantity in the No. 1 hydraulic System for further loss of fluid.

If Flap failed between 0 or 15:

- GPWS Flap Override press

Lost Services:

- Inboard Roll Spoilers
- Flap
- Normal/Anti-Skid Brakes

Landing Considerations:

- Use Emergency Brake to stop aircraft (unlimited brake applications available).

Approach & V_{REF} speeds:

Flap 0 1.4 V_S

Landing Distance Factor:

Flap 0 (use Flap 35 chart) 2.63

Caution: *Avoid pitch attitudes in excess of 6° at touchdown.*

Excessive application of emergency braking can result in skidding and tire failure.

If reverse is required, care should be taken to ensure that engine torque limit in reverse is not exceeded.

**#1 ENG HYD PUMP
(Caution Light)**

(No pressure may be indicated in the No. 1 Hydraulic System)

- #1 Hyd Qty check

If system 1 quantity is normal:

- Stby Hyd Press 1 on
- Monitor pressure and quantity in the No. 1 Hydraulic system for normal indications.

Landing Considerations:

- Flap extension and retraction is slower than normal.
- Flap Power caution light may come in during flap operation.

No. 2 HYDRAULIC SYSTEM FAILURE

**LOSS of ALL FLUID from
No. 2 HYDRAULIC SYSTEM**

(“#2 ENG HYD PUMP” and “#2 HYD ISO VLV” Caution Lights and no quantity indicated in the No. 2 Hydraulic System)

Note: “#2 HYD ISO VLV” Caution Light may go out with very low hydraulic fluid quantity in the No. 2 Hydraulic System.

- Stby Hyd Press 2 Norm
- Airspeed 200 KIAS (max)

Lost Services:

- Normal Gear Retraction And Extension
- Nosewheel Steering
- Emerg Brakes (when PK BRK press depleted)
- Outboard Roll Spoiler
- Rudder System No. 2

Landing Considerations:

- Alternate Landing Gear Extension
(Page 14.3) accomplish when required
- Use asymmetric braking and power, as required, to maintain directional control after touchdown.

Approach & V_{REF} speeds:

- Flap 15 V_{REF} + 6 kts
- Flap 35 V_{REF} + 6 kts

Landing Distance Factor:

- Flap 15 1.21
- Flap 35 1.21

**#2 HYD ISO VLV
(Caution Light)**

(Partial loss of fluid from the No. 2 Hydraulic System)

- Monitor quantity in the No. 2 hydraulic System for further loss of fluid.

Lost Services:

- Normal Gear Retraction and Extension
- Nosewheel Steering
- Emerg Brakes (when PK BRK press depleted)
- Outboard Roll Spoilers

Landing Considerations:

- Alternate Landing Gear Extension
(Page 14.3) accomplish when required
- Use asymmetric braking and power, as required, to maintain directional control after touchdown.

Approach & V_{REF} speeds:

- Flap 15 V_{REF} + 6 kts
- Flap 35 V_{REF} + 6 kts

Landing Distance Factor:

- Flap 15 1.21
- Flap 35 1.21

**#2 ENG HYD PUMP
(Caution Light)**

(No pressure may be indicated in the No. 2 Hydraulic System)

- #2 Hyd Qty check

If system 2 quantity is normal:

- Stby Hyd Press 2 on
- Monitor pressure and quantity in the No. 2 Hydraulic system for normal indications.

Landing Considerations:

- Prior to selecting Landing Gear Down
 - Manual PTU on
 - Landing Gear Down / 3 green
 - Manual PTU Off

**“#1 HYD FLUID HOT” or
“#2 HYD FLUID HOT”
(Caution Light)**

- Pressure and Quantity monitor

**“#1 STBY HYD PUMP HOT” or
“#2 STBY HYD PUMP HOT”
(Caution Light)**

Flap Selector Lever set at 0:



Yes

- Stby Hyd Press (affected) Norm

- END -

No

Flap Selector Lever set greater than 0:

- No crew action req'd.

----- END -----

ICE AND RAIN PROTECTION STALL PROTECTION

“DEICE PRESS” (Caution Light)	13.3
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STICK PUSHER SHUT–OFF (SWITCHLIGHT ON)	13.7

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**“DEICE PRESS”
(Caution Light)**

- Airframe Auto Selector Off
- Boot Air Iso
- Deice Pressure Indicator check
- Engine Intake Bypass Doors open
- Ignition 1 and 2 Manual (Auto)

Caution: *Do not select the outer two wing positions during manual deicing of the tail and engine intake.*

- Airframe Manual selector Tail and engine intake positions

Note: *The dwell at each Tail and engine Intake position should be 6 seconds.*

The engine intake boot on the side with normal pressure can be deiced.

- Exit and avoid icing conditions if possible.

Landing Considerations:

IF landing in icing conditions or the aircraft is not aerodynamically clean after leaving icing conditions:

- Land using Flap 15

Minimum Hold Speed:

Flap 0 1.3 Vs + 15 KTS

Approach, V_{REF} and V_{GA} Speeds:

Flap 15 add 15 KTS

Landing Distance Factor:

Flap 15 1.46

DEICE BOOT FAILURE

Deice Boot Advisory Light does not Illuminate during boot cycle:

- Test Caut / Advsy Advsy

IF affected advisory light illuminates:

- Exit and avoid icing conditions if possible

Landing Considerations:

IF landing in icing conditions or the aircraft is not aerodynamically clean after leaving icing conditions:

- Land using Flap 15

Minimum Hold Speed:

Flap 0 1.3 Vs + 15 KTS

Approach, V_{REF} and V_{GA} Speeds:

Flap 15 add 15 KTS

Landing Distance Factor:

Flap 15 1.46

Deice Boot Advisory Light Illuminates Continuously:

- Exit and avoid icing conditions if possible

Landing Considerations:

IF landing in icing conditions or the aircraft is not aerodynamically clean after leaving icing conditions:

- Land using Flap 15

Minimum Hold Speed:

Flap 0 1.3 Vs + 15 KTS

Approach, V_{REF} and V_{GA} Speeds:

Flap 15 add 15 KTS

Landing Distance Factor:

Flap 15 1.46

ENGINE INTAKE BOOT FAILURE

FOR remainder of flight (affected engine):

- Engine Intake Bypass Door open
- Ignition Manual (Auto)
- Exit and avoid icing conditions if possible.

PROPELLER DEICING FAILURE

(Propeller Advisory Light does not illuminate)

- Test Caut / Advsy Advisory

IF all propeller advisory lights illuminate:

- Prop Timer Selector select alternate position

IF propeller advisory lights do not cycle normally:

- Condition levers increase as req'd
- Exit and avoid icing conditions if possible.

**“L WSHLD HOT” or “R WSHLD HOT”
(Caution Light)**

- Windshield Heat Warm Up
- Exit and avoid icing conditions if possible.

**“SIDE WDO HOT”
(Caution Light)**

- Pilot Wdo Heat Off

**“L ELEV HORN HEAT” or
 “R ELEV HORN HEAT”
 (Caution Light)**

- Exit and avoid icing conditions if possible.

IF icing conditions cannot be avoided:

- Flap 0°
- Airspeed 173 KIAS (min)

Landing Considerations:

- Land using Flap 15
- Minimum Hold Speed:
 Flap 0 173 KIAS
- Approach, V_{REF} and V_{GA} Speeds:
 Flap 15 add 15 KTS
- Landing Distance Factor:
 Flap 15 1.46

**“PITOT HEAT 1” or “PITOT HEAT 2”
 (Caution Light)**

- Pitot Static Heat (affected) on
 IF Caution Light remains on, fly the aircraft using
 opposite side instruments in icing and precipitation.

**“#1 STALL SYST FAIL” or
 “#2 STALL SYST FAIL” and
 “PUSHER SYST FAIL”
 (Caution Lights)**

- Airspeed 1.3 V_S (min)
 OR
- Maintain airspeed appropriate for icing conditions and
 other failures if applicable

**“PUSHER SYST FAIL”
(Caution Light)**

- Airspeed 1.3 V_S (min)
OR
- Maintain airspeed appropriate for icing conditions and other failures if applicable

**STICK PUSHER SHUT–OFF
(Switchlight On)**

- Aircraft attitude control
- Pilot or Copilot Stick Pusher
Shut–off switch push off
- Airspeed 1.3 V_S (min)
OR
- Maintain airspeed appropriate for icing conditions and other failures if applicable

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LANDING GEAR

ALTERNATE LANDING GEAR EXTENSION or “LDG GEAR INOP” (Caution Light)	14.3
LANDING GEAR DOOR MALFUNCTIONS	14.4
“INBD ANTI SKID” <u>and/or</u> “OUTBD ANTI SKID” (Caution Light)	14.5
“WT ON WHEELS” (Caution Light)	14.5
“NOSE STEERING” (Caution Light)	14.6
ALL LANDING GEAR FAIL TO RETRACT	14.7
LANDING GEAR INDICATOR MALFUNCTION	14.7
“ALT GEAR IND FAIL” (Caution Light)	14.7
“TOUCHED RUNWAY” (Warning Light)	14.7

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**ALTERNATE LANDING GEAR
EXTENSION or “LDG GEAR INOP”
(Caution Light)**

Landing Considerations:

- Landing gear cannot be retracted.
- Nosewheel steering will be inoperative.
- Do not select PTU to manual during approach.

Note: *The main and nose gear release handle pull forces will be significantly higher than experienced during practice alternate landing gear extensions. The required pull force, to release the gear uplocks, can be as high as 41 kg (90 lb). It may require a repeated pull effort to achieve a landing gear down and locked indication.*

- Airspeed 140 KIAS (max)
- L/G Inhibit switch Inhibit
- Landing Gear selector Down
- Landing Gear Alternate Release door open
- Main Gear Release handle pull fully down
Check L & R DOOR amber open and LEFT & RIGHT green gear locked down advisory lights illuminate.
- Landing Gear Alternate Extension door open

Note: *If LEFT and/or RIGHT green gear locked Advisory Lights do not illuminate, insert Hydraulic Pump handle in socket and operate pump until LEFT and RIGHT green Advisory Lights illuminate.*

- Nose Gear Release handle pull fully up
Check N DOOR amber open and NOSE green gear locked down advisory lights illuminate.

Note: *Leave Landing Gear Alternate Release and Landing Gear Alternate Extension doors fully open and L/G Inhibit switch at Inhibit.*

- Gear-Locked-Down indicator on / check / off

Warning: *Ensure the Alternate Nose Gear-Locked-Down indicator light is checked with the Taxi light Off.*

- Anti-skid Test

After Landing:

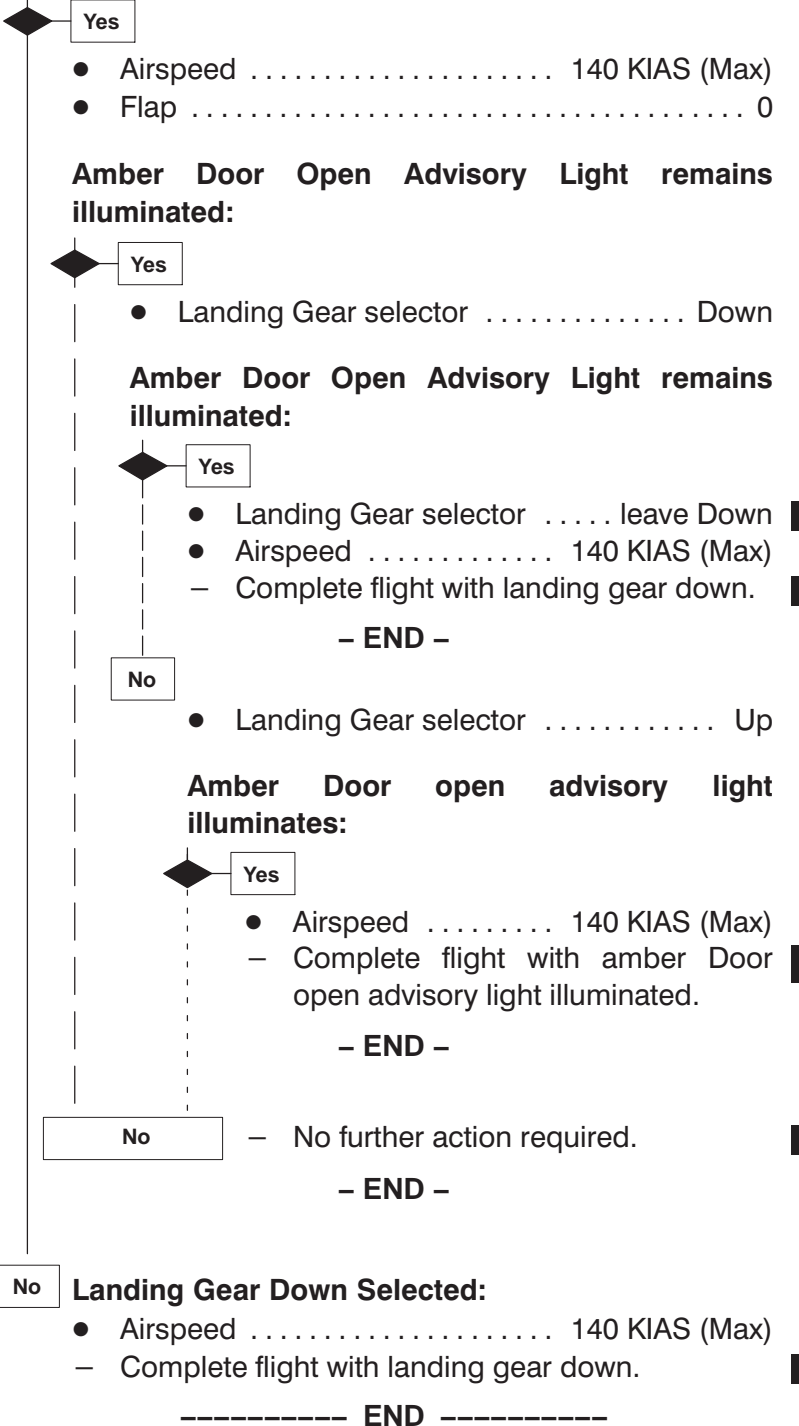
As soon as possible after engine shutdown:

- Ground Locks install

LANDING GEAR DOOR MALFUNCTIONS

(Illumination of Amber Door Open Advisory Light after Landing Gear selection)

Landing Gear Up:



**“INBD ANTI SKID”and/or
“OUTBD ANTI SKID”
(Caution Light)**

- Anti-Skid On

Caution Light remains on:

Yes

Landing Considerations:

- Anti-Skid will be inoperative, use Manual Technique for braking.

Caution: *Excessive brake application can result in skidding and tire failure.*

Manual Technique – for maximum deceleration, brakes should be applied intermittently with momentary release at about 1 second intervals.

Landing Distance Factor:

Flap 15	1.93
Flap 35	1.93

– END –

No

- No further action required.

----- END -----

**“WT ON WHEELS”
(Caution Light)**

- No crew action req’d.
- Complete flight with Caution Light on.

Caution: *Landing Gear may not retract.*

Note: *Caution Light may extinguish after landing, however, rectification will be required prior to next flight.*

**“NOSE STEERING”
(Caution Light)**

In Flight:

- Steering Tiller centered

IF Caution Light remains on:

- Nosewheel Steering Off

Landing Considerations:

- Land at an airport with minimum crosswind and turbulence.

After touchdown:

- Use asymmetric braking and power, as required, to maintain directional control.

On the Ground:

- Taxi airplane forward to centre nosewheel.

With the airplane stopped:

- Steering Tiller and Rudder pedals centered
- Nosewheel Steering Off then on
- Wait for Nosewheel Steering to re-engage.

Caution Light remains on:



Yes

- Nosewheel Steering Off
- Use asymmetric braking and power, as required, to taxi airplane.
- Maintenance action required prior to flight.

– END –

No

- Check nosewheel for correct response to steering inputs prior to flight.

----- END -----

ALL LANDING GEAR FAIL TO RETRACT

(3 Red Gear Unsafe and Landing Gear Lever Advisory Lights illuminated with Landing Gear Lever selected Up)

Note: *If the Landing Gear Alternate Release door is open, the landing gear will not retract. Do not close the Landing Gear Alternate Release door with the Landing Gear Lever in the Up position.*

Note: *Landing Gear Doors may be open or closed (Amber Doors Open Advisory Lights illuminated or out).*

- Landing Gear selector Down
Confirm 3 Green Gear-Locked-Down Advisory Lights illuminate.
- DO NOT re-select landing gear up.
- Land at the nearest suitable airport.

LANDING GEAR INDICATOR MALFUNCTION

IF any of the Green gear-locked-down Advisory Lights fail to illuminate:

- Landing Gear Alternate Extension door open
- Gear-Locked-Down Indicator on / check / off

Warning: *Ensure the Alternate Nose Gear-Locked-Down indicator light is checked with the Taxi light Off.*

- Landing Gear Alternate Extension door close

“ALT GEAR IND FAIL” (Caution Light)

(Alternate Gear–Locked–Down Indicator malfunction)

Note: *One or more of the Alternate Gear-Locked-Down Indicator Light circuit(s) is unserviceable.*

With the landing gear indicating down and locked, the failed alternate Gear-Locked-Down indicator light circuit(s) can be identified by selecting the alternate Gear-Locked-Down Indicator Light switch. The light(s) associated with the failed circuit(s) will not illuminate.

- Maintenance action required before next flight.

“TOUCHED RUNWAY” (Warning Light)

Due to the possibility of runway debris:

- Advise ATC and airport operations of the fuselage/runway contact.
- Aircraft must not be flown prior to inspection and maintenance approval.

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DASH 8 MODEL 314

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12.6	FEB 26/16 8/1983		
	FEB 26/16 8/2781		
12.7	FEB 26/16 8/1983	* MODSUM 8Q101170 and	
	MAY 24/17 8/2781	8Y101067	
12.8	FEB 26/16 8/1983		
	FEB 26/16 8/2781		

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PRI INV	L AC BUS	EMER LTS DISARMED		#1 HYD FLUID HOT	#1 STBY HYD PUMP HOT	FLT COMPT- PACK HOT	#1 ENG FUEL PRESS	#2 ENG FUEL PRESS	ALT GEAR IND FAIL	RUD PRESS		#1 STALL SYST FAIL	FLT DATA RECORDER
9.10*	9.5	9.12		12.8	12.8	4.5	11.3	11.3	14.7	10.11		13.6	6.5
SEC INV	R AC BUS	PITOT HEAT 1		#2 HYD FLUID HOT	#2 STBY HYD PUMP HOT	#1 BLEED HOT	#1 ENG HYD PUMP	#2 ENG HYD PUMP	#2 BLEED HOT		PUSHER SYST FAIL	#2 STALL SYST FAIL	GPWS
9.10*	9.5	13.6		12.8	12.8	4.5	12.5	12.7	4.5		13.7*	13.6	6.5
AUX INV	DC BUS			FLT COMPT- DUCT HOT	PITOT HEAT 2	#1 DC GEN HOT	#1 DC GEN	#2 DC GEN	#2 DC GEN HOT	ROLL SPLR INBD HYD	ROLL SPLR OUTBD HYD	NOSE STEERING	PARKING BRAKE
9.10*	9.3			4.5	13.6	9.9	9.7*	9.7*	9.9	10.4*	10.4*	14.6	
L 26 AC	L TRU	L WSHLD HOT		CABIN DUCT HOT	MAIN BATTERY	#1 AC GEN HOT	#1 AC GEN	#2 AC GEN	#2 AC GEN HOT	#1 RUD HYD	#2 RUD HYD	INBD ANTI SKID	OUTBD ANTI SKID
9.6*	9.7*	13.5		4.5	9.12	9.9	9.7*	9.7*	9.9	10.11	10.11	14.5	14.5
R 26 AC	R TRU	R WSHLD HOT		CABIN PACK HOT	AUX BATTERY	#1 ENG MANUAL		#2 SPU AUX PWR	#2 ENG MANUAL	RUD FULL PRESS	FLAP DRIVE	LDG GEAR INOP	WT ON WHEELS
9.6*	9.7*	13.5		4.5	9.12	5.10		12.8	5.10	10.11	10.8	14.3	14.5
L ELEV HORN HEAT	RELEV HORN HEAT	SIDE WDO HOT	L TRU HOT	R TRU HOT	DEICE PRESS	#1 FUEL FLTR BYPASS	#1 TANK FUEL LOW	#2 TANK FUEL LOW	#2 FUEL FLTR BYPASS		FLAP POWER	APU	FUELING ON
13.6	13.6	13.5	9.9	9.9	13.3	11.4	11.3	11.3	11.4	10.9	5.7	5.7	11.4
			#1 ENG OIL PRESS	#2 ENG OIL PRESS	CHECK FIRE DET	CABIN PRESS	PASS DOOR	BAG DOOR	MAIN BAT HOT	AUX BAT HOT	FWD EXIT DOOR	SERV DOOR	
			5.9	5.9	5.13	4.4	4.6	4.6	9.12	9.12	4.6	4.6	

* This caution/warning light is addressed in multiple procedures. Where applicable, only the most critical of the associated procedures is page referenced. Ensure the appropriate procedure is carried out.

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PRI INV	L AC BUS	EMER LTS DISARMED		#1 HYD FLUID HOT	#1 STBY HYD PUMP HOT	FLT COMPT- PACK HOT	#1 ENG FUEL PRESS	#2 ENG FUEL PRESS	ALT GEAR IND FAIL	RUD PRESS		#1 STALL SYST FAIL	FLT DATA RECORDER
9.10*	9.5	9.12		12.8	12.8	4.5	11.3	11.3	14.7	10.11		13.6	6.5
SEC INV	R AC BUS	PITOT HEAT 1		#2 HYD FLUID HOT	#2 STBY HYD PUMP HOT	#1 BLEED HOT	#1 ENG HYD PUMP	#2 ENG HYD PUMP	#2 BLEED HOT		PUSHER SYST FAIL	#2 STALL SYST FAIL	GPWS
9.10*	9.5	13.6		12.8	12.8	4.5	12.5*	12.7*	4.5		13.7*	13.6	6.5
AUX INV	DC BUS			FLT COMPT- DUCT HOT	PITOT HEAT 2	#1 DC GEN HOT	#1 DC GEN	#2 DC GEN	#2 DC GEN HOT	ROLL SPLR INBD HYD	ROLL SPLR OUTBD HYD	NOSE STEERING	PARKING BRAKE
9.10*	9.3			4.5	13.6	9.9	9.7*	9.7*	9.9	10.4*	10.4*	14.6	
L 26 AC	L TRU	L WSHLD HOT		CABIN DUCT HOT	MAIN BATTERY	#1 AC GEN HOT	#1 AC GEN	#2 AC GEN	#2 AC GEN HOT	#1 RUD HYD	#2 RUD HYD	INBD ANTI SKID	OUTBD ANTI SKID
9.6*	9.7*	13.5		4.5	9.12	9.9	9.7*	9.7*	9.9	10.11	10.11	14.5	14.5
R 26 AC	R TRU	R WSHLD HOT		CABIN PACK HOT	AUX BATTERY	#1 ENG MANUAL	#1 HYD ISO VLV	#2 HYD ISO VLV	#2 ENG MANUAL	RUD FULL PRESS	FLAP DRIVE	LDG GEAR INOP	WT ON WHEELS
9.6*	9.7*	13.5		4.5	9.12	5.10	12.3*	12.3*	5.10	10.11	10.8	14.3	14.5
L ELEV HORN HEAT	RELEV HORN HEAT	SIDE WDO HOT	L TRU HOT	R TRU HOT	DEICE PRESS	#1 FUEL FLTR BYPASS	#1 TANK FUEL LOW	#2 TANK FUEL LOW	#2 FUEL FLTR BYPASS		FLAP POWER	APU	FUELING ON
13.6	13.6	13.5	9.9	9.9	13.3	11.4	11.3	11.3	11.4		10.9	5.7	11.4
			#1 ENG OIL PRESS	#2 ENG OIL PRESS	CHECK FIRE DET	CABIN PRESS	PASS DOOR	BAG DOOR	MAIN BAT HOT	AUX BAT HOT	FWD EXIT DOOR	SERV DOOR	
			5.9	5.9	5.13	4.4	4.6	4.6	9.12	9.12	4.6	4.6	
			14.7										

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MOD 8/2781 ONLY

Ensure the appropriate procedure is carried out.