Model BD–500–1A10
Model BD–500–1A11

Transport Canada

Dispatch Deviation Guide

DDG

BD500–3AB48–12403–00

Issue No. 012

This document agrees with Transport Canada Master Minimum Equipment List BD500–3AB48–12703–00, Issue 011, dated Oct 21/2019. If there are differences between the MMEL and this document, the information in the MMEL takes precedence.

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Publication information			
*Aircraft type:		*Aircraft model:	
*Publication Model Code (PMC):		*Publication title:	
*Media type: ☐ Paper ☐ Web ☐ Disk	*Chapter/Section/Page:	*Issue date:	*Issue number:
*Section title:		*Originator's reference number:	
*Comments:			
Reason for change:			
Reference data provided: ☐ Yes ☐ No Description:			

Rev. no	Issue date	Date inserted	Inserted by
001	Jun 21/2016	Jun 21/2016	Signature on file
002	Aug 04/2016	Aug 04/2016	Signature on file
003	Sep 14/2016	Sep 14/2016	Signature on file
004	Nov 17/2016	Nov 17/2016	Signature on file
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006	Feb 08/2017	Feb 08/2017	Signature on file
007	Jul 04/2017	Jul 04/2017	Signature on file
008	Jan 19/2018	Jan 19/2018	Signature on file
009	Jun 14/2018	Jun 14/2018	Signature on file
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011	Jul 09/2019	Jul 09/2019	Signature on file
012	Oct 22/2019	Oct 22/2019	Signature on file

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The table that follows gives a list of the technical and editorial changes from the previous issue of this document.

ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
All pages	Editorial	Rebranding (AIRBUS / A220 logos).
Preamble	Editorial	Rebranding (Airbus).
Cross–reference list	Editorial	List has been moved at the beginning of the document for clarity. Changes to the list are not identified by revisions bars, they are listed individually below.
Cross–reference list	Technical	AFT CARGO BTL FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	CREW OXY LO PRESS (Caution) Section 1 relief revised.
Cross–reference list	Technical	FUEL MAN XFR FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	FWD CARGO BTL FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	L PACK FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	L PACK LEAK (Caution) Section 1 relief revised.
Cross–reference list	Technical	LAV SMOKE FAIL (Caution) Section 2 relief revised.
Cross–reference list	Technical	R PACK FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	R PACK LEAK (Caution) Section 1 relief revised.
Cross–reference list	Technical	TAWS FAIL (Caution) Section 1 relief revised.
Cross–reference list	Technical	UNABLE RNP (Caution) Section 1 relief revised. Section 2 relief revised.
Cross–reference list	Technical	TAWS GPWS FAIL (Advisory) Section 1 relief revised.
Cross–reference list	Technical	TAWS MAP FAIL (Advisory) Section 1 relief revised.

ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
Cross–reference list	Technical	TAWS TERR FAIL (Advisory) Section 1 relief revised.
Cross–reference list	Technical	TAWS WINDSHEAR FAIL (Advisory) Section 1 relief revised.
Cross–reference list	Technical	21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL CLSD (Info) Section 2 relief revised.
Cross–reference list	Technical	21 L PACK FAIL – L PACK INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 L PACK OVHT – L RAM AIR REG VLV INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 PACK FAULT – L RAM AIR REG VLV INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 PACK FAULT – R RAM AIR REG VLV INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 R PACK FAULT – R PACK INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 R PACK OVHT – R PACK INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	21 R PACK OVHT – R RAM AIR REG VLV INOP (Info) Section 1 relief revised.
Cross–reference list	Technical	24 ELECTRICAL FAULT – L GEN DEGRADED (Info) Section 1 relief revised.
Cross–reference list	Technical	24 ELECTRICAL FAULT – R GEN DEGRADED (Info) Section 1 relief revised.
Cross–reference list	Technical	26 FIRE SYSTEM FAULT – AFT CARGO BTL SQUIB REDUND LOSS (Info) Section 1 relief revised.
Cross–reference list	Technical	26 FIRE SYSTEM FAULT – FWD CARGO BTL SQUIB REDUND LOSS (Info) Section 1 relief revised.
Cross–reference list	Technical	44 CABIN COM FAULT – CKPT HANDSET INOP (Info) Section 1 relief revised.
21–51–01	Technical/Editorial	(M): In step B., the left air conditioning pack corrected to right air conditioning pack. (O): Info messages format harmonized (info) now reads (Info).

ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21–63–00	Technical	(O): NOTE 1 deleted.
21–90–01	Technical	(M): Typo correction in step C. (wrong breaker nomenclature was called).
27–53–01	Technical	(O): Procedure revised.
28–21–55	Technical	(P): Revised.
29–31–03	Technical	(O): In step B. (2)(a): Hydraulic circuit number revised.
30–11–09	Technical	(O): Note 1 and 2 added.
36–11–92	Technical	(O): In A.(1): Step added to reconfigure the bleed system for flight.
36–12–05	Technical	(O): Revised to reconfigure the XBLEED to AUTO prior to flight.
38–30–01	Technical	(M): Added a deactivation procedure for the 100% waste tank ultrasonic point level sensor.
49–14–19	Technical	(P): Revised.
49–62–05	Technical	(P): Revised.
21–00–097–01	Technical	(O): Revised.
27–00–201–01	Technical	(O): Procedure expanded.
27–00–213–02	Technical	(O): Revised.
27–00–213–04	Technical	(O): Revised.
27–00–223–04	Technical	(O): Revised.
30–00–003–01	Technical	(O): Step added to reconfigure the bleed system for flight.
30–00–005–01	Technical	(O): Step added to reconfigure the bleed system for flight.
30–00–013–01	Technical	(O): Step added to reconfigure the bleed system for flight.
30–00–017–01	Technical	(O): Step added to reconfigure the bleed system for flight.
30–00–019–01	Technical	(O): Step added to reconfigure the bleed system for flight.
30–00–027–01	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–009–01	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–011–03	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–013–01	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–031–01	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–035–03	Technical	(O): Step added to reconfigure the bleed system for flight.
36–00–037–01	Technical	(O): Step added to reconfigure the bleed system for flight.
49–00–007–01	Technical	(O): Revised.

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73 R ENGINE FAULT – P2/T2 HEATER INOP	73–00–047–01	575
73 R ENGINE FAULT – T3 SNSR INOP	73–00–049–01	576
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1. General

The Dispatch Deviation Guide (DDG) is intended to assist operators and maintenance organizations in developing the procedures necessary to operate the aircraft in various non–standard configurations as permitted by the Master Minimum Equipment List (MMEL) and as approved by Transport Canada (TC).

2. Background

A Master Minimum Equipment List (MMEL) is published for the A220 aircraft. Additional operator amplification is intended before use, since the MMEL does not always have the special procedures necessary to properly prepare and operate the aircraft. The items for which special procedures are necessary are identified in the MMEL by an (M) and/or an (O). (M) indicates that specific maintenance procedures must be accomplished to configure the aircraft for flight with the inoperative item. These procedures can be accomplished by maintenance personnel or others, as determined by the operator. (O) indicates that normal flight crew procedures must be modified or supplemented to account for the inoperative item. A dash (–) indicates that a variable quantity is installed or required.

It is the operator's responsibility to develop a Minimum Equipment List (MEL) with adequate procedures (using the DDG as a guide) and to get the approval of this MEL from the appropriate regulatory authority. The MEL cannot be less restrictive than the MMEL.

NOTE: The recommend (O) procedure(s) presented in the DDG do not address airline-specific operating requirements. Incorporation of these procedures into the operator's MEL must take applicable operating requirements into consideration.

3. Procedures

This section contains all items from the MMEL that require procedures. Items are given the same ATA number that appears in the MMEL, together with the title of the component or system that is affected.

The symbol (***) after the item title indicates an item that is not required by regulation but can be installed on some models of aircraft covered by the MMEL. This item can be included on the operator's MEL after the applicable regulatory authority has determined that the item is installed on one or more of the operator's aircraft. The symbol (***), however, must not be transcribe into the operator's MEL. Neither this policy nor the use of the symbol (***) give authority to install or remove an item from an aircraft.

In conjunction with this document, the operator must comply with the preamble of the MMEL. The procedures are technically correct, to the best of Airbus Canada Limited Partnership's knowledge, but are not approved by a regulatory authority. The MMEL takes precedence in the event of conflicting information. The AFM takes precedence over the MMEL and the DDG documents.

By publishing the procedures in this document, it does not mean that these are the only valid procedures. The operator can create and establish procedures that more closely meet his needs. The aircraft configuration, routes, special operational procedures, and operator's maintenance practices could have an effect on a given procedure.

Each procedure should be coordinated with or approved by the applicable regulatory authority.

The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator.

A vertical bar (revision bar) in the left margin indicates a change, addition, or deletion in the adjacent text for the current revision of that page only. The change bar is removed at the next revision of that page.

A placard must be installed on each inoperative item to inform and remind the crew members and maintenance personnel of the condition of the equipment.

NOTE: The placards should be located adjacent to the control or indicator for the item affected. Unless otherwise specified, the wording and location of the placard will be determined by the operator.

4. Referenced Maintenance Procedures

The DDG MAINTENANCE (M) procedures give the appropriate steps to accomplish the maintenance procedure that is required by a proviso in a given item. However, for certain (M) procedures, due to the extent of the procedure (deactivation of a system for example), or as required in a step (to prepare the aircraft for maintenance, or to do a operation/function check), an Aircraft Maintenance Publication (AMP) data module number is referenced (refer to BD500–A–JXX–XX–XX–XXXXX–XXXX–X).

5. Thermal Circuit Breaker Acknowledgement – CB TRIP (advisory)

If a DDG procedure requires to open a thermal circuit breaker for dispatch, a CB TRIP (advisory) will show when a thermal circuit breaker is open and not acknowledge. This message may be removed by accessing the CB synoptic page and select the TRIP acknowledgment soft switch.

Trip acknowledgement will:

– Change the state to OUT, and

– Remove the CB TRIP (advisory) message from the EICAS if no other trip acknowledgement soft switches are active.

6. Cross–reference list

A Cross–reference list can be found before Section 2 of the DDG. It is presented as an assistance in relating CAS messages to the appropriate MMEL/DDG item(s). When MMEL relief exists for a component or a system, and that item impacts information presented on a system synoptic page, that synoptic page will reflect the inoperative condition of that item. This does not constitute a degradation of or failure within the affected synoptic page.

7. Modification Summary (ModSum) / Service Bulletin (SB) Reference List

The ModSum / SB Reference List provides a cross–reference between the ModSums and SBs and a description of their purpose.

A220-100 and A220-300 (Model BD–500–1A10 and BD–500–1A11)

ModSum / SB Reference List			
ITEM #	**ModSum**	**SB**	**Description**
21–51–01 21–52–04 21–53–14 21–53–18	500T101031	BD500-219001	Integrated Air System Controller (IASC) Software Update v5.0
21–90–01 27–53–01	500T101030	BD500-314002	Integrated Modular Avionic Application (IMAA) Software Change (Build 8.0A)
52–30–01	500T101352	BD500-523001	Installation of Provisions and Tooling for the Cargo–Door Manual Override

ModSum / SB Reference List			
ITEM #	**ModSum**	**SB**	**Description**
21–00–047–01	500T101031	BD500-219001	Integrated Air System Controller (IASC) Software Update v5.0
21–00–047–02			
21–00–047–03			
21–00–051–01			
21–00–051–02			
21–00–051–03			
21–00–061–01			
21–00–061–02			
21–00–061–03			
21–00–069–01			
21–00–069–02			
21–00–069–03			
21–00–077–01			
21–00–077–02			
21–00–077–03			
21–00–085–01			
21–00–085–02			
21–00–085–03			
21–00–103–01			
21–00–103–02			
21–00–103–03			
21–00–107–01			
21–00–107–02			
21–00–107–03			
21–00–119–01			
21–00–121–01			
21–00–123–01			
21–00–125–01			
21–00–127–01			
21–00–129–01			
21–00–131–01			
21–00–133–01			

ModSum / SB Reference List			
ITEM #	**ModSum**	**SB**	**Description**
27–00–213–01	500T101030	BD500-314002	Integrated Modular Avionic Application (IMAA) Software Change (Build 8.0A)
27–00–213–02			
27–00–213–03			
27–00–213–04			
27–00–223–01			
27–00–223–02			
27–00–223–03			
27–00–223–04			
32–00–003–01			
32–00–005–01			
32–00–007–01			
32–00–009–01			
32–00–011–01			
32–00–013–01			
32–61–005–01			
32–61–005–03			

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WARNING MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
AFT CARGO FIRE	No Dispatch	No Dispatch
APU FIRE	No Dispatch	No Dispatch
APU OVERSPEED	49-00-03	-
BRAKE OVHT	32–49–17	-
CABIN ALT	No Dispatch	No Dispatch
CABIN DIFF PRESS	No Dispatch	No Dispatch
>CABIN EMER	No Dispatch	No Dispatch
CKPT DOOR EMER ACCESS	No Dispatch	No Dispatch
CONFIG AP	No Dispatch	No Dispatch
CONFIG BRAKE	No Dispatch	No Dispatch
CONFIG FLAP	No Dispatch	No Dispatch
CONFIG RUDDER TRIM	No Dispatch	No Dispatch
CONFIG SIDESTICK	No Dispatch	No Dispatch
CONFIG SPOILER	No Dispatch	No Dispatch
CONFIG STAB TRIM	No Dispatch	No Dispatch
DUAL ENG FAIL	No Dispatch	No Dispatch
EMER PWR ONLY	No Dispatch	No Dispatch
EMERGENCY DESCENT	No Dispatch	No Dispatch
EQUIP BAY OVHT	No Dispatch	No Dispatch
EQUIP BAY SMOKE	No Dispatch	No Dispatch
FLT CTRL DIRECT	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

WARNING MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
FWD CARGO FIRE	No Dispatch	No Dispatch
GEAR	No Dispatch	No Dispatch
L ELEVATOR FAIL	No Dispatch	No Dispatch
L ENG FIRE	No Dispatch	No Dispatch
L ENG OIL PRESS	No Dispatch	No Dispatch
L WING A/ICE FAIL	30–11–09	-
LAV SMOKE	No Dispatch	No Dispatch
MLG BAY OVHT	No Dispatch	No Dispatch
R ELEVATOR FAIL	No Dispatch	No Dispatch
R ENG FIRE	No Dispatch	No Dispatch
R ENG OIL PRESS	No Dispatch	No Dispatch
R WING A/ICE FAIL	30–11–09	-
RUDDER FAIL	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
AC BUS 1	No Dispatch	No Dispatch
AC BUS 2	No Dispatch	No Dispatch
AC ESS BUS	No Dispatch	No Dispatch
ADS 1 PROBE HEAT FAIL	No Dispatch	No Dispatch
ADS 1 SLIPCOMP FAIL	-	34–00–019–01
ADS 2 PROBE HEAT FAIL	No Dispatch	No Dispatch
ADS 2 SLIPCOMP FAIL	-	34–00–021–01
ADS 3 FAIL	No Dispatch	No Dispatch
ADS 3 PROBE HEAT FAIL	No Dispatch	No Dispatch
ADS 3 SLIPCOMP FAIL	No Dispatch	No Dispatch
ADS 4 PROBE HEAT FAIL	No Dispatch	No Dispatch
ADS 4 SLIPCOMP FAIL	No Dispatch	No Dispatch
ADS–B 1 OUT FAIL	Not Applicable	Not Applicable
ADS–B 2 OUT FAIL	Not Applicable	Not Applicable
ADS–B OUT FAIL	-	34–00–061–02
ADS DEGRADED	No Dispatch	No Dispatch
ADS ISI PROBE HEAT	No Dispatch	No Dispatch
ADS ISI SLIPCOMP FAIL	No Dispatch	No Dispatch
ADS SAME SOURCE	No Dispatch	No Dispatch
AFT CARGO BTL FAIL	26–25–03–1–B or 26–25–08–1–B	26–00–001–01

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
AFT CARGO SMOKE FAIL	-	26–00–003–03
AFT DOOR	No Dispatch	No Dispatch
AFT SLIDE	52–11–00	-
AILERON FAIL	No Dispatch	No Dispatch
AIR SYS ESS CTLR FAIL	No Dispatch	No Dispatch
ALPHA LIMIT	No Dispatch	No Dispatch
APPROACH NOT AVAIL	No Dispatch	No Dispatch
APU	49–00–03 or 49–14–19	-
APU BLEED FAIL	49–51–03	49–00–001–01
APU BLEED LEAK	No Dispatch	No Dispatch
APU BTL FAIL	-	26–00–005–01
APU DOOR OPEN	49–14–19	-
APU FIRE DET FAIL	26–12–00	26–00–009–01
APU FUEL SOV FAIL	28–21–55	-
APU GEN FAIL	24–22–01	24–00–009–01
AT RETARD INHIBIT	-	22–00–005–01
AURAL WARN FAIL	No Dispatch	No Dispatch
AUTO PRESS FAIL	21–31–01	21–00–025–01
AUTOBRAKE FAIL	32–43–15	32–00–075–01
BATT 1 FAIL	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
BATT 1 OVERTEMP	No Dispatch	No Dispatch
BATT 2 FAIL	No Dispatch	No Dispatch
BATT 2 OVERTEMP	No Dispatch	No Dispatch
BATT DISCHARGING	No Dispatch	No Dispatch
BRAKE FAIL	No Dispatch	No Dispatch
BRAKE ON	No Dispatch	No Dispatch
CABIN ALT	Not Applicable	Not Applicable
>CABIN PRIORITY	Not Applicable	Not Applicable
CARGO BTL FAIL	26–25–04	26–00–013–01
CARGO DOOR	No Dispatch	No Dispatch
CKPT DOOR LOCK FAIL	52–51–01	-
COWL A/ICE ON	Not Applicable	Not Applicable
CPLT BRAKE PEDAL FAIL	No Dispatch	No Dispatch
CREW OXY LO PRESS	35–11–05–2 or 35–11–05–3	35–00–001–01 or 35–00–001–02
DC BUS 1	No Dispatch	No Dispatch
DC BUS 2	No Dispatch	No Dispatch
DC EMER BUS	No Dispatch	No Dispatch
DC ESS BUS 1	No Dispatch	No Dispatch
DC ESS BUS 2	No Dispatch	No Dispatch
DC ESS BUS 3	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
DITCHING MISCONFIG	Not Applicable	Not Applicable
DMC 1 FAIL	No Dispatch	No Dispatch
DMC 2 FAIL	No Dispatch	No Dispatch
DOOR SLIDE DISARMED	No Dispatch	No Dispatch
DUAL ADS FAIL	No Dispatch	No Dispatch
EFIS COMPARATOR FAIL	No Dispatch	No Dispatch
EFIS MISCOMPARE	No Dispatch	No Dispatch
ELT ON	Not Applicable	Not Applicable
EMER DEPRESS ON	Not Applicable	Not Applicable
EMER LTS OFF	Not Applicable	Not Applicable
EMERGENCY DESCENT	No Dispatch	No Dispatch
ENG BLEED MISCONFIG	Not Applicable	Not Applicable
ENG DSPL MISCOMPARE	No Dispatch	No Dispatch
ENG OIL LO TEMP	Not Applicable	Not Applicable
ENG SETTING MISMATCH	Not Applicable	Not Applicable
ENG VIBRATION	Not Applicable	Not Applicable
EQUIP BAY COOL FAIL	No Dispatch	No Dispatch
EQUIP BAY DOOR	No Dispatch	No Dispatch
EQUIP BAY SMOKE FAIL	No Dispatch	No Dispatch
FD FAIL	No Dispatch	No Dispatch
FD MODE CHANGE	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
FIRE SYSTEM FAIL	No Dispatch	No Dispatch
FLAP FAIL	No Dispatch	No Dispatch
FLAP SLOW	No Dispatch	No Dispatch
FLT CTRL DIRECT	No Dispatch	No Dispatch
FLT CTRL DIRECT ADS	No Dispatch	No Dispatch
FLT CTRL DIRECT IRS	No Dispatch	No Dispatch
FMS 1 FAIL	-	34–00–081–01
FMS 2 FAIL	-	34–00–083–01
FMS FUEL	No Dispatch	No Dispatch
FMS OEI PERF ACTIVE	No Dispatch	No Dispatch
FMS PERF DEP CONFIG	No Dispatch	No Dispatch
FMS PERF DEP VSPEEDS	No Dispatch	No Dispatch
FMS POSITION	No Dispatch	No Dispatch
FUEL COLLECTOR LO LVL	No Dispatch	No Dispatch
FUEL CTR XFR FAIL	28–22–04	-
FUEL IMBALANCE	No Dispatch	No Dispatch
FUEL LEAK SUSPECT	No Dispatch	No Dispatch
FUEL MAN XFR FAIL	28–23–05–1	-
FUEL TANK HI TEMP	No Dispatch	No Dispatch
FUEL TANK LO TEMP	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
FWD CARGO BTL FAIL	26–25–02–1–B or 26–25–06–1–B	26–00–059–01
FWD CARGO HEAT FAIL	-	21–00–043–01
FWD CARGO LO TEMP	-	21–00–045–01
FWD CARGO SMOKE FAIL	-	26–00–061–03
FWD DOOR	No Dispatch	No Dispatch
FWD SLIDE	52–11–00	-
GEAR DISAGREE	No Dispatch	No Dispatch
GEAR FAIL	32–30–00	-
GND LIFT DUMP FAIL	No Dispatch	No Dispatch
GND SPOILER FAIL	No Dispatch	No Dispatch
GNSS NOT AVAIL	-	34–00–095–01
HYD 1–2 LO PRESS	No Dispatch	No Dispatch
HYD 1–3 LO PRESS	No Dispatch	No Dispatch
HYD 1 HI TEMP	No Dispatch	No Dispatch
HYD 1 LO PRESS	No Dispatch	No Dispatch
HYD 1 SOV FAIL	No Dispatch	No Dispatch
HYD 2–3 LO PRESS	No Dispatch	No Dispatch
HYD 2 HI TEMP	No Dispatch	No Dispatch
HYD 2 LO PRESS	No Dispatch	No Dispatch
HYD 2 SOV FAIL	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
HYD 3 HI TEMP	No Dispatch	No Dispatch
HYD 3 LO PRESS	No Dispatch	No Dispatch
HYD EDP 1A FAIL	No Dispatch	No Dispatch
HYD EDP 2A FAIL	No Dispatch	No Dispatch
HYD PTU FAIL	29–11–01	-
HYD PUMP 2B FAIL	29–11–02	-
HYD PUMP 3A FAIL	29–11–03	29–00–031–01
HYD PUMP 3B FAIL	29–11–04	29–00–033–01
HYD RAT PUMP FAIL	No Dispatch	No Dispatch
ICE	Not Applicable	Not Applicable
ICE DET OUT OF RANGE	Not Applicable	Not Applicable
IPC 1 FAIL	No Dispatch	No Dispatch
IPC 2 FAIL	No Dispatch	No Dispatch
IPC 3 FAIL	No Dispatch	No Dispatch
IPC 4 FAIL	No Dispatch	No Dispatch
IRS SAME SOURCE	No Dispatch	No Dispatch
IRS SET HEADING	Not Applicable	Not Applicable
KU BAND ON	-	25–00–087–01
L AIR SYS CTLR FAIL	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
L BLEED FAIL	36–11–92 or 36–12–00 or 36–12–01 or 36–12–05	See INFO
L BLEED LEAK	No Dispatch	No Dispatch
L BLEED OVHT	36–11–92	-
L BRAKE FAIL	See INFO	See INFO
L COWL A/ICE FAIL	30–22–01	-
L COWL A/ICE FAIL ON	30–22–01	-
L CTP TUNING FAIL	31–60–00	23–00–027–01
L ELEVATOR FAIL	No Dispatch	No Dispatch
L ENG BTL FAIL	No Dispatch	No Dispatch
L ENG EXCEEDANCE	No Dispatch	No Dispatch
L ENG FAIL	No Dispatch	No Dispatch
L ENG FIRE DET FAIL	No Dispatch	No Dispatch
L ENG FUEL LO PRESS	No Dispatch	No Dispatch
L ENG FUEL SOV FAIL	No Dispatch	No Dispatch
L ENG NACELLE OVHT	No Dispatch	No Dispatch
L ENG OIL FILTER	No Dispatch	No Dispatch
L ENG OPER DEGRADED	No Dispatch	No Dispatch
L ENG START ABORT	Not Applicable	Not Applicable

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
L ENG STARTER FAIL ON	No Dispatch	No Dispatch
L FUEL LO QTY	No Dispatch	No Dispatch
L GEN FAIL	24–11–02	24–00–105–01
L GEN OIL	No Dispatch	No Dispatch
L ICE DET FAIL	30–81–01	30–00–001–01
L PACK FAIL	21–00–01 See INFO or 21–51–01–1 or 21–51–01–2–A or 21–51–01–3–A or 21–51–01–3–B or 21–51–01–3–C or 21–53–14 or 21–53–18 or 36–17–01	-
L PACK LEAK	21–51–01–1	-
L PACK OVHT	21–53–18	See INFO
L–R ENG BTL FAIL	No Dispatch	No Dispatch
L–R ENG FUEL FILTER	No Dispatch	No Dispatch
L–R RADIO TUNING FAIL	No Dispatch	No Dispatch
L REVERSER FAIL	78–30–02	-
L REVERSER UNLOCK	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
L SIDE WDW HEAT FAIL	No Dispatch	No Dispatch
L SIDESTICK	No Dispatch	No Dispatch
L THROTTLE FAIL	No Dispatch	No Dispatch
L WING A/ICE LO HEAT	30-11-09 or 36-11-92	See INFO
L WING A/ICE OVHT	36-11-92	30-00-011-01 or 30-00-013-01
L WSHLD HEAT FAIL	30–41–08	-
LAV SMOKE FAIL	See INFO	–
LDG ELEV MISCONFIG	Not Applicable	Not Applicable
LEAK DET FAIL	No Dispatch	No Dispatch
LPV NOT AVAIL	No Dispatch	No Dispatch
MLG BAY OVHT DET FAIL	26–14–00	-
NORM BRAKE FAIL	No Dispatch	No Dispatch
NOSE STEER FAIL	No Dispatch	No Dispatch
NOSE STEER MISALIGN	No Dispatch	No Dispatch
NOSE TIRE LO PRESS	No Dispatch	No Dispatch
OVERWING DOOR	No Dispatch	No Dispatch
PARK BRAKE FAIL	No Dispatch	No Dispatch
PITCH AUTHORITY	No Dispatch	No Dispatch
PLT BRAKE PEDAL FAIL	No Dispatch	No Dispatch

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
R AIR SYS CTLR FAIL	No Dispatch	No Dispatch
R BLEED FAIL	36–11–92 or 36–12–00 or 36–12–01 or 36–12–05	See INFO
R BLEED LEAK	No Dispatch	No Dispatch
R BLEED OVHT	36–11–92	-
R BRAKE FAIL	See INFO	See INFO
R COWL A/ICE FAIL	30–22–01	-
R COWL A/ICE FAIL ON	30–22–01	-
R CTP TUNING FAIL	31–60–00	23–00–029–01
R ELEVATOR FAIL	No Dispatch	No Dispatch
R ENG BTL FAIL	No Dispatch	No Dispatch
R ENG EXCEEDANCE	No Dispatch	No Dispatch
R ENG FAIL	No Dispatch	No Dispatch
R ENG FIRE DET FAIL	No Dispatch	No Dispatch
R ENG FUEL LO PRESS	No Dispatch	No Dispatch
R ENG FUEL SOV FAIL	No Dispatch	No Dispatch
R ENG NACELLE OVHT	No Dispatch	No Dispatch
R ENG OIL FILTER	No Dispatch	No Dispatch
R ENG OPER DEGRADED	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
R ENG START ABORT	Not Applicable	Not Applicable
R ENG STARTER FAIL ON	No Dispatch	No Dispatch
R FUEL LO QTY	No Dispatch	No Dispatch
R GEN FAIL	24–11–02	24–00–119–01
R GEN OIL	No Dispatch	No Dispatch
R ICE DET FAIL	30–81–01	30–00–015–01
R PACK FAIL	21–00–01 See INFO or 21–51–01–1 or 21–51–01–2–B or 21–51–01–3–D or 21–51–01–3–E or 21–51–01–3–F or 21–53–14 or 21–53–18 or 36–17–01	-
R PACK LEAK	21–51–01–1	-
R PACK OVHT	21–53–18	See INFO
R REVERSER FAIL	78–30–02	-
R REVERSER UNLOCK	No Dispatch	No Dispatch
R SIDE WDW HEAT FAIL	No Dispatch	No Dispatch
R SIDESTICK	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
R THROTTLE FAIL	No Dispatch	No Dispatch
R WING A/ICE LO HEAT	30-11-09 or 36-11-92	See INFO
R WING A/ICE OVHT	36-11-92	30-00-025-01 or 30-00-027-01
R WSHLD HEAT FAIL	30–41–08	-
RAD ALT FAIL	No Dispatch	No Dispatch
RAM AIR FAIL	21–52–04	-
RAT GEN FAIL	No Dispatch	No Dispatch
RECIRC AIR FAIL	21–21–19	-
ROLL AUTHORITY	No Dispatch	No Dispatch
RUDDER DEGRADED	No Dispatch	No Dispatch
SLAT FAIL	No Dispatch	No Dispatch
SLAT–FLAP FAIL	No Dispatch	No Dispatch
SLAT–FLAP LEVER FAIL	No Dispatch	No Dispatch
SLAT SKEW	No Dispatch	No Dispatch
SLAT SLOW	No Dispatch	No Dispatch
SPOILER DEGRADED	No Dispatch	No Dispatch
SPOILER DPLY	No Dispatch	No Dispatch
SPOILER FAIL	No Dispatch	No Dispatch
SPOILER LEVER FAIL	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
STAB DEGRADED	No Dispatch	No Dispatch
STAB TRIM FAIL	No Dispatch	No Dispatch
STEEP NOT AVAIL	-	27–00–000–01
TAWS FAIL	34–42–02–1	-
TCAS FAIL	34–43–01	-
TCAS OFF	No Dispatch	No Dispatch
THROTTLE IN REVERSE	Not Applicable	Not Applicable
TRIM AIR FAIL	-	21–00–117–01
TRIM AIR LEAK	No Dispatch	No Dispatch
UNABLE RNP	Not Applicable	Not Applicable
WING A/ICE FAIL	30–11–09 or 30–12–01	See INFO
WING A/ICE LEAK	No Dispatch	No Dispatch
WING A/ICE MISCONFIG	Not Applicable	Not Applicable
WING A/ICE ON	Not Applicable	Not Applicable
WING SLIDE	25-63-02 or 52-11-00	-
WOW FAIL	No Dispatch	No Dispatch
WXR ON	No Dispatch	No Dispatch
XBLEED FAIL	No Dispatch	No Dispatch
XPDR 1 FAIL	34-54-00	-

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CAUTION MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
XPDR 2 FAIL	34-54-00	-
YAW AUTHORITY	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
ADS 1 DEGRADED	-	34–00–009–01
ADS 1 FAIL	-	34–00–001–01
ADS 2 DEGRADED	-	34–00–011–01
ADS 2 FAIL	-	34–00–003–01
ADS 3 DEGRADED	-	34–00–013–01
ADS 4 DEGRADED	-	34–00–015–01
ADS 4 FAIL	No Dispatch	No Dispatch
ADS FAULT	See INFO	See INFO
ADS MAINT MODE ACTIVE	No Dispatch	No Dispatch
AIR SYSTEM FAULT	See INFO	See INFO
ALTN BRAKE FAIL	No Dispatch	No Dispatch
ALTN GEAR DN	Not Applicable	Not Applicable
APPR1 NOT AVAIL	-	22–00–025–01
APPR2 NOT AVAIL	-	22–00–027–01
APU BTL LO	-	26–00–007–01
APU FAULT	See INFO	See INFO
APU FUEL SOV CLSD	No Dispatch	No Dispatch
APU OIL LO QTY	Not Applicable	Not Applicable
APU SHUTDOWN	49–00–03 or 49–14–19 or 49–91–12	49–00–013–01

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ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
AT FAIL	No Dispatch	No Dispatch
AUDIO PNL 1 FAIL	No Dispatch	No Dispatch
AUDIO PNL 2 FAIL	No Dispatch	No Dispatch
AUTO FLIGHT FAULT	See INFO	See INFO
AVIONIC FAN FAULT	See INFO	See INFO
AVIONIC FAULT	See INFO	See INFO
BATT CHARGER FAULT	No Dispatch	No Dispatch
BATT EMER PWR ON	Not Applicable	Not Applicable
BRAKE FAULT	32–49–20 when associated with amber cross symbol on BRAKE WEAR STATUS synoptic page.	See INFO
BRAKE HI TEMP	32–49–17	-
CABIN ALT LEVEL HI	Not Applicable	Not Applicable
>CABIN CALL	Not Applicable	Not Applicable
CABIN COM FAULT	See INFO	See INFO
>CABIN READY	Not Applicable	Not Applicable
CARGO BTL LO	26–00–01 or 26–25–01	26–00–015–01
CAS MISCOMPARE	No Dispatch	No Dispatch
CB TRIP	Not Applicable	Not Applicable
CKPT DOOR OPEN	Not Applicable	Not Applicable

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
>CPDLC	Not Applicable	Not Applicable
CTRL PANEL FAULT	See INFO	See INFO
CVR FAIL	23–70–06	-
DATALINK FAIL	23–22–00-1-A-1 or 23–22–00-1-A-2 or 23–22–00-1-B-1 or 23–22–00-1-B-2 or 23–22–00-2-A or 23–22–00-2-B	23-00-031-01 or 23-00-031-03
DATALINK STATUS	-	23-00-031-05 or 23-00-031-07
>DLK	Not Applicable	Not Applicable
DMC 1A FAIL	No Dispatch	No Dispatch
DMC 1B FAIL	No Dispatch	No Dispatch
DMC 2A FAIL	No Dispatch	No Dispatch
DMC 2B FAIL	No Dispatch	No Dispatch
DOOR FAULT	52–11–00	See INFO
DOOR OPEN	Not Applicable	Not Applicable
DOOR SLIDE DISARMED	Not Applicable	Not Applicable
DOOR SLIDE FAULT	See INFO	See INFO
ELECTRICAL FAULT	See INFO	See INFO

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
ENG BTL 1 LO	No Dispatch	No Dispatch
ENG BTL 2 LO	No Dispatch	No Dispatch
ENG START DELAY	Not Applicable	Not Applicable
EQUIP BAY COOL FAULT	See INFO	See INFO
EXT PWR AVAIL	Not Applicable	Not Applicable
FDR ACCEL FAIL	Not Applicable	Not Applicable
FDR FAIL	31–31–01	-
FIRE SYSTEM FAULT	See INFO	See INFO
FLAP FAULT	See INFO	See INFO
FLAP SLOW	See INFO	See INFO
FLT CTRL FAULT	See INFO	See INFO
FLT CTRL IN TEST	Not Applicable	Not Applicable
FLT CTRL TEST REQ	Not Applicable	Not Applicable
FUEL COMPUTER FAIL	No Dispatch	No Dispatch
FUEL CTR XFR FAULT	No Dispatch	No Dispatch
FUEL FAULT	See INFO	See INFO
FUEL GRAV XFR FAIL	28–22–15	-
FUEL INERTING FAULT	See INFO	See INFO
FUEL MAN XFR COMPLETE	Not Applicable	Not Applicable
GEAR FAULT	See INFO	See INFO
HEALTH MGMT FAULT	See INFO	See INFO

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
HI LOAD EVENT	No Dispatch	No Dispatch
HI LOAD MONITOR FAIL	-	46–00–003–01 or 46–00–004–01
HUD FAIL	-	34–00–113–01 or 34–00–114–01
HYD 1 LO QTY	Not Applicable	Not Applicable
HYD 1 SOV CLSD	Not Applicable	Not Applicable
HYD 2 LO QTY	Not Applicable	Not Applicable
HYD 2 SOV CLSD	Not Applicable	Not Applicable
HYD 3 LO QTY	Not Applicable	Not Applicable
HYDRAULIC FAULT	See INFO	See INFO
ICE	Not Applicable	Not Applicable
ICE DET OUT OF RANGE	Not Applicable	Not Applicable
IRS 1 FAIL	No Dispatch	No Dispatch
IRS 1 POWER FAULT	No Dispatch	No Dispatch
IRS 2 FAIL	-	34–00–073–01
IRS 2 POWER FAULT	No Dispatch	No Dispatch
IRS 3 FAIL	-	34–00–075–01
IRS 3 POWER FAULT	No Dispatch	No Dispatch
L BOOST PUMP FAIL	28–23–02	-
L BRAKE DEGRADED	See INFO	See INFO

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
L ENG A/T OFF	No Dispatch	No Dispatch
L ENG BTL FAULT	No Dispatch	No Dispatch
L ENG FUEL FILTER	See INFO	See INFO
L ENG FUEL SOV CLSD	No Dispatch	No Dispatch
L ENG OIL LO QTY	Not Applicable	Not Applicable
L ENG PCE DOOR OPEN	78–36–04	75–42–001–01
L ENG STARTER OVHT	Not Applicable	Not Applicable
L ENGINE FAULT	See INFO	See INFO
L FUEL EJECTOR FAIL	No Dispatch	No Dispatch
L FUEL FLOW DEGRADED	No Dispatch	73–00–021–01
L HUD FAIL	-	34–00–115–01 or 34–00–116–01
L LVTO NOT AVAIL	-	22–00–037–01 or 22–00–041–01
L PITCH TRIM SW FAIL	No Dispatch	No Dispatch
L SIDE WDW HT FAIL ON	No Dispatch	No Dispatch
L WSHLD HEAT FAIL ON	No Dispatch	No Dispatch
LAND2 NOT AVAIL	-	22–00–029–01
LAND3 NOT AVAIL	-	22–00–031–01
LEAK DET FAULT	See INFO	See INFO
LOAD SHED	Not Applicable	Not Applicable

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
LVTO NOT AVAIL	-	22–00–033–01 or 22–00–035–01
NOSE STEER FAULT	See INFO	See INFO
PACK FAULT	21-53-14 or 21-53-18 See INFO	See INFO
PFCC 1 FAIL	-	27–00–009–01
PFCC 2 FAIL	-	27–00–009–03
PFCC 3 FAIL	-	27–00–009–05
PRESSURIZATION FAULT	21–31–01	See INFO
R BOOST PUMP FAIL	-	28–00–053–01
R BRAKE DEGRADED	See INFO	See INFO
R ENG A/T OFF	No Dispatch	No Dispatch
R ENG BTL FAULT	No Dispatch	No Dispatch
R ENG FUEL FILTER	See INFO	See INFO
R ENG FUEL SOV CLSD	No Dispatch	No Dispatch
R ENG OIL LO QTY	Not Applicable	Not Applicable
R ENG PCE DOOR OPEN	78–36–04	75–42–003–01
R ENG STARTER OVHT	Not Applicable	Not Applicable
R ENGINE FAULT	See INFO	See INFO
R FUEL EJECTOR FAIL	No Dispatch	No Dispatch
R FUEL FLOW DEGRADED	-	73–00–051–01

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
R HUD FAIL	-	34–00–117–01 or 34–00–118–01
R LVTO NOT AVAIL	-	22–00–039–01 or 22–00–043–01
R PITCH TRIM SW FAIL	No Dispatch	No Dispatch
R SIDE WDW HT FAIL ON	No Dispatch	No Dispatch
R WSHLD HEAT FAIL ON	No Dispatch	No Dispatch
RAD ALT 1 FAIL	34–44–00	34–00–063–01 or 34–00–064–01
RAD ALT 2 FAIL	34–44–00	34–00–067–01 or 34–00–068–01
RAD ALT 3 FAIL	34–44–00	34–00–070–01 or 34–00–071–01
RAT DPLY	24–23–01	-
RAT GEN ON	Not Applicable	Not Applicable
SAT VOICE NO SIGNAL	No Dispatch	No Dispatch
>SATCOM	Not Applicable	Not Applicable
SATCOM DATA FAIL	23-15-00-1 or 23-15-00-2	23-00-033-09 or 23-00-033-11
SATCOM FAIL	23-15-00	23-00-033-01 or 23-00-033-03

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
SATCOM LOST	Not Applicable	Not Applicable
SATCOM NO SIGNAL	23-15-00	23-00-033-05 or 23-00-033-07
SATCOM VOICE FAIL	Not Applicable	Not Applicable
SATCOM VOICE LOST	Not Applicable	Not Applicable
SELCAL	Not Applicable	Not Applicable
SLAT FAULT	See INFO	See INFO
SLAT–FLAP SLOW	No Dispatch	No Dispatch
SLAT SLOW	See INFO	See INFO
SMS FAIL	-	34–00–077–01 or 34–00–079–01
SMS RUNWAY N/A	Not Applicable	Not Applicable
SPOILER DPLY	Not Applicable	Not Applicable
SPOILER MISMATCH	No Dispatch	No Dispatch
TAWS GPWS FAIL	34–42–02–1	-
TAWS MAP FAIL	34–42–02–3	-
TAWS TERR FAIL	34–42–02–2	-
TAWS WINDSHEAR FAIL	34–42–02–1–E	-
TIRE LO PRESS	No Dispatch	No Dispatch
TIRE PRESS FAULT	See INFO	See INFO
TRU FAULT	See INFO	See INFO

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ADVISORY MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
WING A/ICE FAULT	See INFO	See INFO
WOW FAULT	See INFO	See INFO
WXR AUTO FAULT	-	34–00–101–01
WXR CTRL FAULT	-	34–00–103–01
WXR FAIL	-	34–00–099–01
WXR FAULT	-	34–00–105–01
WXR PWS FAIL	-	34–00–109–01 or 34–00–110–01
WXR TURB FAULT	-	34–00–107–01

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STATUS MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
A/C MAINTENANCE SW	45–01–01	-
ADS PROBE HEAT GND ON	Not Applicable	Not Applicable
AFT CARGO AIR OFF	Not Applicable	Not Applicable
ALTN BRAKE ON	Not Applicable	Not Applicable
ALTN FLAP DPLY	Not Applicable	Not Applicable
ALTN GEAR DN	Not Applicable	Not Applicable
APR DISARM	Not Applicable	Not Applicable
APU BLEED OFF	Not Applicable	Not Applicable
APU GEN OFF	Not Applicable	Not Applicable
APU IN START	Not Applicable	Not Applicable
APU ON	Not Applicable	Not Applicable
AURAL WARN INHIB	Not Applicable	Not Applicable
AUTOBRAKE HI	Not Applicable	Not Applicable
AUTOBRAKE LO	Not Applicable	Not Applicable
AUTOBRAKE MED	Not Applicable	Not Applicable
AUTOBRAKE RTO	Not Applicable	Not Applicable
BATT 1 OFF	Not Applicable	Not Applicable
BATT 2 OFF	Not Applicable	Not Applicable
BATT PWR CONFIG	Not Applicable	Not Applicable
CABIN PRESS MAN	Not Applicable	Not Applicable
CABIN PWR OFF	Not Applicable	Not Applicable

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STATUS MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
CKPT DOOR LOCK OFF	Not Applicable	Not Applicable
CTP OVERRIDE	Not Applicable	Not Applicable
CURSOR INHIB	Not Applicable	Not Applicable
DITCHING ON	Not Applicable	Not Applicable
DSPL TUNE INHIB	Not Applicable	Not Applicable
ELEC BUS ISOL ESS	Not Applicable	Not Applicable
ELEC BUS ISOL MAIN	Not Applicable	Not Applicable
EMER LTS ON	Not Applicable	Not Applicable
ENG CONT IGNITION ON	Not Applicable	Not Applicable
EXHAUST AIR ON	Not Applicable	Not Applicable
EXHAUST AIR VLV ONLY	Not Applicable	Not Applicable
EXT PWR IN USE	Not Applicable	Not Applicable
FD/AT ALTN	Not Applicable	Not Applicable
FUEL GRAV XFR ON	Not Applicable	Not Applicable
FUEL MAN XFR TO CTR	Not Applicable	Not Applicable
FUEL MAN XFR TO L	Not Applicable	Not Applicable
FUEL MAN XFR TO R	Not Applicable	Not Applicable
FUEL XFR CTR READY	Not Applicable	Not Applicable
FWD CARGO AIR OFF	Not Applicable	Not Applicable
GEAR AURAL CNCL	Not Applicable	Not Applicable
HYD 1 SOV CLSD	Not Applicable	Not Applicable

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STATUS MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
HYD 2 SOV CLSD	Not Applicable	Not Applicable
HYD PTU OFF	Not Applicable	Not Applicable
HYD PTU ON	Not Applicable	Not Applicable
HYD PUMP 2B OFF	Not Applicable	Not Applicable
HYD PUMP 2B ON	Not Applicable	Not Applicable
HYD PUMP 3A OFF	Not Applicable	Not Applicable
HYD PUMP 3A ON	Not Applicable	Not Applicable
HYD PUMP 3B OFF	Not Applicable	Not Applicable
HYD PUMP 3B ON	Not Applicable	Not Applicable
INLET AIR OFF	Not Applicable	Not Applicable
L BLEED OFF	Not Applicable	Not Applicable
L BOOST PUMP OFF	Not Applicable	Not Applicable
L BOOST PUMP ON	Not Applicable	Not Applicable
L COWL A/ICE OFF	Not Applicable	Not Applicable
L COWL A/ICE ON	Not Applicable	Not Applicable
L ENG SHUTDOWN	Not Applicable	Not Applicable
L GEN DISC	Not Applicable	Not Applicable
L GEN OFF	Not Applicable	Not Applicable
L PACK OFF	Not Applicable	Not Applicable
L–R COWL A/ICE OFF	Not Applicable	Not Applicable
L–R COWL A/ICE ON	Not Applicable	Not Applicable

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STATUS MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
L REVERSER INHIBIT	Not Applicable	Not Applicable
L SIDE WDW HEAT OFF	Not Applicable	Not Applicable
L WSHLD HEAT OFF	Not Applicable	Not Applicable
MAN TEMP ON	Not Applicable	Not Applicable
NO PED	Not Applicable	Not Applicable
NOSE STEER OFF	Not Applicable	Not Applicable
PACK FLOW HI	Not Applicable	Not Applicable
PARK BRAKE ON	Not Applicable	Not Applicable
PAX OXY DPLY	Not Applicable	Not Applicable
PEDAL STEER DISC	Not Applicable	Not Applicable
PFCC 1 OFF	Not Applicable	Not Applicable
PFCC 2 OFF	Not Applicable	Not Applicable
PFCC 3 OFF	Not Applicable	Not Applicable
PILOT EVENT	Not Applicable	Not Applicable
R BLEED OFF	Not Applicable	Not Applicable
R BOOST PUMP OFF	Not Applicable	Not Applicable
R BOOST PUMP ON	Not Applicable	Not Applicable
R COWL A/ICE OFF	Not Applicable	Not Applicable
R COWL A/ICE ON	Not Applicable	Not Applicable
R ENG SHUTDOWN	Not Applicable	Not Applicable
R GEN DISC	Not Applicable	Not Applicable

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

STATUS MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
R GEN OFF	Not Applicable	Not Applicable
R PACK OFF	Not Applicable	Not Applicable
R REVERSER INHIBIT	Not Applicable	Not Applicable
R SIDE WDW HEAT OFF	Not Applicable	Not Applicable
R WSHLD HEAT OFF	Not Applicable	Not Applicable
RAM AIR OPEN	Not Applicable	Not Applicable
RECIRC AIR OFF	Not Applicable	Not Applicable
SEAT BELTS	Not Applicable	Not Applicable
SMS RUNWAY INHIB	Not Applicable	Not Applicable
TAWS FLAP INHIB	Not Applicable	Not Applicable
TAWS GEAR INHIB	Not Applicable	Not Applicable
TAWS GS CNCL	Not Applicable	Not Applicable
TAWS TERR INHIB	Not Applicable	Not Applicable
TRIM AIR OFF	Not Applicable	Not Applicable
VHF COM 121.5 ENABLE	Not Applicable	Not Applicable
VHF3 IN VOICE	Not Applicable	Not Applicable
WING A/ICE OFF	Not Applicable	Not Applicable
WING A/ICE ON	Not Applicable	Not Applicable
XBLEED MAN CLSD	Not Applicable	Not Applicable
XBLEED MAN OPEN	Not Applicable	Not Applicable

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
21 AIR SYSTEM FAULT – AFT CARGO SOV INOP	21–55–03	21–00–001–01
21 AIR SYSTEM FAULT – DUCT TEMP SNSR INOP	-	21–00–111–01
21 AIR SYSTEM FAULT – ERAV INOP	No Dispatch	No Dispatch
21 AIR SYSTEM FAULT – FWD CARGO SOV INOP	21–55–02	21–00–003–01
21 AIR SYSTEM FAULT – FWD CARGO TAV FAIL CLSD	-	21–00–003–02
21 AIR SYSTEM FAULT – FWD CARGO TAV INOP	-	21–00–003–03
21 AIR SYSTEM FAULT – IASC 1A INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC 1B INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC 1C INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC 2A INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC 2B INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC 2C INOP	21–90–01	-
21 AIR SYSTEM FAULT – IASC CHANNEL REDUND LOSS	No Dispatch	No Dispatch
21 AIR SYSTEM FAULT – IASC CHANNELS INOP	No Dispatch	No Dispatch
21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS	No Dispatch	No Dispatch
21 AIR SYSTEM FAULT – L PACK PRESS SNSR REDUND LOSS	-	21–00–073–01
21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS	No Dispatch	No Dispatch
21 AIR SYSTEM FAULT – R PACK PRESS SNSR REDUND LOSS	-	21–00–089–01
21 AIR SYSTEM FAULT – TAV INOP	-	21–00–003–04

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL CLSD	-	21–00–017–01 or 21–00–017–03
21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN	21–63–00	-
21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL CLSD	21–63–01	-
21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN	21–63–01	-
21 AIR SYSTEM FAULT – ZONE TEMP SNSR INOP	-	21–00–021–01
21 EQUIP BAY COOL FAULT – ALTN FAN INOP	No Dispatch	No Dispatch
21 EQUIP BAY COOL FAULT – AVIO TEMP SNSR REDUND LOSS	-	21–00–027–01
21 EQUIP BAY COOL FAULT – EFAN CAN BUS INOP	-	21–00–029–01
21 EQUIP BAY COOL FAULT – EFAN INOP	21–24–16	21–00–031–01
21 EQUIP BAY COOL FAULT – FWD AVIO EXHAUST VLV INOP	21–24–18	-
21 EQUIP BAY COOL FAULT – IFAN INOP	-	21–00–035–01
21 EQUIP BAY COOL FAULT – MID AVIO EXHAUST VLV INOP	21–24–18	-
21 EQUIP BAY COOL FAULT – MID GND VLV INOP	21–24–24	-
21 EQUIP BAY COOL FAULT – SUPP FAN INOP	No Dispatch	No Dispatch
21 L PACK FAIL – L FLOW CTRL VLV INOP	21–53–14	-
21 L PACK FAIL – L PACK DISCHARGE DUCT DISCONNECT	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
21 L PACK FAIL – L PACK INOP	21–51–01–2–A or 21–51–01–3–A or 21–51–01–3–B or 21–51–01–3–C	-
21 L PACK FAULT – L PACK TEMP SNSR INOP	-	21–00–081–01
21 L PACK OVHT – L PACK INOP	-	21–00–051–01 or 21–00–051–02 or 21–00–051–03 or 21–00–121–01
21 L PACK OVHT – L RAM AIR REG VLV INOP	21–53–18–1	-
21 PACK FAULT – L BYPASS VLV INOP	-	21–00–061–01 or 21–00–061–02 or 21–00–061–03 or 21–00–123–01
21 PACK FAULT – L PACK DISCH PRESS SNSR INOP	-	21–00–069–01 or 21–00–069–02 or 21–00–069–03 or 21–00–125–01
21 PACK FAULT – L PACK TEMP SNSR REDUND LOSS	-	21–00–063–01
21 PACK FAULT – L RAM AIR REG VLV INOP	21–53–18–1	-
21 PACK FAULT – MIX MANF TEMP SNSR REDUND LOSS	-	21–00–067–01

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
21 PACK FAULT – MIX MANF TEMP SNSR TOTAL LOSS	-	21–00–065–01
21 PACK FAULT – R BYPASS VLV INOP	-	21–00–077–01 or 21–00–077–02 or 21–00–077–03 or 21–00–127–01
21 PACK FAULT – R PACK DISCH PRESS SNSR INOP	-	21–00–085–01 or 21–00–085–02 or 21–00–085–03 or 21–00–129–01
21 PACK FAULT – R PACK TEMP SNSR REDUND LOSS	-	21–00–079–01
21 PACK FAULT – R RAM AIR REG VLV INOP	21–53–18–1	-
21 PRESSURIZATION FAULT – BACKUP ALT LIM INOP	21–30–04	21–00–093–01
21 PRESSURIZATION FAULT – CPCS AUTO MODE REDUND LOSS	-	21–00–097–01
21 PRESSURIZATION FAULT – MANUAL MODE INOP	21–31–01	21–00–095–03
21 PRESSURIZATION FAULT – OFV FINGER FAIL IN	21–31–28	-
21 PRESSURIZATION FAULT – OFV FINGER FAIL OUT	21–31–28	-
21 PRESSURIZATION FAULT – PRIM ALT LIM INOP	21–30–04	21–00–099–01
21 R PACK FAIL – R FLOW CTRL VLV INOP	21–53–14	-
21 R PACK FAIL – R PACK DISCHARGE DUCT DISCONNECT	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
21 R PACK FAIL – R PACK INOP	21–51–01–2–B or 21–51–01–3–D or 21–51–01–3–E or 21–51–01–3–F	-
21 R PACK FAULT – R PACK TEMP SNSR INOP	-	21–00–083–01
21 R PACK OVHT – R PACK INOP	21–53–18–2–A or 21–53–18–2–B–1 or 21–53–18–2–B–2 or 21–53–18–2–B–3	-
21 R PACK OVHT – R RAM AIR REG VLV INOP	21–53–18–1	-
22 AUTO FLIGHT FAULT – AP 1 INOP	22–11–00	22–00–007–01 or 22–00–008–01
22 AUTO FLIGHT FAULT – AP 2 INOP	22–11–00	22–00–009–01 or 22–00–010–01
22 AUTO FLIGHT FAULT – AP 3 INOP	22–11–00	22–00–011–01 or 22–00–012–01
22 AUTO FLIGHT FAULT – AT 1 INOP	-	22–00–001–01
22 AUTO FLIGHT FAULT – AT 2 INOP	-	22–00–003–01
22 AUTO FLIGHT FAULT – FCP A INOP	No Dispatch	No Dispatch
22 AUTO FLIGHT FAULT – FCP B INOP	No Dispatch	No Dispatch
22 AUTO FLIGHT FAULT – FD 1L INOP	No Dispatch	No Dispatch
22 AUTO FLIGHT FAULT – FD 1R INOP	No Dispatch	No Dispatch

The term "Not Applicable" means that this message may be caused by a system response to a flight crew action or the result of a normal/abnormal system configuration. To clear an EICAS message caused by an inadvertent action, check that the cockpit controls are configured correctly. Refer to FCOM Vol. 1 for the description of the messages.

INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
22 AUTO FLIGHT FAULT – FD 2L INOP	No Dispatch	No Dispatch
22 AUTO FLIGHT FAULT – FD 2R INOP	No Dispatch	No Dispatch
23 AVIONIC FAULT – AUDIO PNL 3 FAIL	25–02–02	-
23 AVIONIC FAULT – RIU 1B AURAL INOP	-	23–00–023–01
23 AVIONIC FAULT – RIU 2B AURAL INOP	-	23–00–025–01
23 AVIONIC FAULT – RIU CH 1A INOP	-	23–00–015–01
23 AVIONIC FAULT – RIU CH 1B INOP	-	23–00–017–01
23 AVIONIC FAULT – RIU CH 2A INOP	-	23–00–019–01
23 AVIONIC FAULT – RIU CH 2B INOP	-	23–00–021–01
23 AVIONIC FAULT – SATCOM OVERHEAT	No Dispatch	No Dispatch
24 BATT CHARGER FAULT – BATT CHARGER 1 INOP	No Dispatch	No Dispatch
24 BATT CHARGER FAULT – BATT CHARGER 2 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – A664 COM REDUND LOSS	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – APU GEN DEGRADED	-	24–00–011–01
24 ELECTRICAL FAULT – BATT 1 HEATER INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – BATT 1 TEMP SNSR INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – BATT 2 HEATER INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – BATT 2 TEMP SNSR INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – BPCU 1 DEGRADED	-	24–00–013–01
24 ELECTRICAL FAULT – BPCU 2 DEGRADED	-	24–00–015–03 or 24–00–015–04

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
24 ELECTRICAL FAULT – BPCU INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CAN COM REDUND LOSS	-	24–01–015–01
24 ELECTRICAL FAULT – CBP INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 1 MICRO 1 MODULE 1 INOP	-	24–00–043–01
24 ELECTRICAL FAULT – CDC 1 MICRO 2 MODULE 4 INOP	-	24–00–045–01
24 ELECTRICAL FAULT – CDC 1 PWR SUPPLY MODULE 2 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 1 PWR SUPPLY MODULE 3 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 2 MICRO 1 MODULE 1 INOP	-	24–00–051–01
24 ELECTRICAL FAULT – CDC 2 MICRO 2 MODULE 4 INOP	-	24–00–053–01
24 ELECTRICAL FAULT – CDC 2 PWR SUPPLY MODULE 2 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 2 PWR SUPPLY MODULE 3 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 3 PWR SUPPLY MODULE 1 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 3 PWR SUPPLY MODULE 2 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 4 PWR SUPPLY MODULE 1 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 4 PWR SUPPLY MODULE 2 INOP	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
24 ELECTRICAL FAULT – CDC 5 PWR SUPPLY MODULE 1 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC 5 PWR SUPPLY MODULE 2 INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC A664 COM LOSS	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC A664 COM REDUND LOSS	-	24–01–015–03
24 ELECTRICAL FAULT – CDC DISCRETE MODULE INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – CDC PWR MODULE INOP	-	24–00–035–01
24 ELECTRICAL FAULT – CDC SSPC FAIL OPEN	-	24–00–039–01
24 ELECTRICAL FAULT – EMPC COM LOSS	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – EPC 1 DEGRADED	24–33–03	24–01–015–19
24 ELECTRICAL FAULT – EPC 2 DEGRADED	24–33–03	24–01–015–21 24–01–015–23
24 ELECTRICAL FAULT – EPC 3 DEGRADED	-	24–01–015–25
24 ELECTRICAL FAULT – EPC INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – EPDS COM REDUND LOSS	-	24–01–015–05
24 ELECTRICAL FAULT – EPGS COM REDUND LOSS	-	24–01–015–13
24 ELECTRICAL FAULT – GEN INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – GND CART INOP	-	24–00–099–01
24 ELECTRICAL FAULT – ISPS 1 RELAY FAIL CLSD	44-20-01	-
24 ELECTRICAL FAULT – ISPS 2 RELAY FAIL CLSD	44-20-01	-
24 ELECTRICAL FAULT – L CB PANEL DEGRADED	-	24–00–091–01
24 ELECTRICAL FAULT – L FBW PC COM LOSS	-	24–00–081–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
24 ELECTRICAL FAULT – L FBW PC DEGRADED	-	24–00–077–01
24 ELECTRICAL FAULT – L FBW PC INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – L FBW PC PMG INOP	24–20–44	-
24 ELECTRICAL FAULT – L GEN DEGRADED	24–11–02	-
24 ELECTRICAL FAULT – L GEN OIL HI DELTA PRESS	24-11-02	-
24 ELECTRICAL FAULT – L GEN OIL LO LEVEL	24–12–01–1–A or 24–12–01–1–B	-
24 ELECTRICAL FAULT – R CB PANEL DEGRADED	-	24–00–093–01
24 ELECTRICAL FAULT – R FBW PC COM LOSS	-	24–00–083–01
24 ELECTRICAL FAULT – R FBW PC DEGRADED	-	24–00–079–01
24 ELECTRICAL FAULT – R FBW PC INOP	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – R FBW PC PMG INOP	24–20–44	-
24 ELECTRICAL FAULT – R GEN DEGRADED	24–11–02	-
24 ELECTRICAL FAULT – R GEN OIL HI DELTA PRESS	24-11-02	-
24 ELECTRICAL FAULT – R GEN OIL LO LEVEL	24–12–01–1–A or 24–12–01–1–B	-
24 ELECTRICAL FAULT – RAT ACTUATOR HI PRESS	No Dispatch	No Dispatch
24 ELECTRICAL FAULT – RAT HEATER A INOP	-	24–00–087–01
24 ELECTRICAL FAULT – RAT HEATER B INOP	-	24–00–089–01
24 TRU FAULT – CBP INOP	No Dispatch	No Dispatch
24 TRU FAULT – TRU 1 INOP	24–31–01	-

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
24 TRU FAULT – TRU 2 INOP	24–31–01	-
24 TRU FAULT – TRU 3 INOP	No Dispatch	No Dispatch
24 TRU FAULT – TRU RIPPLE	No Dispatch	No Dispatch
26 FIRE SYSTEM FAULT – AFT CARGO BTL SQUIB REDUND LOSS	26–25–03–1–A or 26–25–08–1–A	26–00–023–01
26 FIRE SYSTEM FAULT – AFT CARGO SMOKE DET REDUND LOSS	-	26–00–025–01
26 FIRE SYSTEM FAULT – APU BTL SQUIB REDUND LOSS	-	26–00–029–01
26 FIRE SYSTEM FAULT – APU FIRE DET REDUND LOSS	-	26–00–031–01
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A A429 INPUT LOSS	-	26–00–032–01
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A DEGRADED	-	26–00–033–01
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A INOP	26–10–01	-
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B A429 INPUT LOSS	-	26–00–036–01
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B DEGRADED	-	26–00–037–01
26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B INOP	26–10–01	-
26 FIRE SYSTEM FAULT – CTRL UNIT CONFIG INOP	No Dispatch	No Dispatch
26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS	–	26–00–043–01
26 FIRE SYSTEM FAULT – FWD CARGO BTL SQUIB REDUND LOSS	26–25–02–1–A or 26–25–06–1–A	26–00–045–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
26 FIRE SYSTEM FAULT – FWD CARGO SMOKE DET REDUND LOSS	-	26–00–047–01
26 FIRE SYSTEM FAULT – L ENG BTL SQUIB REDUND LOSS	-	26–00–049–01
26 FIRE SYSTEM FAULT – L ENG FIRE DET REDUND LOSS	-	26–00–051–01
26 FIRE SYSTEM FAULT – MLG OVHT DET REDUND LOSS	-	26–00–053–01 or 26–00–053–03
26 FIRE SYSTEM FAULT – R ENG BTL SQUIB REDUND LOSS	-	26–00–055–01
26 FIRE SYSTEM FAULT – R ENG FIRE DET REDUND LOSS	-	26–00–057–03
26 LAV SMOKE FAIL – AFT LAV C SMOKE DET INOP	26–16–01	-
26 LAV SMOKE FAIL – AFT LAV D SMOKE DET INOP	26–16–01	-
26 LAV SMOKE FAIL – AFT LAV E SMOKE DET INOP	26–16–01	-
26 LAV SMOKE FAIL – FWD LAV A SMOKE DET INOP	26–16–01	-
27 FLAP FAULT – ALTN SWITCH INOP	No Dispatch	No Dispatch
27 FLAP FAULT – ALTN SWITCH REDUND LOSS	-	27–00–201–01
27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS	-	27–00–203–01
27 FLAP FAULT – FLAP SKEW	No Dispatch	No Dispatch
27 FLAP FAULT – LEVER SNSR REDUND LOSS	27–53–01	-
27 FLAP FAULT – OUTBD BRAKE INOP	No Dispatch	No Dispatch
27 FLAP FAULT – OUTBD BRAKE PROX SNSR INOP	-	27–00–207–01
27 FLAP FAULT – PDU FAULT	-	27–00–209–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLAP FAULT – SKEW SNSR REDUND LOSS	-	27–00–211–01
27 FLAP SLOW – CHAN 1 INOP	-	27–00–213–01 or 27–00–213–02
27 FLAP SLOW – CHAN 2 INOP	-	27–00–213–03 or 27–00–213–04
27 FLAP SLOW – FLAP SYSTEM INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – AFCU DMC INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – AFCU DMC INPUT REDUND LOSS	-	27–00–151–01
27 FLT CTRL FAULT – AFCU SFECU INPUT REDUND LOSS	-	27–00–159–01
27 FLT CTRL FAULT – AFCU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – AHRS INOP	-	27–00–013–01
27 FLT CTRL FAULT – AILERON TRIM SW REDUND LOSS	-	27–00–134–01
27 FLT CTRL FAULT – DIRECT MODE COM DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – DIRECT MODE COM REDUND LOSS	-	27–00–072–01
27 FLT CTRL FAULT – DMC AFCU INPUT REDUND LOSS	-	27–00–152–01
27 FLT CTRL FAULT – DMC IIM INPUT REDUND LOSS	-	27–00–064–01
27 FLT CTRL FAULT – FBW FAULT	No Dispatch	No Dispatch
27 FLT CTRL FAULT – GND SPOILER INOP	27–61–01	-
27 FLT CTRL FAULT – GND SPOILER SNSR INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 DMC INPUT INOP	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – IIM 1 DMC INPUT REDUND LOSS	-	27–00–052–01
27 FLT CTRL FAULT – IIM 1 FADEC INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 FADEC INPUT REDUND LOSS	-	27–00–062–01
27 FLT CTRL FAULT – IIM 1 INCEPTOR DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 IRS INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 IRS INPUT REDUND LOSS	-	27–00–054–01
27 FLT CTRL FAULT – IIM 1 SFECU INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS	-	27–00–060–01
27 FLT CTRL FAULT – IIM 2 DMC INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 DMC INPUT REDUND LOSS	-	27–00–052–03
27 FLT CTRL FAULT – IIM 2 FADEC INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 FADEC INPUT REDUND LOSS	-	27–00–062–03
27 FLT CTRL FAULT – IIM 2 INCEPTOR DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 IRS INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 IRS INPUT REDUND LOSS	-	27–00–054–03
27 FLT CTRL FAULT – IIM 2 SFECU INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS	-	27–00–060–03

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – IIM 3 DMC INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 DMC INPUT REDUND LOSS	-	27–00–052–05
27 FLT CTRL FAULT – IIM 3 FADEC INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 FADEC INPUT REDUND LOSS	-	27–00–062–05
27 FLT CTRL FAULT – IIM 3 INCEPTOR DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 IRS INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 IRS INPUT REDUND LOSS	-	27–00–054–05
27 FLT CTRL FAULT – IIM 3 SFECU INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS	-	27–00–060–05
27 FLT CTRL FAULT – IIM INPUT REDUND LOSS	-	27–00–052–07
27 FLT CTRL FAULT – INPUT POWER REDUND LOSS	-	27–00–073–01
27 FLT CTRL FAULT – ISI INPUT INOP	-	27–00–022–01
27 FLT CTRL FAULT – L AUTOPILOT SIDESTICK DETENT INOP	-	27–00–114–01
27 FLT CTRL FAULT – L GSHLD PTY SW INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – L PITCH TRIM SW DEGRADED	-	27–00–135–01
27 FLT CTRL FAULT – L SIDESTICK AP DISC/PTY SW INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – L SIDESTICK SHAKER INOP	-	27–00–110–01
27 FLT CTRL FAULT – L SIDESTICK SNSR DEGRADED	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – L SIDESTICK SNSR REDUND LOSS	-	27–00–115–01
27 FLT CTRL FAULT – L TOGA SW INOP	22–10–00	27–00–136–01 or 27–00–137–01
27 FLT CTRL FAULT – MCE CHAN 1 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MCE CHAN 2 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 1 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 1 PCU INOP	27–62–01	-
27 FLT CTRL FAULT – MFS 1 REU INOP	27–62–01	-
27 FLT CTRL FAULT – MFS 2 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 2 PCU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 2 REU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 3 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 3 PCU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 3 REU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 4 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 4 PCU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – MFS 4 REU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – OEI CONDITION DETECT	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PFCC 1 ADS INPUT DEGRADED	-	27–00–011–01
27 FLT CTRL FAULT – PFCC 1 ADS INPUT REDUND LOSS	-	27–00–012–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – PFCC 1 BDCU INPUT INOP	-	27–00–014–01
27 FLT CTRL FAULT – PFCC 1 BDCU INPUT REDUND LOSS	-	27–00–015–01
27 FLT CTRL FAULT – PFCC 1 CUTOUT SW INOP	27–01–05	-
27 FLT CTRL FAULT – PFCC 1 DEGRADED	-	27–00–017–01
27 FLT CTRL FAULT – PFCC 1 DMC COM DEGRADED	-	27–00–018–01
27 FLT CTRL FAULT – PFCC 1 DMC COM REDUND LOSS	-	27–00–019–01
27 FLT CTRL FAULT – PFCC 1 FADEC INPUT DEGRADED	-	27–00–031–01
27 FLT CTRL FAULT – PFCC 1 FADEC INPUT REDUND LOSS	-	27–00–030–01
27 FLT CTRL FAULT – PFCC 1 FMS INPUT INOP	-	27–00–035–01
27 FLT CTRL FAULT – PFCC 1 FMS INPUT REDUND LOSS	-	27–00–034–01
27 FLT CTRL FAULT – PFCC 1 IRS INPUT DEGRADED	-	27–00–020–01
27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS	-	27–00–021–01
27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT DEGRADED	-	27–00–023–01
27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT REDUND LOSS	-	27–00–024–01
27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP	-	27–00–025–01 or 27–00–025–03
27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP	-	27–00–025–07 or 27–00–025–09
27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP	-	27–00–025–13

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – PFCC 1 SFECU INPUT DEGRADED	-	27–00–028–01
27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS	-	27–00–029–01
27 FLT CTRL FAULT – PFCC 1 TEST SW INOP	-	27–00–007–01
27 FLT CTRL FAULT – PFCC 1 WAI INPUT DEGRADED	-	27–00–033–01
27 FLT CTRL FAULT – PFCC 1 WAI INPUT REDUND LOSS	-	27–00–032–01
27 FLT CTRL FAULT – PFCC 2 ADS INPUT DEGRADED	-	27–00–011–03
27 FLT CTRL FAULT – PFCC 2 ADS INPUT REDUND LOSS	-	27–00–012–03
27 FLT CTRL FAULT – PFCC 2 BDCU INPUT INOP	-	27–00–014–03
27 FLT CTRL FAULT – PFCC 2 BDCU INPUT REDUND LOSS	-	27–00–015–03
27 FLT CTRL FAULT – PFCC 2 CUTOUT SW INOP	27–01–05	-
27 FLT CTRL FAULT – PFCC 2 DEGRADED	-	27–00–017–03
27 FLT CTRL FAULT – PFCC 2 DMC COM DEGRADED	-	27–00–018–03
27 FLT CTRL FAULT – PFCC 2 DMC COM REDUND LOSS	-	27–00–019–03
27 FLT CTRL FAULT – PFCC 2 FADEC INPUT DEGRADED	-	27–00–031–03
27 FLT CTRL FAULT – PFCC 2 FADEC INPUT REDUND LOSS	-	27–00–030–03
27 FLT CTRL FAULT – PFCC 2 FMS INPUT INOP	-	27–00–035–03
27 FLT CTRL FAULT – PFCC 2 FMS INPUT REDUND LOSS	-	27–00–034–03
27 FLT CTRL FAULT – PFCC 2 IRS INPUT DEGRADED	-	27–00–020–03
27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS	-	27–00–021–03

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT DEGRADED	-	27–00–023–03
27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT REDUND LOSS	-	27–00–024–03
27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP	-	27–00–026–01 or 27–00–026–03
27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP	-	27–00–026–07 or 27–00–026–09
27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP	-	27–00–026–13
27 FLT CTRL FAULT – PFCC 2 SFECU INPUT DEGRADED	-	27–00–028–03
27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS	-	27–00–029–03
27 FLT CTRL FAULT – PFCC 2 TEST SW INOP	-	27–00–007–03
27 FLT CTRL FAULT – PFCC 2 WAI INPUT DEGRADED	-	27–00–033–03
27 FLT CTRL FAULT – PFCC 2 WAI INPUT REDUND LOSS	-	27–00–032–03
27 FLT CTRL FAULT – PFCC 3 ADS INPUT DEGRADED	-	27–00–011–05
27 FLT CTRL FAULT – PFCC 3 ADS INPUT REDUND LOSS	-	27–00–012–05
27 FLT CTRL FAULT – PFCC 3 BDCU INPUT INOP	-	27–00–014–05
27 FLT CTRL FAULT – PFCC 3 BDCU INPUT REDUND LOSS	-	27–00–015–05
27 FLT CTRL FAULT – PFCC 3 CUTOUT SW INOP	-	27–00–016–05
27 FLT CTRL FAULT – PFCC 3 DEGRADED	-	27–00–017–05
27 FLT CTRL FAULT – PFCC 3 DMC COM DEGRADED	-	27–00–018–05

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – PFCC 3 DMC COM REDUND LOSS	-	27–00–019–05
27 FLT CTRL FAULT – PFCC 3 FADEC INPUT DEGRADED	-	27–00–031–05
27 FLT CTRL FAULT – PFCC 3 FADEC INPUT REDUND LOSS	-	27–00–030–05
27 FLT CTRL FAULT – PFCC 3 FMS INPUT INOP	-	27–00–035–05
27 FLT CTRL FAULT – PFCC 3 FMS INPUT REDUND LOSS	-	27–00–034–05
27 FLT CTRL FAULT – PFCC 3 IRS INPUT DEGRADED	-	27–00–020–05
27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS	-	27–00–021–05
27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT DEGRADED	-	27–00–023–05
27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT REDUND LOSS	-	27–00–024–05
27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP	-	27–00–027–01 or 27–00–027–03
27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP	-	27–00–027–07 or 27–00–027–09
27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP	-	27–00–027–13
27 FLT CTRL FAULT – PFCC 3 SFECU INPUT DEGRADED	-	27–00–028–05
27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS	-	27–00–029–05
27 FLT CTRL FAULT – PFCC 3 TEST SW INOP	-	27–00–007–05
27 FLT CTRL FAULT – PFCC 3 WAI INPUT DEGRADED	-	27–00–033–05
27 FLT CTRL FAULT – PFCC 3 WAI INPUT REDUND LOSS	-	27–00–032–05

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – PFCC ADS INPUT REDUND LOSS	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PFCC BDCU INPUT REDUND LOSS	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PFCC FADEC INPUT REDUND LOSS	-	27–00–157–01
27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS	-	27–00–153–01
27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS	-	27–00–154–01
27 FLT CTRL FAULT – PFCC LGSCU INPUT REDUND LOSS	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PFCC RAD ALT INPUT DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PFCC RAD ALT INPUT REDUND LOSS	-	27–00–155–01
27 FLT CTRL FAULT – PFCC STEEP APPR INPUT INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PRIM PCU FAULT	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PRIM PCU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – PRIM REU INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – R AUTOPILOT SIDESTICK DETENT INOP	-	27–00–114–03
27 FLT CTRL FAULT – R GSHLD PTY SW INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – R PITCH TRIM SW DEGRADED	-	27–00–135–03
27 FLT CTRL FAULT – R SIDESTICK AP DISC/PTY SW INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP	-	27–00–110–03
27 FLT CTRL FAULT – R SIDESTICK SNSR DEGRADED	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 FLT CTRL FAULT – R SIDESTICK SNSR REDUND LOSS	-	27–00–115–03
27 FLT CTRL FAULT – R TOGA SW INOP	22–10–00	27–00–138–01 or 27–00–139–01
27 FLT CTRL FAULT – REU DIRECT MODE DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – RUDDER PEDAL SNSR DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – RUDDER PEDAL SNSR REDUND LOSS	-	27–00–131–01
27 FLT CTRL FAULT – RUDDER TRIM SNSR INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – SPOILER LEVER SNSR DEGRADED	No Dispatch	No Dispatch
27 FLT CTRL FAULT – SPOILER LEVER SNSR REDUND LOSS	-	27–00–091–01
27 FLT CTRL FAULT – SPOILER REU CCDL REDUND LOSS	-	27–00–092–01
27 FLT CTRL FAULT – STAB TRIM CHAN 1 INOP	No Dispatch	No Dispatch
27 FLT CTRL FAULT – STAB TRIM CHAN 2 INOP	No Dispatch	No Dispatch
27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS	-	27–00–215–01
27 SLAT FAULT – OUTBD BRAKE INOP	No Dispatch	No Dispatch
27 SLAT FAULT – OUTBD BRAKE PROX SNSR INOP	-	27–00–217–01
27 SLAT FAULT – PDU BRAKE DEGRADED	No Dispatch	No Dispatch
27 SLAT FAULT – PDU FAULT	-	27–00–219–01
27 SLAT FAULT – SKEW SNSR REDUND LOSS	-	27–00–221–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
27 SLAT FAULT – SLAT SKEW	No Dispatch	No Dispatch
27 SLAT SLOW – CHAN 1 INOP	-	27–00–223–01 or 27–00–223–02
27 SLAT SLOW – CHAN 2 INOP	-	27–00–223–03 or 27–00–223–04
27 SLAT SLOW – SLAT SYSTEM INOP	No Dispatch	No Dispatch
28 FUEL FAULT – BOOST PUMP PRESS SW FAIL HI	No Dispatch	No Dispatch
28 FUEL FAULT – COMPUTER REDUND LOSS	-	28–00–009–01
28 FUEL FAULT – CONFIG STRAPPING INOP	-	28–00–011–01
28 FUEL FAULT – CTR WING RDC INOP	28–41–01	-
28 FUEL FAULT – CTR WING RDC REDUND LOSS	-	28–00–015–01
28 FUEL FAULT – DEFUEL/XFR SOV INOP	28–23–05	-
28 FUEL FAULT – ENG INLET PRESS SW INOP	-	28–00–019–01
28 FUEL FAULT – FUEL GAUGING SNSR DEFECT	-	28–00–021–01
28 FUEL FAULT – FUEL GAUGING SNSR INOP	No Dispatch	No Dispatch
28 FUEL FAULT – FUEL KG–LB MISCOMPARE	-	28–00–023–01
28 FUEL FAULT – FUEL TEMP SNSR INOP	-	28–00–025–01
28 FUEL FAULT – FUELING DOOR OPEN	-	28–00–027–01
28 FUEL FAULT – GAUGING SNSR SHORT CIRCUIT	No Dispatch	No Dispatch
28 FUEL FAULT – L WING RDC INOP	No Dispatch	No Dispatch
28 FUEL FAULT – L WING RDC REDUND LOSS	-	28–00–031–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
28 FUEL FAULT – R WING RDC INOP	No Dispatch	No Dispatch
28 FUEL FAULT – R WING RDC REDUND LOSS	-	28–00–035–01
28 FUEL FAULT – SOFTWARE LOAD INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 1 FWSOV SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 1 PRESS SNSR INOP	29–31–02	-
29 HYDRAULIC FAULT – HYD 1 QTY SNSR INOP	29–11–30	-
29 HYDRAULIC FAULT – HYD 1 RESERV TEMP SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 2 FWSOV SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 2 PRESS SNSR INOP	29–31–02	-
29 HYDRAULIC FAULT – HYD 2 QTY SNSR INOP	29–11–30	-
29 HYDRAULIC FAULT – HYD 2 RESERV TEMP SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 3 ACCUM 1 PRESS DEGRADED	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 3 ACCUM 1 SNSR INOP	29–31–01	-
29 HYDRAULIC FAULT – HYD 3 ACCUM 2 PRESS DEGRADED	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD 3 ACCUM 2 SNSR INOP	29–31–01	-
29 HYDRAULIC FAULT – HYD 3 PRESS SNSR INOP	29–31–02	-
29 HYDRAULIC FAULT – HYD 3 QTY SNSR INOP	29–11–30	-
29 HYDRAULIC FAULT – HYD 3 RESERV TEMP SNSR INOP	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
29 HYDRAULIC FAULT – HYD CDC ACMP 3A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD CDC ACMP 3B PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD CDC EDP 1A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD CDC EDP 2A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD EDP 1A DEPRESS INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD EDP 1A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD EDP 2A DEPRESS INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD EDP 2A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD PTU INOP	29–11–01	-
29 HYDRAULIC FAULT – HYD PTU PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD PUMP 2B INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD PUMP 2B PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD PUMP 2B TEMP SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD PUMP 3A INOP	-	29–00–031–02
29 HYDRAULIC FAULT – HYD PUMP 3A PRESS SW INOP	29–31–03	-
29 HYDRAULIC FAULT – HYD PUMP 3A TEMP SNSR INOP	No Dispatch	No Dispatch
29 HYDRAULIC FAULT – HYD PUMP 3B INOP	-	29–00–033–02
29 HYDRAULIC FAULT – HYD PUMP 3B PRESS SW INOP	29–31–03	-

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
29 HYDRAULIC FAULT – HYD PUMP 3B TEMP SNSR INOP	No Dispatch	No Dispatch
30 L ENGINE FAULT – COWL A/ICE PRESS SNSR 1 INOP	No Dispatch	No Dispatch
30 L ENGINE FAULT – COWL A/ICE PRESS SNSR 2 INOP	No Dispatch	No Dispatch
30 L WING A/ICE FAIL – L WING A/ICE VLV FAIL OPEN	30–11–09	-
30 L WING A/ICE FAIL – L WING PRESS FAIL	30–11–09	-
30 L WING A/ICE LO HEAT – CTRL TEMP INOP	36-11-92	30–00–003–01
30 L WING A/ICE LO HEAT – L HPV FAIL CLSD	-	30–00–005–01
30 L WING A/ICE LO HEAT – L WING A/ICE TEMP SNSR INOP	-	30–00–007–01
30 L WING A/ICE OVHT – CTRL TEMP INOP	36-11-92	No Dispatch
30 L WING A/ICE OVHT – L WING A/ICE TEMP SNSR INOP	-	30–00–011–01
30 R ENGINE FAULT – COWL A/ICE PRESS SNSR 1 INOP	No Dispatch	No Dispatch
30 R ENGINE FAULT – COWL A/ICE PRESS SNSR 2 INOP	No Dispatch	No Dispatch
30 R WING A/ICE FAIL – R WING A/ICE VLV FAIL OPEN	30–11–09	-
30 R WING A/ICE FAIL – R WING PRESS FAIL	30–11–09	-
30 R WING A/ICE LO HEAT – CTRL TEMP INOP	36-11-92	30–00–017–01
30 R WING A/ICE LO HEAT – R HPV FAIL CLSD	-	30–00–019–01
30 R WING A/ICE LO HEAT – R WING A/ICE TEMP SNSR INOP	-	30–00–021–01
30 R WING A/ICE OVHT – CTRL TEMP INOP	36-11-92	No Dispatch
30 R WING A/ICE OVHT – R WING A/ICE TEMP SNSR INOP	-	30–00–025–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
30 WING A/ICE FAULT – L WING A/ICE PRESS SNSR INOP	30-12-01	-
30 WING A/ICE FAULT – R WING A/ICE PRESS SNSR INOP	30-12-01	-
30 WING A/ICE FAULT – L WING A/ICE VLV LEAK	No Dispatch	No Dispatch
30 WING A/ICE FAULT – L WING A/ICE VLV POS SW INOP	30–11–09	-
30 WING A/ICE FAULT – R WING A/ICE VLV LEAK	No Dispatch	No Dispatch
30 WING A/ICE FAULT – R WING A/ICE VLV POS SW INOP	30–11–09	-
30 WING A/ICE FAULT – WING A/ICE AUTO MODE INOP	-	30–00–037–01
30 WING A/ICE FAULT – WING A/ICE TEMP SNSR REDUND LOSS	-	30–00–039–01
31 AVIONIC FAN FAULT – DMC 1A FAN INOP	-	31–00–001–01
31 AVIONIC FAN FAULT – DMC 1B FAN INOP	-	31–00–003–01
31 AVIONIC FAN FAULT – DMC 2A FAN INOP	-	31–00–005–01
31 AVIONIC FAN FAULT – DMC 2B FAN INOP	-	31–00–007–01
31 AVIONIC FAN FAULT – IPC 1 FAN INOP	-	31–00–009–01
31 AVIONIC FAN FAULT – IPC 2 FAN INOP	-	31–00–011–01
31 AVIONIC FAN FAULT – IPC 3 FAN INOP	-	31–00–013–01
31 AVIONIC FAN FAULT – IPC 4 FAN INOP	-	31–00–015–01
31 AVIONIC FAULT – APM 1 INOP	-	31–00–017–01
31 AVIONIC FAULT – APM 2 INOP	-	31–00–019–01
31 AVIONIC FAULT – CONFIG INVALID	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
31 AVIONIC FAULT – CONFIG SYS INOP	-	45–00–003–01
31 AVIONIC FAULT – OMS INOP	-	45–00–005–01
31 CTRL PANEL FAULT – ENGINE PANEL PIM INOP	-	31–00–059–01
31 CTRL PANEL FAULT – LIGHTING PANEL PIM INOP	-	31–00–055–01
31 CTRL PANEL FAULT – OVRHD AND ENGINE PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD EYEBROW 2 OF 3 CHAN INOP	-	31–00–061–01
31 CTRL PANEL FAULT – OVRHD EYEBROW 3 OF 3 CHAN INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD L INBD 2 OF 3 CHAN INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD L INBD PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD L OUTBD 2 OF 3 CHAN INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD L OUTBD PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD PIM 1 INOP	-	31–00–049–01
31 CTRL PANEL FAULT – OVRHD PIM 2 INOP	-	31–00–051–01
31 CTRL PANEL FAULT – OVRHD PIM 3 INOP	-	31–00–053–01
31 CTRL PANEL FAULT – OVRHD R INBD 2 OF 3 CHAN INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD R INBD PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – OVRHD R OUTBD 2 OF 3 CHAN INOP	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
31 CTRL PANEL FAULT – OVRHD R OUTBD PANEL INOP	No Dispatch	No Dispatch
31 CTRL PANEL FAULT – RDC 1 INOP	-	31–00–065–01
31 CTRL PANEL FAULT – RDC 2 INOP	-	31–00–067–01
31 CTRL PANEL FAULT – RDC 3 INOP	-	31–00–069–01
31 CTRL PANEL FAULT – TRIM PANEL PIM INOP	-	31–00–057–01
32 BRAKE FAULT – BDCU 1 ALTN INOP	-	32–00–043–01
32 BRAKE FAULT – BDCU 1 NORM INOP	No Dispatch	No Dispatch
32 BRAKE FAULT – BDCU 2 ALTN INOP	-	32–00–045–01
32 BRAKE FAULT – BDCU 2 NORM INOP	No Dispatch	No Dispatch
32 BRAKE FAULT – BRAKE CODE 2 INOP	-	32–00–067–01
32 BRAKE FAULT – BRAKE TEMP SENSOR INOP	32–46–02 32–49–17	32–00–053–01
32 BRAKE FAULT – GEAR RETRACT INOP	-	32–00–069–01
32 BRAKE FAULT – IFT INOP	-	32–00–057–01
32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS	-	32–00–063–01
32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS	-	32–00–059–01
32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS	-	32–00–065–01
32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS	-	32–00–061–01
32 BRAKE FAULT – THROTTLE RVDT INOP	-	32–00–073–01
32 BRAKE FAULT – WOW DISAGREE	-	32–00–071–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
32 GEAR FAULT – 28V ESS REDUND LOSS	-	32–00–021–01
32 GEAR FAULT – 28V NORM REDUND LOSS	-	32–00–023–01
32 GEAR FAULT – ALTN EXT INOP	32–30–00	-
32 GEAR FAULT – ALTN EXT RLY 1 CONTACT FAULT	32–30–00	-
32 GEAR FAULT – ALTN EXT RLY 2 CONTACT FAULT	32–30–00	-
32 GEAR FAULT – FFSV FAIL OPEN	No Dispatch	No Dispatch
32 GEAR FAULT – GEAR DNLK REDUND LOSS	-	32–61–005–01
32 GEAR FAULT – GEAR DNLK SENSORS INOP	No Dispatch	No Dispatch
32 GEAR FAULT – GEAR REDUND LOSS	No Dispatch	No Dispatch
32 GEAR FAULT – GEAR UPLK REDUND LOSS	-	32–61–005–03
32 GEAR FAULT – GEAR UPLK SENSORS INOP	No Dispatch	No Dispatch
32 GEAR FAULT – L GEAR DNLK REDUND LOSS	-	32–00–003–01
32 GEAR FAULT – L GEAR UPLK MOTOR FAULT	32–30–00	-
32 GEAR FAULT – L GEAR UPLK REDUND LOSS	-	32–00–005–01
32 GEAR FAULT – LGCL REDUND LOSS	-	32–00–001–01
32 GEAR FAULT – LGCL INOP	No Dispatch	No Dispatch
32 GEAR FAULT – LGCV REDUND LOSS	-	32–00–025–01
32 GEAR FAULT – LGCL SWITCH FAULT	No Dispatch	No Dispatch
32 GEAR FAULT – LGSCU 1 REDUND LOSS	No Dispatch	No Dispatch
32 GEAR FAULT – LGSCU 2 REDUND LOSS	No Dispatch	No Dispatch
32 GEAR FAULT – LGSCU INTERNAL FAULT	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
32 GEAR FAULT – MULTIPLE GEAR REDUND LOSS	No Dispatch	No Dispatch
32 GEAR FAULT – NOSE GEAR DNLK REDUND LOSS	-	32–00–011–01
32 GEAR FAULT – NOSE GEAR UPLK MOTOR FAULT	32–30–00	-
32 GEAR FAULT – NOSE GEAR UPLK REDUND LOSS	-	32–00–013–01
32 GEAR FAULT – R GEAR DNLK REDUND LOSS	-	32–00–007–01
32 GEAR FAULT – R GEAR UPLK MOTOR FAULT	32–30–00	-
32 GEAR FAULT – R GEAR UPLK REDUND LOSS	-	32–00–009–01
32 GEAR FAULT – WOW OVERRIDE ACTIVE	No Dispatch	No Dispatch
32 L BRAKE DEGRADED – L GEAR 1 EMA INOP	32–43–05	-
32 L BRAKE DEGRADED – L GEAR 2 EMA INOP	32–43–05	-
32 L BRAKE DEGRADED – L GEAR EMAC INOP	32–43–03	-
32 L BRAKE DEGRADED – L WHEEL SPEED CHAN INOP	32–44–02	-
32 L BRAKE FAIL – L BRAKE CODE 1 INOP	No Dispatch	No Dispatch
32 L BRAKE FAIL – L WHEEL SPEED INOP	No Dispatch	No Dispatch
32 NOSE STEER FAULT – L TILLER INOP	-	32–00–082–01
32 NOSE STEER FAULT – LGSCU INTNL FAULT	No Dispatch	No Dispatch
32 NOSE STEER FAULT – OVERTRAVEL DET INOP	No Dispatch	No Dispatch
32 NOSE STEER FAULT – R TILLER INOP	-	32–00–081–01
32 NOSE STEER FAULT – STEER REDUND LOSS	-	32–00–085–01
32 NOSE STEER FAULT – TILLER DEGRADED	-	32–00–084–01
32 R BRAKE DEGRADED – R GEAR 1 EMA INOP	32–43–05	-

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
32 R BRAKE DEGRADED – R GEAR 2 EMA INOP	32–43–05	-
32 R BRAKE DEGRADED – R GEAR EMAC INOP	32–43–03	-
32 R BRAKE DEGRADED – R WHEEL SPEED CHAN INOP	32–44–02	-
32 R BRAKE FAIL – R BRAKE CODE 1 INOP	No Dispatch	No Dispatch
32 R BRAKE FAIL – R WHEEL SPEED INOP	No Dispatch	No Dispatch
32 TIRE PRESS FAULT – L MLG INBD TPIS INOP	-	32–00–035–01 or 32–00–035–03
32 TIRE PRESS FAULT – L MLG OUTBD TPIS INOP	-	32–00–039–01 or 32–00–039–03
32 TIRE PRESS FAULT – L NOSE TPIS INOP	-	32–00–031–01 or 32–00–031–03
32 TIRE PRESS FAULT – R MLG INBD TPIS INOP	-	32–00–037–01 or 32–00–037–03
32 TIRE PRESS FAULT – R MLG OUTBD TPIS INOP	-	32–00–041–01 or 32–00–041–03
32 TIRE PRESS FAULT – R NOSE TPIS INOP	-	32–00–033–01 or 32–00–033–03
32 TIRE PRESS FAULT – TPMU INOP	-	32–00–029–01 or 32–00–029–03
32 WOW FAULT – L GEAR WOFFW REDUND LOSS	-	32–00–015–01
32 WOW FAULT – NOSE GEAR WOFFW REDUND LOSS	-	32–00–019–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
32 WOW FAULT – R GEAR WOFFW REDUND LOSS	-	32–00–017–01
34 ADS 1 DEGRADED – DMC INPUT INOP	No Dispatch	No Dispatch
34 ADS 2 DEGRADED – DMC INPUT INOP	No Dispatch	No Dispatch
34 ADS 3 DEGRADED – DMC INPUT INOP	No Dispatch	No Dispatch
34 ADS 4 DEGRADED – DMC INPUT INOP	No Dispatch	No Dispatch
34 ADS FAULT – ADS 1 DMC INPUT REDUND LOSS	No Dispatch	No Dispatch
34 ADS FAULT – ADS 1 PRIMARY SIDESLIP COMP INOP	No Dispatch	No Dispatch
34 ADS FAULT – ADS 1 TAT ELEMENT INOP	-	34–00–035–01 or 34–00–037–01
34 ADS FAULT – ADS 2 DMC INPUT REDUND LOSS	No Dispatch	No Dispatch
34 ADS FAULT – ADS 2 PRIMARY SIDESLIP COMP INOP	No Dispatch	No Dispatch
34 ADS FAULT – ADS 2 TAT ELEMENT INOP	-	34–00–039–01 or 34–00–040–01
34 ADS FAULT – ADS 3 DMC INPUT REDUND LOSS	No Dispatch	No Dispatch
34 ADS FAULT – ADS 3 PRIMARY SIDESLIP COMP INOP	No Dispatch	No Dispatch
34 ADS FAULT – ADS 3 TAT ELEMENT INOP	-	34–00–041–01
34 ADS FAULT – ADS 4 DMC INPUT REDUND LOSS	No Dispatch	No Dispatch
34 ADS FAULT – ADS 4 PRIMARY SIDESLIP COMP INOP	No Dispatch	No Dispatch
34 ADS FAULT – ADS 4 TAT ELEMENT INOP	-	34–00–042–01
34 ADS FAULT – ADS HEATER 1 REDUND LOSS	-	34–00–045–01
34 ADS FAULT – ADS HEATER 2 REDUND LOSS	-	34–00–046–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
34 ADS FAULT – ADS HEATER 3 REDUND LOSS	-	34–00–047–01
34 ADS FAULT – ADS HEATER 4 REDUND LOSS	-	34–00–048–01
34 ADS FAULT – ADS SENSE LINE HEATER 1 INOP	-	34–00–049–01
34 ADS FAULT – ADS SENSE LINE HEATER 2 INOP	-	34–00–050–01
34 ADS FAULT – ADS SENSE LINE HEATER 3 INOP	-	34–00–051–01
34 ADS FAULT – ADS SENSE LINE HEATER 4 INOP	-	34–00–053–01
34 ADS FAULT – L AOA CASE HEATER INOP	-	34–00–054–05
34 ADS FAULT – L AOA VANE DEGRADED	No Dispatch	No Dispatch
34 ADS FAULT – L AOA VANE HEATER INOP	-	34–00–054–03
34 ADS FAULT – L AOA VANE INOP	-	34–00–054–01
34 ADS FAULT – L TAT HEATER INOP	-	34–00–043–01
34 ADS FAULT – R AOA CASE HEATER INOP	-	34–00–054–07
34 ADS FAULT – R AOA VANE DEGRADED	No Dispatch	No Dispatch
34 ADS FAULT – R AOA VANE HEATER INOP	-	34–00–054–06
34 ADS FAULT – R AOA VANE INOP	-	34–00–054–02
34 ADS FAULT – R TAT HEATER INOP	-	34–00–044–01
34 ADS MAINT MODE ACTIVE – ADS 1 MAINT MODE ACTIVE	Not Applicable	Not Applicable
34 ADS MAINT MODE ACTIVE – ADS 2 MAINT MODE ACTIVE	Not Applicable	Not Applicable
34 ADS MAINT MODE ACTIVE – ADS 3 MAINT MODE ACTIVE	Not Applicable	Not Applicable

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
34 ADS MAINT MODE ACTIVE – ADS 4 MAINT MODE ACTIVE	Not Applicable	Not Applicable
34 AVIONIC FAN FAULT – HUD FAN INOP	-	34–00–121–01
34 AVIONIC FAN FAULT – L HUD FAN INOP	-	34–00–123–01
34 AVIONIC FAN FAULT – L INBD DSPL L FAN INOP	-	34–00–160–01
34 AVIONIC FAN FAULT – L INBD DSPL R FAN INOP	-	34–00–160–02
34 AVIONIC FAN FAULT – L OUTBD DSPL L FAN INOP	-	34–00–160–03
34 AVIONIC FAN FAULT – L OUTBD DSPL R FAN INOP	-	34–00–160–04
34 AVIONIC FAN FAULT – LWR DSPL L FAN INOP	-	34–00–160–05
34 AVIONIC FAN FAULT – LWR DSPL R FAN INOP	-	34–00–160–06
34 AVIONIC FAN FAULT – R HUD FAN INOP	-	34–00–125–01
34 AVIONIC FAN FAULT – R INBD DSPL L FAN INOP	-	34–00–160–07
34 AVIONIC FAN FAULT – R INBD DSPL R FAN INOP	-	34–00–160–08
34 AVIONIC FAN FAULT – R OUTBD DSPL L FAN INOP	-	34–00–160–09
34 AVIONIC FAN FAULT – R OUTBD DSPL R FAN INOP	-	34–00–160–10
34 AVIONIC FAN FAULT – TSS FAN INOP	-	34–00–058–01
34 AVIONIC FAULT – ADS–B 1 OUT INOP	-	34–00–061–03
34 AVIONIC FAULT – ADS–B 2 OUT INOP	-	34–00–061–04
34 AVIONIC FAULT – DSPL XTALK COM LOSS	No Dispatch	No Dispatch
34 AVIONIC FAULT – GPS 1 INOP	-	34–00–087–01 or 34–00–089–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
34 AVIONIC FAULT – GPS 2 INOP	-	34–00–091–01 or 34–00–093–01
34 AVIONIC FAULT – IPC 1 DSM INOP	No Dispatch	No Dispatch
34 AVIONIC FAULT – IPC 2 DSM INOP	No Dispatch	No Dispatch
34 AVIONIC FAULT – IPC 3 DSM INOP	No Dispatch	No Dispatch
34 AVIONIC FAULT – IPC 4 DSM INOP	No Dispatch	No Dispatch
34 AVIONIC FAULT – WXR L CTRL INOP	-	34–00–112–04
34 AVIONIC FAULT – WXR L DSPL INOP	-	34–00–112–01
34 AVIONIC FAULT – WXR R CTRL INOP	-	34–00–112–05
34 AVIONIC FAULT – WXR R DSPL INOP	-	34–00–112–02
34 AVIONIC FAULT – WXR–4 BUS INOP	-	34–00–112–03
34 AVIONIC FAULT – XPDR 1 INOP	-	34–00–055–01
34 AVIONIC FAULT – XPDR 2 INOP	-	34–00–057–01
36 AIR SYSTEM FAULT – L BLEED MON PRESS SNSR INOP	-	36–00–001–01
36 AIR SYSTEM FAULT – L BLEED TEMP SNSR REDUND LOSS	-	36–00–003–01
36 AIR SYSTEM FAULT – R BLEED MON PRESS SNSR INOP	-	36–00–005–01
36 AIR SYSTEM FAULT – R BLEED TEMP SNSR REDUND LOSS	-	36–00–005–03
36 L BLEED FAIL – L BLEED TEMP SNSR INOP	-	36–00–009–01
36 L BLEED FAIL – L HPV FAIL CLSD	-	36–00–011–03

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
36 L BLEED FAIL – L HPV FAIL OPEN	36–12–05	-
36 L BLEED FAIL – L PACK INLET PRESS SNSR INOP	-	21–00–047–01 or 21–00–047–02 or 21–00–047–03 or 21–00–119–01
36 L BLEED FAIL – L PRESS REG SOV FAIL OPEN	36–12–01	-
36 L BLEED FAIL – L PRESS REG SOV INOP	-	36–00–013–01
36 LEAK DET FAULT – LOOP REDUND LOSS	-	36–00–017–01
36 R BLEED FAIL – R BLEED TEMP SNSR INOP	-	36–00–031–01
36 R BLEED FAIL – R HPV FAIL CLSD	-	36–00–035–03
36 R BLEED FAIL – R HPV FAIL OPEN	36–12–05	-
36 R BLEED FAIL – R PACK INLET PRESS SNSR INOP	-	21–00–103–01 or 21–00–103–02 or 21–00–103–03 or 21–00–131–01
36 R BLEED FAIL – R PRESS REG SOV INOP	-	36–00–037–01
36 R BLEED FAIL – R PRESS REG SOV FAIL OPEN	36–12–01	-
44 CABIN COM FAULT – CABIN CTRL INOP	23–30–04 or 23–31–01	-
44 CABIN COM FAULT – CKPT HANDSET INOP	23–31–04–1–A or 23–31–04–1–B	-

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
46 HEALTH MGMT FAULT – HMU DEGRADED	46–10–01	46–00–001–01 or 46–00–002–01
46 HEALTH MGMT FAULT – HMU LATCH ON BATTERY	46–10–01	-
46 HI LOAD EVENT – GUST EVENT MODERATE	No Dispatch	No Dispatch
46 HI LOAD EVENT – GUST EVENT SEVERE	No Dispatch	No Dispatch
46 HI LOAD EVENT – HARD LANDING MODERATE	No Dispatch	No Dispatch
46 HI LOAD EVENT – HARD LANDING SEVERE	No Dispatch	No Dispatch
46 HI LOAD EVENT – OUT OF LIMIT LANDING	No Dispatch	No Dispatch
47 FUEL INERTING FAULT – DUAL FLOW SOV INOP	47-30-00	No Dispatch
47 FUEL INERTING FAULT – FUEL INERTING DEGRADED	-	47-00-001-01
47 FUEL INERTING FAULT – FUEL INERTING INOP	47–30–00	-
47 FUEL INERTING FAULT – FUEL INERTING REDUND LOSS	-	47–00–003–01
47 FUEL INERTING FAULT – FUEL INERTING SHUTDOWN	-	47-00-005-01 or 47-00-007-01
47 FUEL INERTING FAULT – INLET ISOL VLV INOP	47-30-00	47-00-015-01
47 FUEL INERTING FAULT – TEMP ISOL VLV INOP	47-30-00	47-00-013-01
49 APU FAULT – APU DEGRADED	49–00–03	-
49 APU FAULT – APU DOOR INOP	49–14–19	-
49 APU FAULT – APU INOP	49–00–03	49–00–007–01
49 APU FAULT – APU REDUND LOSS	-	49–00–009–01
49 APU FAULT – APU STARTER WEAR	49-00-03	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
52 DOOR FAULT – AFT CARGO DOOR SNSR INOP	-	52–00–043–01
52 DOOR FAULT – AFT CARGO DOOR TRGT INOP	-	52–00–045–01
52 DOOR FAULT – AFT EQUIP BAY DOOR SNSR INOP	-	52–00–037–01
52 DOOR FAULT – AFT PAX DOOR SNSR INOP	-	52–00–009–01
52 DOOR FAULT – AFT PAX DOOR TRGT INOP	-	52–00–011–01
52 DOOR FAULT – AFT SERV DOOR SNSR INOP	-	52–00–013–01
52 DOOR FAULT – AFT SERV DOOR TRGT INOP	-	52–00–015–01
52 DOOR FAULT – FWD CARGO DOOR SNSR INOP	-	52–00–039–01
52 DOOR FAULT – FWD CARGO DOOR TRGT INOP	-	52–00–041–01
52 DOOR FAULT – FWD EQUIP BAY DOOR SNSR INOP	-	52–00–033–01
52 DOOR FAULT – FWD PAX DOOR SNSR INOP	-	52–00–001–01
52 DOOR FAULT – FWD PAX DOOR TRGT INOP	-	52–00–003–01
52 DOOR FAULT – FWD SERV DOOR SNSR INOP	-	52–00–005–01
52 DOOR FAULT – FWD SERV DOOR TRGT INOP	-	52–00–007–01
52 DOOR FAULT – L OVERWING AFT DOOR SNSR INOP	-	52–00–025–01
52 DOOR FAULT – L OVERWING AFT DOOR TRGT INOP	-	52–00–027–01
52 DOOR FAULT – L OVERWING DOOR SNSR INOP	-	52–00–017–01
52 DOOR FAULT – L OVERWING DOOR TRGT INOP	-	52–00–019–01
52 DOOR FAULT – MID EQUIP BAY DOOR SNSR INOP	-	52–00–035–01
52 DOOR FAULT – R OVERWING AFT DOOR SNSR INOP	-	52–00–029–01
52 DOOR FAULT – R OVERWING AFT DOOR TRGT INOP	-	52–00–031–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
52 DOOR FAULT – R OVERWING DOOR SNSR INOP	-	52–00–021–01
52 DOOR FAULT – R OVERWING DOOR TRGT INOP	-	52–00–023–01
52 DOOR SLIDE FAULT – AFT PAX DOOR SLIDE SNSR INOP	-	25–00–079–01
52 DOOR SLIDE FAULT – AFT PAX DOOR SLIDE TRGT INOP	-	25–00–081–01
52 DOOR SLIDE FAULT – AFT SERV DOOR SLIDE SNSR INOP	-	25–00–083–01
52 DOOR SLIDE FAULT – AFT SERV DOOR SLIDE TRGT INOP	-	25–00–085–01
52 DOOR SLIDE FAULT – FWD PAX DOOR SLIDE SNSR INOP	-	25–00–071–01
52 DOOR SLIDE FAULT – FWD PAX DOOR SLIDE TRGT INOP	-	25–00–073–01
52 DOOR SLIDE FAULT – FWD SERV DOOR SLIDE SNSR INOP	-	25–00–075–01
52 DOOR SLIDE FAULT – FWD SERV DOOR SLIDE TRGT INOP	-	25–00–077–01
52 WING SLIDE – L OWEE SLIDE INOP	25-63-02 or 52-11-00	-
52 WING SLIDE – R OWEE SLIDE INOP	25-63-02 or 52-11-00	-
73 INFO NOTE – L ENG CTRL SYS REDUND LOSS	-	73–00–023–01
73 INFO NOTE – L ENG FADEC FAULT 3	-	73–00–025–01
73 INFO NOTE – R ENG CTRL SYS REDUND LOSS	-	73–00–027–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
73 INFO NOTE – R ENG FADEC FAULT 3	-	73–00–029–01
73 L ENG FUEL FILTER – BYPASS	No Dispatch	No Dispatch
73 L ENG FUEL FILTER – IMPENDING BYPASS	73–34–01	73–34–001–01
73 L ENGINE FAULT – EEC A CTRL CPU INOP	No Dispatch	No Dispatch
73 L ENGINE FAULT – EEC B CTRL CPU INOP	No Dispatch	No Dispatch
73 L ENGINE FAULT – FADEC FAULT 1	No Dispatch	No Dispatch
73 L ENGINE FAULT – FADEC FAULT 2	-	73–00–009–01
73 L ENGINE FAULT – FUEL EQUAL INOP	No Dispatch	No Dispatch
73 L ENGINE FAULT – FUEL FILTER PRESS SNSR INOP	73–34–02	-
73 L ENGINE FAULT – HEALTH MON DEGRADED	-	73–00–015–01
73 L ENGINE FAULT – P2/T2 HEATER INOP	-	73–00–017–01
73 L ENGINE FAULT – T3 SNSR INOP	-	73–00–019–01
73 L ENGINE FAULT – EEC 28VDC REDUND LOSS	73–21–03	-
73 L ENGINE FAULT – HYD EDP1A DEPRESS SOL INOP	No Dispatch	No Dispatch
73 R ENG FUEL FILTER – BYPASS	No Dispatch	No Dispatch
73 R ENG FUEL FILTER – IMPENDING BYPASS	73–34–01	73–34–003–01
73 R ENGINE FAULT – EEC A CTRL CPU INOP	No Dispatch	No Dispatch
73 R ENGINE FAULT – EEC B CTRL CPU INOP	No Dispatch	No Dispatch
73 R ENGINE FAULT – FADEC FAULT 1	No Dispatch	No Dispatch
73 R ENGINE FAULT – FADEC FAULT 2	-	73–00–039–01
73 R ENGINE FAULT – FUEL EQUAL INOP	No Dispatch	No Dispatch

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
73 R ENGINE FAULT – FUEL FILTER PRESS SNSR INOP	73–34–02	-
73 R ENGINE FAULT – HEALTH MON DEGRADED	-	73–00–045–01
73 R ENGINE FAULT – P2/T2 HEATER INOP	-	73–00–047–01
73 R ENGINE FAULT – T3 SNSR INOP	-	73–00–049–01
73 R ENGINE FAULT – EEC 28VDC REDUND LOSS	73–21–03	-
73 R ENGINE FAULT – HYD EDP2A DEPRESS SOL INOP	No Dispatch	No Dispatch
74 L ENGINE FAULT – IGN REDUND LOSS	-	74–00–001–01
74 R ENGINE FAULT – IGN REDUND LOSS	-	74–00–002–01
75 L ENGINE FAULT – ACC FAIL CLSD	75–24–01	-
75 L ENGINE FAULT – BACV FAIL CLSD	No Dispatch	No Dispatch
75 L ENGINE FAULT – BAV INOP	No Dispatch	No Dispatch
75 L ENGINE FAULT – HPC BLEED VLV INOP	No Dispatch	No Dispatch
75 L ENGINE FAULT – PCE DOOR INOP	78–36–04	-
75 R ENGINE FAULT – ACC FAIL CLSD	75–24–01	-
75 R ENGINE FAULT – BACV FAIL CLSD	No Dispatch	No Dispatch
75 R ENGINE FAULT – BAV INOP	No Dispatch	No Dispatch
75 R ENGINE FAULT – HPC BLEED VLV INOP	No Dispatch	No Dispatch
75 R ENGINE FAULT – PCE DOOR INOP	78–36–04	-
76 L ENGINE FAULT – THROTTLE REV BALK INOP	-	76–00–001–01
76 R ENGINE FAULT – THROTTLE REV BALK INOP	-	76–00–002–01

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
77 L ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED	77–11–01 or 77–32–01 or 77–32–03	-
77 L ENGINE FAULT – N2 VIBRATION MON DEGRADED	77–32–02 or 77–32–03	-
77 L ENGINE FAULT – PHMU INOP	77–31–01	-
77 R ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED	77–11–01 or 77–32–01 or 77–32–03	-
77 R ENGINE FAULT – N2 VIBRATION MON DEGRADED	77–32–02 or 77–32–03	-
77 R ENGINE FAULT – PHMU INOP	77–31–01	-
78 L ENGINE FAULT – REVERSER INOP	78–30–02	-
78 L ENGINE FAULT – REVERSER REDUND LOSS	-	78–00–001–01
78 R ENGINE FAULT – REVERSER INOP	78–30–02	-
78 R ENGINE FAULT – REVERSER REDUND LOSS	-	78–00–002–01
79 L ENGINE FAULT – AUX OIL PRESS MON INOP	-	79–00–001–01
79 L ENGINE FAULT – BRG DAMPER VLV INOP	No Dispatch	No Dispatch
79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT	79–21–06	79–35–001–01
79 L ENGINE FAULT – OIL DEBRIS MON INOP	-	79–35–021–01 or 79–35–021–05

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INFO MESSAGE	MMEL RELIEF SECTION 1 ATA NUMBER	MMEL RELIEF SECTION 2 ITEM NUMBER
79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS	79–21–06	79–34–001–01
79 L ENGINE FAULT – OIL FILTER SNSR INOP	79–33–23	-
79 L ENGINE FAULT – OIL QTY SNSR INOP	79–31–01	-
79 L ENGINE FAULT – VORV OPER DEGRADED	-	79–00–007–01
79 R ENGINE FAULT – AUX OIL PRESS MON INOP	-	79–00–009–01
79 R ENGINE FAULT – BRG DAMPER VLV INOP	No Dispatch	No Dispatch
79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT	79–21–06	79–35–003–01
79 R ENGINE FAULT – OIL DEBRIS MON INOP	-	79–35–021–03 or 79–35–021–07
79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS	79–21–06	79–34–003–01
79 R ENGINE FAULT – OIL FILTER SNSR INOP	79–33–23	-
79 R ENGINE FAULT – OIL QTY SNSR INOP	79–31–01	-
79 R ENGINE FAULT – VORV OPER DEGRADED	-	79–00–015–01
80 L ENGINE FAULT – STARTER SYSTEM INOP	80–10–01 or 80–11–01	–
80 R ENGINE FAULT – STARTER SYSTEM INOP	80–10–01 or 80–11–01	–

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SECTION 1

LRU / COMPONENT ORIENTED MMEL RELIEF

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
00–01 Overhead Control Panel Pushbutton Annunciator (PBA) Switch Light (light function only)					
1) AIR Control Panel – MAN TEMP “ON”		C	1	0	
2) PRESSURIZATION Control Panel – EMER DEPRESS “ON”		C	1	0	
3) PRESSURIZATION Control Panel – AUTO PRESS “MAN”		C	1	0	
4) PRESSURIZATION Control Panel – AUTO PRESS “FAIL”		C	1	0	
5) PRESSURIZATION Control Panel – DITCHING “ON”		C	1	0	
6) EQUIP COOLING Control panel – INLET “OFF”		C	1	0	
7) AIR Control Panel – PACK FLOW “HI”		C	1	0	
8) AIR Control Panel – TRIM AIR “OFF”		C	1	0	
9) AIR Control Panel – RECIRC AIR “OFF”		C	1	0	
10) AIR Control Panel – RAM AIR “OPEN”		C	1	0	

(Cont’d)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
00–01	Overhead Control Panel Pushbutton Annunciator (PBA) Switch Light (light function only) (Cont'd)				
11)	AIR Control Panel – L (R) PACK "FAIL"	C	2	0	
12)	AIR Control Panel – L (R) PACK "OFF"	C	2	0	

1. PLACARD (P)

A. Put the applicable LIGHT FUNCTION INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

NOTE: For an inoperative Pushbutton Annunciator (PBA) light function only, a redundant alternative indication is available on the EICAS display when light function is lost.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
20–01 Low Pressure Ground Connection (LPGC)					
1) Check Valve					
A) Inoperative closed		C	1	0	(M)(O) May be inoperative closed provided: (a) Affected check valve is verified closed, and (b) LPGC is not used.
B) Inoperative open		C	1	0	May be inoperative open provided left air conditioning pack is considered inoperative.
2) Cover		C	1	0	(M) May be inoperative or missing provided: (a) Associated check–valve is verified operative, (b) Extended overwater operations are not conducted, (c) Takeoffs and landings are not conducted on runways near water, and (d) LPGC access panel (CDL item 53–24) is installed and confirmed not missing.

1. PLACARD (P)

A. For an inoperative LPGC Check Valve, put a LOW PRESSURE GROUND CONNECTION CHECK VALVE INOPERATIVE placard inside the LPGC access door.

B. For an inoperative or missing LPGC Cover, put the appropriate LOW PRESSURE GROUND CONNECTION COVER MISSING (INOPERATIVE) placard inside the LPGC access door.

2. MAINTENANCE (M)

A. For an inoperative LPGC check valve, do the steps that follow:

(1) Open the LPGC access panel (191BB).

(2) Remove the LGPC Cover.

(3) Visually make sure that the LPGC valve flap is fully closed.

(4) Install the LGPC Cover.

(5) Close the LPGC access panel (191BB).

B. For an inoperative or missing LPGC Cover, do the steps that follow:

(1) Turn on the LH Air Conditioning Pack.

(2) Open the LPGC access panel (191BB).

(3) Visually make sure that the LPGC valve flap is closed.

(4) Make sure there is no whistling sound.

(5) Make sure there is no leak that can be felt with your hand.

(6) Close the LPGC access panel (191BB).

3. OPERATIONS (O)

A. For an inoperative closed LPGC check valve , use the Auxiliary Power Unit (APU) or engine bleed air to operate the air conditioning packs.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
21–19 Recirculation Fan (RFAN)	C	1	0	(M)(O) May be inoperative provided: (a) RECIRC AIR is selected OFF, (b) Associated check valve is verified operative, (c) Both Air Conditioning Packs are operative, (d) Forward cargo compartment heating is selected to LO HEAT or HI HEAT when live animals or temperature sensitive cargo is carried in forward cargo compartment, and (e) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative).

1. PLACARD (P)

A. Put a RECIRCULATION FAN INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative RFAN, make sure that the recirculation fan check valve is not failed open as follows:

(1) On the Air control panel select the RECIRC AIR switch to OFF.

(2) Turn on the LH and the RH Air Conditioning Pack.

(3) Get access to the forward cargo compartment.

(4) On the AFT bulkhead, remove access Panels 123ELW and 124JRW.

(5) With your hand, make sure there is no airflow from the two recirculation filters.

(6) On the AFT bulkhead, install the access Panels 123ELW and 124JRW

3. OPERATIONS (O)

A. For an inoperative RFAN, do the steps that follow:

(1) On the AIR control panel, select the RECIRC AIR switch to OFF.

(2) Make sure that RECIRC OFF is shown on the EICAS AIR synoptic page or RECIRC AIR OFF status message is shown on the EICAS.

(3) Before each flight with both Air Conditioning Packs selected ON, make sure that the messages that follow are not shown:

L PACK FAIL (CAUTION)

R PACK FAIL (CAUTION)

L PACK OVHT (CAUTION)

R PACK OVHT (CAUTION)

PACK FAULT (ADVISORY)

(4) Make sure forward cargo compartment heating is selected to LO HEAT or HI HEAT when live animals or temperature sensitive cargo is carried in the forward cargo compartment.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
23–62 Floor Heaters, Flight Crew (FTWRM) ***	D	2	0	(M) One or both may be inoperative provided affected heater is deactivated.

1. PLACARD (P)

A. Put a L(R) FLIGHT CREW FLOOR HEATERS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Flight Crew Floor Heater, on the electronic circuit breaker synoptic page, set to OUT and LOCK the applicable circuit breaker(s) that follow(s)
(refer to BD500–A–J24–00–00–06AAA–398D–A):

(1) For the pilot side:

– CDC3–4–4 (L FOOT WARMER)

(2) For the copilot side:

– CDC4–4–4 (R FOOT WARMER)

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
23–64 Galley Fan (GFAN)		C	2	0	(M) One or both may be inoperative provided: (a) Affected GFAN is deactivated, and (b) Associated Galley Heater (GHTR) is deactivated.

1. PLACARD (P)

A. Put a GALLEY FAN AND HEATER INOPERATIVE placard on the affected galley control panel.

2. MAINTENANCE (M)

A. For an inoperative Forward Galley Fan, on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows (refer to BD500–A–J24–00–00–06AAA–398D–A:

– CDC3–6–1 (FWD GLY FAN)

– CDC3–12–5 (FWD GLY HTR1)

– CDC3–12–4 (FWD GLY HTR2)

– CDC3–13–6 (FWD GLY HTR3)

B. For an inoperative Aft Galley Fan, on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows (refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC5–3–3 (AFT GLY FAN)

– CDC5–7–4 (AFT GLY HTR1)

– CDC5–7–5 (AFT GLY HTR2)

– CDC5–7–6 (AFT GLY HTR3)

3. OPERATIONS (O)

A. Not required.

NOTE: Colder ambient temperatures can be expected in the associated galley area.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
23–65 Galley Heater (GHTR)	C	2	0	(M) One or both may be inoperative provided affected heater is deactivated.

1. PLACARD (P)

A. Put a GALLEY HEATER INOPERATIVE placard on the affected galley control panel.

2. MAINTENANCE (M)

A. For an inoperative Forward Galley Heater, on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows
(refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC3-12-5 (FWD GLY HTR1)

– CDC3-12-4 (FWD GLY HTR2)

– CDC3-13-6 (FWD GLY HTR3)

B. For an inoperative Aft Galley Heater, on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows (refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC5-7-4 (AFT GLY HTR1)

– CDC5-7-5 (AFT GLY HTR2)

– CDC5-7-6 (AFT GLY HTR3)

3. OPERATIONS (O)

A. Not required.

NOTE: Colder ambient temperatures can be expected in the associated galley area.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
23–66	Temperature Sensor, Galley Heater (GHTS) — Elements				
1)	One element on each sensor inoperative	C	4	2	One element on each sensor may be inoperative.
2)	Both elements on each sensor inoperative	C	4	0	(M) Both elements on each sensor may be inoperative provided: (a) Associated Galley Fan (GFAN) is deactivated, and (b) Associated Galley Heater (GHTR) is deactivated.

1. PLACARD (P)

A. For one inoperative Temperature Sensor Element per Galley Heater:

(1) Put a GALLEY HEATER TEMPERATURE SENSOR REDUNDANCY LOSS placard on the affected galley control panel.

B. For both inoperative Temperature Sensor Elements per Galley Heater:

(1) Put a GALLEY HEATER TEMPERATURE SENSOR, HEATER AND FAN INOPERATIVE placard on the affected galley control panel.

2. MAINTENANCE (M)

A. For an inoperative Forward Galley Heater Temperature Sensor (both elements on each sensor), on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows (refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC3-6-1 (FWD GLY FAN)

– CDC3-12-5 (FWD GLY HTR1)

– CDC3-12-4 (FWD GLY HTR2)

– CDC3-13-6 (FWD GLY HTR3)

B. For an inoperative Aft Galley Heater Temperature Sensor (both elements on each sensor), on the electronic circuit breaker synoptic page, set to OUT and LOCK the circuit breakers that follows (refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC5-3-3 (AFT GLY FAN)

– CDC5-7-4 (AFT GLY HTR1)

– CDC5-7-5 (AFT GLY HTR2)

– CDC5-7-6 (AFT GLY HTR3)

3. OPERATIONS (O)

A. Not required.

NOTE: Colder ambient temperatures can be expected in the associated galley area when galley heater system is deactivated.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
24–16 Extraction Fans (EFAN)		C	2	1	(M) Except for extended operations, may be inoperative provided inoperative Avionics Exhaust Valve (AEV) is secured OPEN.

1. PLACARD (P)

A. Put a EXTRACTION FAN INOPERATIVE placard on the EQUIP COOLING control panel.

2. MAINTENANCE (M)

A. For dispatch with one inoperative Extraction Fan (EFAN) simultaneously with one or both Avionics Exhaust Valve (AEV) inoperative, deactivate OPEN the affected AEV as follows:

(1) For the Forward Avionics Exhaust Valve (AEV), deactivate in the OPEN position (refer to BD500–A–J21–26–07–01AAA–560A–A).

(2) For the Mid Avionics Exhaust Valve, deactivate in the OPEN position (refer to BD500–A–J21–26–07–02AAA–560A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
24–18 Avionics Bay Exhaust Valves (AEV)	C	2	0	(M) One or both may be inoperative provided affected AEV is secured OPEN.

1. PLACARD (P)

A. Put a AVIONICS BAY EXHAUST VALVE INOPERATIVE placard on the EQUIP COOLING control panel.

2. MAINTENANCE (M)

A. For an inoperative forward Avionics Bay Exhaust Valve (AEV), deactivate the forward AEV in the OPEN position (refer to BD500–A–J21–26–07–01AAA–560A–A).

B. For an inoperative mid AEV, deactivate the mid AEV in the OPEN position (refer to BD500–A–J21–26–07–02AAA–560A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
24–24	Ground Valve, MID Avionics Bay	C	1	0	(M) May be inoperative provided affected valve is secured CLOSED.

1. PLACARD (P)

A. Put a MID AVIONICS BAY GROUND VALVE INOPERATIVE placard on the EQUIP COOLING control panel.

2. MAINTENANCE (M)

A. For an inoperative mid avionics bay ground valve, deactivate the ground valve in the CLOSED position (refer to BD500–A–J21–26–09–01AAA–560A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
26–15 Forward/Middle Bay Inlet Fan	C	2	0	(O) May be inoperative provided INLET is selected OFF before each flight.

1. PLACARD (P)

A. Put a FORWARD AND/OR MIDDLE BAY INLET FAN INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Before each flight:

(1) Select INLET PBA on the EQUIP COOLING overhead panel to OFF.

(2) Make sure that INLET AIR OFF status message is displayed on EICAS.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
30–04	Cabin Altitude Limitation Feature				
1)	Primary and Backup Altitude Limiter	C	2	0	(O) One or both may be inoperative provided: (a) Both Auto Pressurization Modes are operative, and (b) Flight is conducted at or below FL250.

1. PLACARD (P)

A. Put a PRIMARY AND/OR BACKUP ALTITUDE LIMITER INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative primary and/or backup altitude limiter, in flight, pressurize the aircraft in AUTO mode at or below FL250.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
31–01 Cabin Pressure Control System (CPCS)	C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) Outflow Valve (OFV) is secured OPEN, (c) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, (d) Extended overwater operations are not conducted, (e) Takeoffs and landings are not conducted on runways near water, and (f) Both EFANs are operative.

1. PLACARD (P)

A. Put a CABIN PRESSURE CONTROL SYSTEM INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. For an inoperative cabin pressure control system (unpressurized operation), deactivate the Outflow Valve (OFV) in the OPEN position (refer to BD500–A–J21–31–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative cabin pressure control system:

(1) Do the Unpressurized Flights Packs ON procedure.

(2) Make sure that the EMER DEPRESS switch is selected ON before each flight.

(3) Do not takeoff and land on runways near water.

(4) Make sure that extended overwater operations are not conducted.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
31–28	Outflow Valve Travel Limiter	C	1	0	(M) May be inoperative provided: (a) The Outflow Valve Travel Limiter is verified inoperative in retracted position, and (b) Flights are conducted at or below FL 250.

1. PLACARD (P)

A. Put a OUTFLOW VALVE TRAVEL LIMITER INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. For an inoperative Outflow Valve (OFV) Travel Limiter, make sure that the travel limiter of the OFV is inoperative in the retracted position as follows:

(1) On the PRESSURIZATION control panel, push the AUTO PRESS switch.

(2) On the EICAS display, make sure that status message CABIN PRESS MAN is shown.

(3) On the PRESSURIZATION control panel, lift the switch guard and push the EMER DEPRESS switch.

(4) On the EICAS display, make sure that caution message EMER DEPRESS ON is shown.

(5) Through the valve (or the muffler if installed), visually make sure that the OFV is fully open.

NOTE: Valve butterfly must be at 90° position inside the valve body to be considered fully open.

(6) On the PRESSURIZATION control panel, lift the switch guard and push the EMER DEPRESS switch.

(7) On the EICAS display, make sure that caution message EMER DEPRESS ON is not shown.

(8) On the PRESSURIZATION control panel, push the AUTO PRESS switch.

(9) On the EICAS display, make sure that status message CABIN PRESS MAN is not shown.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
33–00 Cabin Altitude Indication					
1) Pressurized aircraft	C	1	1	0	(O) May be inoperative provided: (a) Both auto pressurization modes are operative, (b) Cabin Differential Pressure Indication is operative, and (c) A table is available to convert Cabin Differential Pressure to Cabin Altitude.
2) Unpressurized aircraft without passengers	D	1	1	0	(O) May be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, and (c) Both EFANs are operative.

1. PLACARD (P)

A. Put a CABIN ALTITUDE INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For pressurized flight with an inoperative cabin altitude indication, do the steps that follow:

(1) Make sure that the two pressurization modes are operative, as follows:

(a) On the PRESSURIZATION control panel, select the AUTO PRESS switch to MAN,

(b) Make sure that CABIN MAN PRESS status message is shown on the EICAS page,

(c) On the PRESSURIZATION control panel, select the AUTO PRESS switch to AUTO,

(d) Make sure that CABIN MAN PRESS status message is not shown on the EICAS page,

(2) Use the table that follows to convert cabin differential pressure to cabin altitude.

AIRCRAFT PRESSURE ALTITUDE (FEET)	CABIN ALTITUDE (FEET)	CABIN DELTA PRESSURE (PSI)
3000	0	1.5
5000	200	2.4
8000	500	3.5
10000	800	4.2
15000	1400	5.7
20000	2200	6.8
25000	3200	7.6
30000	4600	8.1
35000	5900	8.4
40000	7500	8.4
41000	7800	8.4

B. For unpressurized flight with an inoperative cabin altitude indication, do the steps that follow:

(1) Do the Unpressurized Flight Packs ON procedure.

(2) Make sure that the EMER DEPRESS switch, on the PRESSURIZATION control panel, is selected ON before each flight.

(3) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP info message is not shown on the INFO page.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
33–01 Cabin Differential Pressure Indication					
1) Pressurized aircraft	C	1	0	(O)	May be inoperative provided: (a) Both auto pressurization modes are operative, (b) Cabin altitude pressure indication is operative, and (c) A table is available to convert cabin altitude to cabin differential pressure.
2) Unpressurized aircraft without passengers	D	1	0	(O)	May be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, and (c) Both EFANs are operative.

1. PLACARD (P)

A. Put a CABIN DIFFERENTIAL PRESSURE INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For pressurized flight with an inoperative cabin differential pressure indication, do the steps that follow:

(1) Make sure that the two pressurization modes are operative, as follows:

(a) On the PRESSURIZATION control panel, select the AUTO PRESS switch to MAN.

(b) Make sure that CABIN MAN PRESS status message is shown on the EICAS page.

(c) On the PRESSURIZATION control panel, select the AUTO PRESS switch to AUTO.

(d) Make sure that CABIN MAN PRESS status message is not shown on the EICAS page.

(2) Use the table that follows to convert cabin altitude to cabin differential pressure.

AIRCRAFT PRESSURE ALTITUDE (FEET)	CABIN ALTITUDE (FEET)	CABIN DELTA PRESSURE (PSI)
3000	0	1.5
5000	200	2.4
8000	500	3.5
10000	800	4.2
15000	1400	5.7
20000	2200	6.8
25000	3200	7.6
30000	4600	8.1
35000	5900	8.4
40000	7500	8.4
41000	7800	8.4

B. For unpressurized flight with an inoperative cabin differential pressure indication, do the steps that follow:

(1) Do the Unpressurized Flight Packs ON procedure.

(2) Make sure that the EMER DEPRESS switch, on the PRESSURIZATION control panel, is selected ON before each flight.

(3) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP info message is not shown on the INFO page.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
33–02 Cabin Rate of Change (ROC) Indication					
1) Pressurized aircraft	C	1	1	0	May be inoperative provided both cabin pressurization automatic modes are operative.
2) Unpressurized aircraft without passengers	D	1	1	0	(O) May be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft. (b) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, and (c) Both EFANs are operative.

1. PLACARD (P)

A. Put a CABIN RATE OF CHANGE INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For unpressurized flight with an inoperative cabin rate of change indication, do the steps that follow:

(1) Do the Unpressurized Flight Packs ON procedure.

(2) Make sure that the EMER DEPRESS switch, on the PRESSURIZATION control panel, is selected ON before each flight.

(3) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP info message is not shown on the INFO page.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
33–03	Landing Field Elevation (LFE) Indication				
1)	Unpressurized aircraft without passengers	C	1	0	(O) May be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft. (b) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, and (c) Both EFANs are operative.
2)	Pressurized aircraft	C	1	0	(O) May be inoperative provided: (a) Pressurization is operated in manual control mode, and (b) Autopilot is operative.

1. PLACARD (P)

A. Put a LANDING FIELD ELEVATION INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an unpressurized flight with an inoperative LFE indication, do the steps that follow:

(1) Do the Unpressurized Flight Packs ON procedure.

(2) Make sure that the EMER DEPRESS switch, on the PRESSURIZATION control panel, is selected ON before each flight.

(3) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP info message is not shown on the INFO page.

B. For pressurized flight with an inoperative LFE indication, do the steps that follow before each flight:

(1) Make sure that the AUTO PRESS switch, on the PRESSURIZATION control panel, is selected to MAN.

(2) Make sure that CABIN MAN PRESS status message is shown on the EICAS.

(3) Determine landing field elevation.

(4) Do the AUTO PRESS FAIL caution procedure for manual control.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
33–04	Landing Field Elevation (LFE) Automatic Selection				
1)	LFE operative in manual selection	C	1	0	May be inoperative provided: (a) LFE manual selection is operative and selected, and (b) LFE Indication is operative.
2)	LFE manual selection inoperative	C	1	0	(O) May be inoperative provided: (a) Pressurization is conducted in manual mode, and (b) Autopilot is operative.

1. PLACARD (P)

A. Put a LANDING FIELD ELEVATION AUTOMATIC SELECTION INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. Not Required.

3. OPERATIONS (O)

A. For an inoperative LFE automatic selection, do the steps that follow before each flight:

(1) Make sure that the AUTO PRESS switch, on the PRESSURIZATION control panel, is selected to MAN.

(2) Make sure that CABIN MAN PRESS status message is shown on the EICAS page.

(3) Determine landing field elevation.

(4) Do the AUTO PRESS FAIL caution procedure for manual control.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
33–05 Emergency Depressurization PBA Switch Guard	C	1	0	(O) May be damaged or missing provided associated PBA is verified operative.

1. PLACARD (P)

A. Put a EMER DEPRESS PBA SWITCH GUARD INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. Not Required.

3. OPERATIONS (O)

A. For an inoperative or missing emergency pressurization PBA Switch Guard, make sure that the EMER DEPRESS switch is operative as follows:

(1) On the PRESSURIZATION control panel, push the EMER DEPRESS switch.

(2) Make sure that EMER DEPRESS ON caution message is shown on the EICAS.

(3) On the PRESSURIZATION control panel, push the EMER DEPRESS switch again.

(4) Make sure that EMER DEPRESS ON caution message is not shown on the EICAS.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
34–01 Pressure Equalization Valves (PEV)					
1) Large		C	2	0	(M) One or both may be inoperative provided affected valve is secured CLOSED.
2) Small		C	2	0	(M) One or both may be inoperative provided affected valve is verified CLOSED.

1. PLACARD (P)

A. Put a PRESSURE EQUALIZATION VALVE INOPERATIVE placard on the PRESSURIZATION control panel.

2. MAINTENANCE (M)

A. For an inoperative Large Pressure Equalization Valve (PEV), deactivate the Large PEV in the closed position (refer to BD500–A–J21–31–13–01AAA–560A–A).

B. For an inoperative Small PEV, do a visual check to make sure the Small PEV is in the closed position (refer to BD500–A–J21–31–13–01AAA–310D–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
51–01 Air Conditioning Packs				
1) Both air conditioning packs inoperative	C	2	0	(O) Except for extended operations, both may be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) Packs are selected OFF, (c) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, and (d) Both EFANs are operative.
2) A/C with SB BD500–219001 or Production Modsum 500T101031				
A) Left air conditioning pack inoperative	C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Left air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
B) Right air conditioning pack inoperative	C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (Cont'd)

System & Sequence N°	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
21 – AIR CONDITIONING					
51–01 Air Conditioning Packs (Cont'd)					
					(b) Flight is conducted in single pack configuration at or below FL 310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
3) A/C without SB BD500–219001 or Production Modsum 500T101031					
A) Left air conditioning pack inoperative and left bleed air OFF	C	2	1	(M)(O)	Except for extended operations, may be inoperative provided: (a) Left air conditioning pack is selected OFF, (b) Left bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL 310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with steep approach are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
51–01 Air Conditioning Packs (Cont'd)					
B) Left air conditioning pack inoperative and wing anti–ice selected OFF		C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Left air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with steep approach are not conducted, (f) Wing Anti Ice (WAI) system is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.
C) Left air conditioning pack inoperative and flight conducted at or below FL 190		C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Left air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
51–01 Air Conditioning Packs (Cont'd)					(d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
	D) Right air conditioning pack inoperative and right bleed OFF	C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (b) Right bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL 310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with steep approach are not conducted.
	E) Right air conditioning pack inoperative and wing anti–ice selected OFF	C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
21 – AIR CONDITIONING					
51–01 Air Conditioning Packs (Cont'd)					
					(d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with steep approach are not conducted, (f) Wing Anti Ice (WAI) system is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.
F) Right air conditioning pack inoperative and flight conducted at or below FL 190	C	2	1	(M)(O)	Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a L (R) AIR CONDITIONING PACK(S) INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative left air conditioning pack, remove access Panel 191CB and do a visual inspection to make sure that there is no duct disconnect downstream of the left air conditioning pack (refer to BD500–A–J53–82–32–01AAA–520A–A and BD500–A–J53–82–32–01AAA–720A–A).

B. For an inoperative right air conditioning pack, remove access Panel 192CB and do a visual inspection to make sure that there is no duct disconnect downstream of the right air conditioning pack (refer to BD500–A–J53–82–32–01AAA–520A–A and BD500–A–J53–82–32–01AAA–720A–A).

3. OPERATIONS (O)

A. For both Packs inoperative (unpressurized flight PACKS OFF), before each flight, do as follows:

(1) Do the Unpressurized Flight Packs OFF procedure.

(2) On the PRESSURIZATION control panel, make sure that the EMER DEPRESS switch is selected ON.

(3) On the AIR control panel, make sure that the two air conditioning packs are selected OFF.

(4) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP (Info) is not shown on the INFO page.

NOTE: Trim air may be required available for cold day operation.

B. For A/C with SB BD500–219001 or Production Modsum 500T101031 with an inoperative Left Air Conditioning Pack (operations at or below FL 310), before each flight:

(1) On the AIR control panel, select:

(a) L PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL 310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

C. For A/C with SB BD500–219001 or Production Modsum 500T101031 with an inoperative Right Air Conditioning Pack (operations at or below FL 310), before each flight:

(1) On the AIR control panel, select:

(a) R PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL 310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

D. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Left Air Conditioning Pack (single Right Bleed operation), before each flight:

(1) On the AIR control panel, select:

(a) L PACK pushbutton to OFF.

(b) L BLEED pushbutton to OFF.

(2) Do the operations procedures in Single Bleed configuration.

(3) Do not operate the aircraft above FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

E. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Left Air Conditioning Pack (Wing Anti Ice System (WAI) OFF operations), before each flight, do as follows:

(1) On the AIR control panel, select:

(a) L PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) On the ANTI–ICE control panel, select:

(a) WING switch to OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

F. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Left Air Conditioning Pack (operations at or below FL 190), before each flight, do as follows:

(1) On the AIR control panel, select:

(a) L PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL 190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

G. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Right Air Conditioning Pack (single Left Bleed operation), do as follows:

(1) On the AIR control panel, select:

(a) R PACK pushbutton to OFF.

(b) R BLEED pushbutton to OFF.

(2) Do the operations procedures in Single Bleed configuration.

(3) Do not operate the aircraft above FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

H. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Right Air Conditioning Pack (Wing Anti Ice System (WAI) OFF operation), do as follows:

(1) On the AIR control panel, select:

(a) R PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) On the ANTI–ICE control panel, select:

(a) WING switch to OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

I. For A/C without SB BD500–219001 or Production Modsum 500T101031 and an inoperative Right Air Conditioning Pack (operations at or below FL 190), before each flight, do as follows:

(1) On the AIR control panel, select:

(a) R PACK pushbutton to OFF.

(2) Do the operations procedures for one air conditioning pack inoperative.

(3) Do not operate the aircraft above FL 190.

I (4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE REDUND LOSS (Info) is not shown on the INFO page.

(5) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
51–02	Packs High Flow Mode	C	1	0	(O) PACK FLOW HI Mode may be inoperative provided both Air Conditioning Packs are operative.

1. PLACARD (P)

A. Put a PACK FLOW HI MODE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For a pack flow high mode inoperative, to increase the air flow in case of smoke, do the steps that follow:

(1) On the AIR control panel, set the FWD CABIN temperature to full cold or full hot, as required.

(2) On the AIR control panel, set the AFT CABIN temperature to full cold or full hot, as required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
52–04 Emergency Ram Air Valve (ERAV)				
1) Unpressurized aircraft without passengers	C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) ERAV is secured OPEN, (c) Both packs are selected OFF, (d) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL. (e) Extended overwater operations are not conducted, (f) Takeoffs and landings are not conducted on runways near water, (g) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative, and (h) Both EFANs are operative.
2) Right pack considered inoperative				
A) A/C with SB BD500–219001 or Production Modsum 500T101031	C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) ERAV is secured OPEN, (b) Right pack is considered inoperative (A/C with SB BD500–219001 or Production Modsum 500T101031), (c) Extended overwater operations are not conducted, (d) Takeoffs and landings are not conducted on runways near water, and (e) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative. (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
52–04 Emergency Ram Air Valve (ERAV) (Cont'd)					
	B) A/C without SB BD500–219001 or Production Modsum 500T101031	C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) ERAV is secured OPEN, (b) Right pack is considered inoperative (A/C without SB BD500–219001 or Production Modsum 500T101031), (c) Extended overwater operations are not conducted, (d) Takeoffs and landings are not conducted on runways near water, and (e) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative.

1. PLACARD (P)

A. Put a EMERGENCY RAM AIR VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative ERAV:

(1) Remove access Panel 192GB (refer to BD500–A–J53–82–82–05AAA–520A–A).

(2) Do a visual inspection of the Emergency Ram Air Valve (ERAV) and Right Pack inlet ducts to make sure that there is no duct disconnect or misalignment.

(3) Deactivate the ERAV in the OPEN position (refer to BD500–A–J21–52–05–01AAA–560A–A).

(4) Install access Panel 192GB (refer to BD500–A–J53–82–82–05AAA–720A–A).

3. OPERATIONS (O)

A. For an inoperative ERAV with both packs selected OFF, before each flight do the steps that follow:

(1) Do the Unpressurized Flight Packs OFF procedure.

(2) Make sure that on the PRESSURIZATION control panel, the EMER DEPRESS switch is selected ON.

(3) Make sure both air conditioning packs are set to OFF.

(4) Make sure that no extended overwater operations are conducted.

(5) Make sure that takeoffs and landings are not conducted on runways near water

(6) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP (info) message is not shown on the INFO page.

NOTE: Trim Air may be required available for cold day operation.

B. For an inoperative ERAV with single left pack, do the steps that follow:

(1) Make sure that no extended overwater operations are conducted.

(2) Make sure that takeoffs and landings are not conducted on runways near water

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
53–14	Flow Control Valve (FCV)				
1)	Both FCVs inoperative	C	2	0	(M)(O) Except for extended operations, both may be inoperative provided: (a) Aircraft crews are the only occupants of the aircraft, (b) Both FCV are secured CLOSED, (c) Both air conditioning packs are considered inoperative, (d) Flights are conducted unpressurized at or below 10000 ft MSL, and (e) Both EFANs are operative.
2)	One FCV inoperative				
A)	A/C with SB BD500–219001 or Production Modsum 500T101031	C	2	1	(M) Except for extended operations, one may be inoperative provided: (a) Affected FCV is secured CLOSED, and (b) Associated air conditioning pack is considered inoperative (A/C with SB BD500–219001 or Production Modsum 500T101031).
B)	A/C without SB BD500–219001 or Production Modsum 500T101031	C	2	1	(M) Except for extended operations, one may be inoperative provided: (a) Affected FCV is secured CLOSED, and (b) Associated air conditioning pack is considered inoperative (A/C without SB BD500–219001 or Production Modsum 500T101031).

1. PLACARD (P)

A. Put a L (R) FLOW CONTROL VALVE(S) INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative FCV, deactivate the FCV in the CLOSED position (refer to BD500–A–J21–53–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For two inoperative FCVs, before each flight do the steps that follow:

(1) Do the Unpressurized Flight Packs OFF procedure.

(a) Make sure that the EMER DEPRESS switch, on the PRESSURIZATION control panel, is selected ON.

(b) Make sure that the L PACK and the R PACK switches, on the AIR control panel, are selected OFF.

(2) Make sure that 21 EQUIP BAY COOL FAULT – EFAN INOP info message is not shown on the INFO page.

NOTE: Trim Air may be required for cold day operation.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
53–18 Ram Air Regulating Valve (RARV)					
1) One or both Ram Air Regulating Valve (RARV) inoperative with both packs operative.		C	2	0	(M)(O) Except for extended operations, one or both may be inoperative provided: (a) Affected RARV is secured OPEN, and (b) Associated bypass valve is verified operative. NOTE: When one or both RARV are secured OPEN, associated pack will operate in degraded mode.
2) Right RARV inoperative					
A) A/C with SB BD-500-219001 or Production Modsum 500T101031		C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 310, (c) Avionics equipment bay smoke detectors are verified operative, (d) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative, (e) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with steep approach are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
53–18 Ram Air Regulating Valve (RARV) (Cont'd)					
B) A/C without SB BD-500-219001 or Production Modsum 500T101031					
1) Right bleed OFF	C	1	0	(M)(O)	Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (b) Right bleed is selected OFF, (c) Flight is conducted in single pack configuration at or below FL 310, (d) Avionics equipment bay smoke detectors are verified operative, (e) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative, (f) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (g) Operations with steep approach are not conducted.
2) Wing anti–ice system OFF	C	1	0	(M)(O)	Except for extended operations, may be inoperative provided: (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
53–18 Ram Air Regulating Valve (RARV) (Cont'd)					(a) Right air conditioning pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL 310, (c) Avionics equipment bay smoke detectors are verified operative, (d) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative, (e) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), (f) Wing Anti Ice (WAI) system is selected OFF, (g) Aircraft is not operated in known or forecast icing conditions, and (h) Operations with steep approach are not conducted.
3) Right pack OFF and operations at or below FL 190	C	1	0	(M)(O)	Except for extended operations, may be inoperative provided: (a) Right air conditioning pack is selected OFF, (Cont'd)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING 53–18 Ram Air Regulating Valve (RARV) (Cont'd)				(b) Flight is conducted in single pack configuration at or below FL 190, (c) Avionics equipment bay smoke detectors are verified operative, (d) Inlet ducts of the Emergency Ram Air Valve (ERAV) and right pack are verified operative, (e) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a the applicable L(R) RAM AIR REGULATING VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For dispatch with one or both RARV secured open (associated pack in degraded mode):

(1) Deactivate affected RARV(s) in the OPEN position (refer to BD500–A–J21–52–03–01AAA–560A–A).

B. For dispatch with the right RARV inoperative (right pack OFF), once prior to first flight of relief period:

(1) Remove access Panel 192GB and do a visual inspection of the Emergency Ram Air Valve (ERAV) and Right Pack inlet ducts to make sure that there is no duct disconnect or misalignment (refer to BD500–A–J53–82–82–05AAA–520A–A and BD500–A–J53–82–82–05AAA–720A–A).

3. OPERATIONS (O)

A. For dispatch with one or both RARV secured open (associated pack in degraded mode).

(1) For the left RARV, as indicated by INFO messages
21 PACK FAULT – L RAM AIR REG VLV INOP, or
21 PACK OVHT – L RAM AIR REG VLV INOP, confirm that the bypass valve is operative, make sure the following info message is not shown.

21 PACK FAULT – L BYPASS VLV INOP

(2) For the right RARV, as indicated by INFO messages
21 PACK FAULT – R RAM AIR REG VLV INOP, or
21 PACK OVHT – R RAM AIR REG VLV INOP, confirm that the bypass valve is operative, make sure the following info message is not shown.

21 PACK FAULT – R BYPASS VLV INOP

NOTE: Trim Air may be required available for cold day operation if both RARV are secured OPEN.

B. For dispatch of an inoperative right RARV as indicated by 21 R PACK OVHT - R PACK INOP (A/C with SB BD500-219001 or production Modsum 500T101031)

(1) For relief with flight conducted in single pack configuration at or below FL310.

Before each flight:

(a) Right pack is selected OFF.

(b) Operations are conducted in single pack configuration.

(c) Flight altitude is limited to FL310

(d) Make sure that 26 FIRE SYSTEM FAULT - EQUP BAY SMOKE DET REDUND LOSS message is not shown.

C. For dispatch of an inoperative right RARV as indicated by 21 R PACK OVHT - R PACK INOP (A/C without SB BD500-219001 or production Modsum 500T101031)

(1) For relief with flight conducted in single pack / single bleed configuration at or below FL310.

Before each flight:

(a) Right pack is selected OFF.

(b) Right bleed is selected OFF.

(c) Operations are conducted in single pack / single bleed configuration.

(d) Flight altitude is limited to FL310

(e) Make sure that 26 FIRE SYSTEM FAULT - EQUP BAY SMOKE DET REDUND LOSS message is not shown.

(2) For relief with flight conducted in single pack configuration at or below FL310 / no icing conditions.

Before each flight:

(a) Right pack is selected OFF.

(b) Operations are conducted in single pack configuration.

(c) Flight altitude is limited to FL310

(d) Make sure that 26 FIRE SYSTEM FAULT - EQUP BAY SMOKE DET REDUND LOSS message is not shown.

(e) Wing Anti Ice (WAI) system is selected OFF.

(f) Aircraft is not operated in known or forecast icing conditions..

(3) For relief with flight conducted at or below FL190.

Before each flight:

(a) Right pack is selected OFF.

(b) Operations are conducted in single pack configuration.

(c) Flight altitude is limited to FL190

(d) Make sure that 26 FIRE SYSTEM FAULT - EQUP BAY SMOKE DET REDUND LOSS message is not shown.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
55–02	Forward Cargo Shutoff Valve (FWD CSOV)				
1)	FWD cargo air OFF	D	2	0	(M)(O) One or both may be inoperative provided: (a) Both FWD CSOV are secured CLOSED, (b) FWD CARGO switch is selected OFF, and (c) Live animals or temperature sensitive cargo is not carried in the forward cargo compartment.
2)	Specified material prohibited in FWD cargo	C	2	0	(O) One or both may be inoperative provided cargo is not carried in the forward cargo compartment. NOTE: Unit Load Devices (ULDs) may be carried in the associated compartment provided no cargo is carried on or in their devices. For ballast purposes, use of bags (made of fiberglass or Kevlar) or sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a FORWARD CARGO SHUTOFF VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For dispatch with both FWD CSOV secured CLOSED, do as follows:

(1) Deactivate the forward fuselage FWD CSOV in the CLOSED position (refer to BD500–A–J21–23–01–01AAA–560A–A).

(2) Deactivate the mid fuselage FWD CSOV in the CLOSED position (refer to BD500–A–J21–23–01–02AAA–560A–A).

NOTE: Cargo may need to be off-loaded from FWD cargo compartment to access the CSOVs.

3. OPERATIONS (O)

A. For dispatch with both FWD CSOV secured CLOSED, before each flight do as follows:

(1) On the AIR control panel, set the FWD CARGO switch to OFF.

(a) Make sure that CARGO indicator shows OFF on the AIR synoptic page, or

(b) Make sure that FWD CARGO AIR OFF (status) is shown on the EICAS page.

(2) Make sure that no live animals or temperature sensitive cargo are transported in the forward cargo compartment.

B. For dispatch without securing both FWD CSOV closed, do as follows:

(1) Create and follow procedures to ensure the forward cargo compartment remain empty.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
55–03	Aft Cargo Shutoff Valve (AFT CSOV)				
1)	Aft cargo air OFF	C	2	0	(M)(O) One or both may be inoperative provided: (a) Both AFT CSOV are secured CLOSED, and (b) AFT CARGO Air switch is selected OFF.
2)	Specified material prohibited in AFT cargo	C	2	0	(O) One or both may be inoperative provided: (a) Recirculation Fan (RFAN) is operative and selected ON, and (b) Cargo is not carried in the aft cargo compartment. NOTE: Unit Load Devices (ULDs) may be carried in the associated compartment provided no cargo is carried on or in their devices. For ballast purposes, use of bags (made of fiberglass or Kevlar) or sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a AFT CARGO SHUTOFF VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative AFT CSOVs do the steps that follow:

(1) Deactivate the mid fuselage AFT CSOVs in the CLOSED position (refer to BD500–A–J21–23–03–01AAA–560A–A).

(2) Deactivate the rear fuselage AFT CSOVs in the CLOSED position (refer to BD500–A–J21–23–03–02AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative AFT CSOV, both AFT CSOV deactivated CLOSED, do the steps that follow:

(1) On the AIR control panel, set the AFT CARGO switch to OFF.

(2) Make sure that AFT CARGO AIR OFF status message is shown.

B. For an inoperative AFT CSOV, do the steps that follow:

(1) Make sure the recirculation fan is operative as follows:

(a) On the AIR control panel, select the RECIRC AIR switch to ON.

(b) Make sure that RECIRC AIR FAIL caution message is not shown.

(2) Operator to create and follow procedures to maintain associated cargo compartment empty.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
60–27	COCKPIT/CABIN Temperature Control Knob	C	3	0	(O) Except for extended operations, may be inoperative provided: (a) MAN TEMP is not used, and (b) Associated Ventilated Temperature Sensors (VENTS) are operative.

1. PLACARD (P)

A. Put a TEMPERATURE CONTROL SWITCH INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative COCKPIT/CABIN temperature control knob, do the steps that follow:

(1) Make sure that the MAN TEMP pushbutton, on the AIR control panel, is not used.

(2) Make sure that 24 AIR SYSTEM FAULT – ZONE TEMP SNSR INOP info message is not shown or the cockpit/cabin temperature readout "––" on EICAS or Synoptic page is operative.

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
21 – AIR CONDITIONING					
63–00 Trim Air Pressure Regulating Valve (TAPRV)		C	1	0	(M)(O) May be inoperative provided: (a) TAPRV is secured CLOSED, (b) Both bleed air systems are operative, (c) Both Air Conditioning Packs are operative, and (d) Trim Air Shut-Off Valve (TASOV) is verified operative when live animals or temperature sensitive cargo is carried in the forward cargo compartment.

1. PLACARD (P)

A. Put a TRIM AIR PRESSURE REGULATING VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative TAPRV, deactivate the TAPRV in the CLOSED position (refer to BD500–A–J21–61–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative TAPRV:

(1) Make sure the following messages are not displayed:

PACK FAULT (advisory)

L(R) PACK FAIL (caution)

L(R) PACK OVHT (caution)

L(R) BLEED FAIL (caution)

L(R) BLEED OVHT (caution)

ENG BLEED MISCONFIG (caution)

XBLEED FAIL (caution)

(2) When live animals or temperature sensitive cargo is carried in the forward cargo compartment, make sure the following INFO messages are not displayed:

21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL CLSD

I 21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN

NOTE 1: When the deactivation procedure is completed, one of the following messages may show:

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN (info)

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL CLSD (info)

NOTE 2: When the deactivation procedure is completed, the TAPRV symbol on the AIR synoptic page may appear invalid or different from the actual valve position.

NOTE 3: Noise level might be increased.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
63–01 Trim Air Shut–Off Valve (TASOV)	C	1	0	(M)(O) May be inoperative provided: (a) TASOV is secured CLOSED, (b) Both bleed air systems are operative, (c) Both Air Conditioning Packs are operative, and (d) Trim Air Preesure Regulating Valve (TAPRV) is verified operative when live animals or temperature sensitive cargo is carried in the forward cargo compartment.

1. PLACARD (P)

A. Put a TRIM AIR SHUT-OFF VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. Deactivate the TASOV in the CLOSED position (refer to BD500–A–J21–61–11–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative TASOV:

(1) Make sure the following messages are not displayed:

PACK FAULT (advisory)

L(R) PACK FAIL (caution)

L(R) PACK OVHT (caution)

L(R) BLEED FAIL (caution)

L(R) BLEED OVHT (caution)

ENG BLEED MISCONFIG (caution)

XBLEED FAIL (caution)

(2) When live animals or temperature sensitive cargo is carried in the forward cargo compartment, make sure the following INFO messages are not displayed:

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL CLSD

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN

NOTE 1: When the deactivation procedure is completed, if the TRIM AIR FAIL (caution) message is shown on EICAS, cycle the TRIM AIR pushbutton OFF then back to auto to clear the message.

NOTE 2: When the deactivation procedure is completed, one of the following messages may show:

21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN (info)

21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL CLSD (info)

NOTE 3: When the deactivation procedure is completed, the TASOV symbol on the AIR synoptic page may appear invalid or different from the actual valve position.

NOTE 4: Noise level might be increased.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
90–01 Integrated Air System Controller (IASC)					
1) IASC 1A (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	1	0	(M)(O) May be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1B INOP 21 AIR SYSTEM FAULT – IASC 1C INOP 21 AIR SYSTEM FAULT – IASC 2A INOP 21 AIR SYSTEM FAULT – IASC 2B INOP 21 AIR SYSTEM FAULT – IASC 2C INOP 21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS (b) TASOV is verified closed, and (c) IASC 1A is deactivated.
2) IASC 1B (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1A INOP 21 AIR SYSTEM FAULT – IASC 2A INOP 21 AIR SYSTEM FAULT – IASC 2B INOP 21 AIR SYSTEM FAULT – IASC 2C INOP 21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS, and (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
90–01	Integrated Air System Controller (IASC) (Cont'd)				(b) IASC 1B is deactivated. NOTE: When IASC 1B is deactivated IASC 1C becomes inoperative.
3)	IASC 1C (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1A INOP 21 AIR SYSTEM FAULT – IASC 2A INOP 21 AIR SYSTEM FAULT – IASC 2B INOP 21 AIR SYSTEM FAULT – IASC 2C INOP 21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS, and (b) IASC 1B is deactivated.
4)	IASC 2A (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	0	(M)(O) May be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1A INOP 21 AIR SYSTEM FAULT – IASC 1B INOP 21 AIR SYSTEM FAULT – IASC 1C INOP 21 AIR SYSTEM FAULT – IASC 2B INOP 21 AIR SYSTEM FAULT – IASC 2C INOP (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING					
90–01 Integrated Air System Controller (IASC) (Cont'd)					21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS, and (b) IASC 2A is deactivated.
5) IASC 2B (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	0	(M)(O)	Except for extended operations may be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1A INOP 21 AIR SYSTEM FAULT – IASC 1B INOP 21 AIR SYSTEM FAULT – IASC 1C INOP 21 AIR SYSTEM FAULT – IASC 2A INOP 21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS, and (b) IASC 2B is deactivated. NOTE: When IASC 2B is deactivated IASC 2C becomes inoperative.
6) IASC 2C (A/C with SB BD500–314002 or Production Modsum 500T101030)	C	1	0	(M)(O)	Except for extended operations may be inoperative provided: (a) None of the below INFO messages are displayed: 21 AIR SYSTEM FAULT – IASC 1A INOP 21 AIR SYSTEM FAULT – IASC 1B INOP (Cont'd)

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 – AIR CONDITIONING				
90–01	Integrated Air System Controller (IASC) (Cont'd)			21 AIR SYSTEM FAULT – IASC 1C INOP 21 AIR SYSTEM FAULT – IASC 2A INOP 21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS 21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS, and (b) IASC 2B is deactivated.

1. PLACARD (P)

A. Put the applicable IASC CHANNEL INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative IASC 1A, do as follows:

(1) On the Electrical Power Center (EPC) 1 open and collar the circuit breaker that follow (refer to BD500-A-J24-00-00-04AAA-398D-A):

EPC1–H7 (IASC 1A)

B. For an inoperative IASC 1B or IASC 1C, do as follows:

(1) On the Electrical Power Center (EPC) 2 open and collar the circuit breaker that follow (refer to BD500-A-J24-00-00-04AAA-398D-A):

EPC2–E6 (IASC 1B)

C. For an inoperative IASC 2A, do as follows:

(1) On the Electrical Power Center (EPC) 2 open and collar the circuit breaker that follow (refer to BD500-A-J24-00-00-04AAA-398D-A):

EPC2–E7 (IASC 2A)

D. For an inoperative IASC 2B or IASC 2C, do as follows:

(1) On the right circuit breaker panel, open and collar the circuit breaker that follow (refer to BD500-A-J24-00-00-04AAA-398D-A):

R–CBP–D1 (IASC 2B)

3. OPERATIONS (O)

A. For an inoperative IASC 1A, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1B INOP

21 AIR SYSTEM FAULT – IASC 1C INOP

21 AIR SYSTEM FAULT – IASC 2A INOP

21 AIR SYSTEM FAULT – IASC 2B INOP

21 AIR SYSTEM FAULT – IASC 2C INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

(2) Select TRIM AIR ON followed by OFF and verify that INFO message 21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN is not displayed.

B. For an inoperative IASC 1B, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1A INOP

21 AIR SYSTEM FAULT – IASC 2A INOP

21 AIR SYSTEM FAULT – IASC 2B INOP

21 AIR SYSTEM FAULT – IASC 2C INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

C. For an inoperative IASC 1C, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1A INOP

21 AIR SYSTEM FAULT – IASC 2A INOP

21 AIR SYSTEM FAULT – IASC 2B INOP

21 AIR SYSTEM FAULT – IASC 2C INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

D. For an inoperative IASC 2A, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1A INOP

21 AIR SYSTEM FAULT – IASC 1B INOP

21 AIR SYSTEM FAULT – IASC 1C INOP

21 AIR SYSTEM FAULT – IASC 2B INOP

21 AIR SYSTEM FAULT – IASC 2C INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

E. For an inoperative IASC 2B, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1A INOP

21 AIR SYSTEM FAULT – IASC 1B INOP

21 AIR SYSTEM FAULT – IASC 1C INOP

21 AIR SYSTEM FAULT – IASC 2A INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

F. For an inoperative IASC 2C, before each flight.

(1) Make sure that none of the following INFO messages are displayed:

21 AIR SYSTEM FAULT – IASC 1A INOP

21 AIR SYSTEM FAULT – IASC 1B INOP

21 AIR SYSTEM FAULT – IASC 1C INOP

21 AIR SYSTEM FAULT – IASC 2A INOP

21 AIR SYSTEM FAULT – L IASC ARINC INPUT LOSS

21 AIR SYSTEM FAULT – R IASC ARINC INPUT LOSS

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
10–00 Takeoff/Go Around (TOGA) Switches (Thrust Levers)					
1) One TOGA switch inoperative					
A) Category B	B	2	1	(O)	One may be inoperative provided: (a) Alternate procedures are established and used, and (b) Operations with steep approach are not conducted.
B) Category C	C	2	1	(O)	One may be inoperative provided: (a) Alternate procedures are established and used, (b) Autopilot and flight director are not used below: 1 2,000 feet AGL on ILS approaches; or 2 500 feet AGL or MDA whichever is higher on all other approaches, (c) Operations with steep approach are not conducted. (d) APPR 2 (CAT II) and autoland operations are not conducted, and (e) RNP AR approach operations are not conducted.
2) Both TOGA switches inoperative	B	2	0	(O)	Both may be inoperative provided: (a) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement (Operations with Airplane Systems Inoperative), (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
10–00	Takeoff/Go Around (TOGA) Switches (Thrust Levers) (Cont'd)				(b) Autopilot and flight director are not used below: 1 2,000 feet AGL on ILS approaches; or 2 500 feet AGL or MDA whichever is higher on all other approaches, (c) Operations with steep approach are not conducted. (d) APPR 2 (CAT II) and autoland operations are not conducted, and (e) RNP AR approach operations are not conducted.

1. PLACARD (P)

A. Put a L(R) TOGA SWITCH(ES) INOPERATIVE placard on the throttle quadrant assembly.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For one inoperative Thrust Lever TOGA Switch, alternate procedures are established and used.

(1) For a subsequent in–flight failure of the remaining Thrust Lever TOGA switch during a Go–Around, do as follows:

(a) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

B. For two inoperative Thrust Lever TOGA switches, during takeoff or go-around, do as follows:

(1) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
11–00 Autopilot Systems					
1) Three autopilot systems inoperative	B		3	0	Except for extended operations, may be inoperative provided: (a) Operations do not require their use, (b) CAT II Operations are conducted in accordance with AFM Supplement (Category II operations), (c) Autoland operations are not conducted, and (d) RNP AR operations are conducted in accordance with AFM Supplement (RNP – Authorization required operations).
2) One autopilot system inoperative	C		3	2	May be inoperative.

1. PLACARD (P)

A. Put a AUTOPILOT SYSTEMS INOPERATIVE placard on the PRIM FLT CTRL panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
11–05 Flight Control Panel (FCP)					
1) Control Panel Read Out Windows	C		4	0	(O) May be inoperative provided crew selection of IAS / MACH, HDG, ALT, V/S , FPA are verified to be indicated on the Primary Flight Displays (PFDs).
2) Light Bars	C		14	0	(O) May be inoperative (not illuminated) provided associated mode is annunciated on the Flight Mode Annunciator (FMA) of both Primary Flight Displays (PFDs). NOTE: If mode is inoperative, refer to applicable MMEL item.
3) 1/2 BANK Push Button	C		1	0	May be inoperative.
4) Autopilot (AP) Push Button	B		1	0	May be inoperative provided Autopilot is considered inoperative.
5) Autothrottle (AT) Push Button	C		1	0	(O) May be inoperative provided: (a) Autothrottle Disconnect buttons are operative, (b) Alternate procedures are established and used, and (c) Autoland Operations are not conducted.
6) Flight Level Change (FLC) Mode Push Button	C		1	0	(O) May be inoperative provided alternate procedures are established and used.
7) Altitude (ALT) Mode Push Button	C		1	0	May be inoperative provided: (a) Altitude Rotary Knob is operative, and (b) Altitude alerting system is operative. (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
11–05	Flight Control Panel (FCP) (Cont'd)				
8)	VNAV Mode Push Button	C	1	0	May be inoperative provided: (a) Procedures do not require its use, and (b) RNP AR Operations are not conducted.
9)	Flight Path Angle (FPA) Mode Push Button	C	1	0	(O) May be inoperative provided alternate procedures are established and used.
10)	Vertical Speed (V/S) Mode Push Button	C	1	0	(O) May be inoperative provided alternate procedures are established and used.
11)	Flight Director (FD) Push Button	C	2	1	One may be inoperative.
12)	Speed IAS to Mach Push Button	C	1	0	May be inoperative provided automatic transition from IAS to Mach and Mach to IAS is operative.
13)	Speed FMS or MAN Selector Knob	C	1	0	May be inoperative provided manual selection (MAN) is operative.
14)	Heading Rotary Knob	B	1	0	(O) May be inoperative provided: (a) Heading PUSH SYNC Push Button is operative, and (b) Alternate procedures are established and used.
15)	Heading PUSH SYNC Push Button	C	1	0	May be inoperative provided Heading Rotary Knob is operative.
16)	Altitude Push Fine Push Button	B	1	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Altitude preselect is only available in 1000 foot or 100 meter increments. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
11–05 Flight Control Panel (FCP) (Cont'd)					
17) Altitude Feet to Meter Selector Knob					
A) Alternate procedures are established and used	B	1	0	(O)	May be inoperative provided alternate procedures are established and used.
B) Not used for routine procedures	D	1	0		May be inoperative provided routine procedures do not require its use.
18) UP/DN Selector Wheel	C	1	0	(O)	May be inoperative provided: (a) Flight Path Angle (FPA) Flight Director mode is considered inoperative, (b) Vertical Speed (V/S) Flight Director mode is considered inoperative, and (c) Alternate procedures are established and used.
19) Bright/Dim Knob	B	1	0		May be inoperative provided brightness is acceptable to flight crew.
20) Emergency Descent Mode (EDM) Guarded Push Button	C	1	0		May be inoperative provided operations are conducted at or below FL 250.
21) Emergency Descent Mode (EDM) Push Button Guard	C	1	0		May be inoperative, damaged or missing.

1. PLACARD (P)

A. Put the applicable FLIGHT CONTROL PANEL FUNCTION INOPERATIVE placard on the Flight Control Panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative FCP readout window, the flight crew must confirm the selection of the affected parameter on the Primary Flight Display (PFD) (or MAP format on Multifunction Windows (MFWs) or HUD, if applicable), when the knob of the associated FCP mode is rotated.

B. For an inoperative FCP light bar, do the steps that follow:

(1) Do a lamp test.

(a) Make sure that the affected light bar is not illuminated.

(2) During each flight. to use the FD mode or function associated with the affected light bar, do the steps that follow:

(a) On the FCP, select the mode button or the function button.

(b) Make sure that associated mode or function shows active (if applicable) on both FMAs.

(3) During each flight, to de–select the FD mode or function associated with the affected light bar, do the steps that follow:

(a) On the FCP, de–select the mode button or the function button.

(b) Make sure that associated mode or function shows inactive (if applicable) on both FMAs.

C. For an inoperative FCP Autothrottle (AT) pushbutton, operators must establish alternative cockpit procedures to advance the thrust levers as required during takeoff.

D. For an inoperative FCP Flight Level Change (FLC) mode pushbutton, operators must establish alternative cockpit procedures that include the use of alternative vertical FD modes (e.g. V/S, FPA).

E. For an inoperative FCP Flight Plan Angle (FPA) mode pushbutton, operators must establish alternative cockpit procedures that include the use of alternative vertical FD modes (e.g. V/S, FLC).

F. For an inoperative FCP Vertical Speed (V/S) mode pushbutton, operators must establish alternative cockpit procedures that include the use of alternative vertical FD modes (e.g. FPA, FLC).

G. For an inoperative FCP Heading (HDG) rotary knob, operators must establish alternate cockpit procedures to select heading value (e.g. disengage the AP, fly the aircraft manually to the desired heading as read on the PFD, use the Heading Push to Sync Pushbutton to select the current heading and then re–engage the AP).

NOTE: Autopilot function must remain engaged in RVSM airspace.

H. For an inoperative FCP Altitude (ALT) push fine pushbutton, operators must establish alternative cockpit procedures to maintain altitudes that are not selectable.

I. For an inoperative FCP Altitude Feet to Meter selector knob, before each flight, if the selector switch is not in the appropriate position for the airspace that operations will be conducted in, make sure that conversion chart (foot to meter or meter to foot) is readily available in the flight compartment.

J. For an inoperative FCP UP/DN selector wheel, operators must establish alternative cockpit procedures for flight crew to use other vertical FD modes.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
22 – AUTO FLIGHT					
31–01	Autothrottle Disconnect Buttons (Throttle Quadrant)				
1)	One inoperative	C	2	1	One may be inoperative.
2)	Both inoperative	C	2	0	(O) Both may be inoperative provided: (a) AT push button on Flight Control Panel (FCP) is operative, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. Put a AUTOTHROTTLE DISCONNECT BUTTONS INOPERATIVE placard on the Flight Control Panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For both Autothrottle Disconnect Buttons inoperative:

(1) To disconnect the autothrottle system, do as follows:

(a) Press the AT switch on the Flight Control Panel, or

(b) Manually override the autothrottle.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
00–01 Overhead Control Panel PBA Switch Light (light function only)					
1) SERV INT “ON”	C	1	1	0	May be inoperative.
2) CVR “TEST”	C	1	1	0	May be inoperative.

1. PLACARD (P)

A. Put a SERV INT "ON" LIGHT FUNCTION INOPERATIVE placard on the SERV INT switch.

B. Put a CVR "TEST" LIGHT INOPERATIVE placard on the CVR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
11–00 VHF Communications Systems		D	3	–	(O) Any in excess of those required by regulations may be inoperative provided: (a) Datalink System is considered inoperative, if VHF 3 is used in VOICE or inoperative, and (b) VHF 1 or VHF 3 is operative.

1. PLACARD (P)

A. Put the applicable VHF COM (1) (2) (3) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative VHF COM 1 or VHF COM 2, switch VHF COM 3 mode from DATA to VOICE as required.

NOTE: Datalink system will be inoperative if VHF 3 is switched to VOICE mode.

B. For an inoperative VHF COM 3, for aircraft with Controller Pilot Datalink Communications (CPDLC), create and use alternative procedures if CPDLC is necessary for the intended route.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
12–01 HF Communications Systems ***					
1) For operations that requires two Long Range Communication Systems (LRCS)	C	–	1	(O)	May be inoperative while conducting operations that requires two Long Range Communication Systems (LRCS) provided: (a) SATCOM Voice or Data Link operates normally, (b) Alternate procedures are established and used, (c) SATCOM coverage is available over the intended route of flight, and (d) If Inmarsat codes are not available while using SATCOM voice, prior coordination with the appropriate ATS facility is required. NOTE: SATCOM is to be used only as a backup to normal HF communications unless otherwise authorized by the appropriate ATS facilities.
2) For others in excess	D	–	–		Any in excess of those required by regulations may be inoperative.

1. PLACARD (P)

A. Put the applicable HF COMMUNICATION (1) or (2) SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not applicable.

3. OPERATIONS (O)

A. For an inoperative HF communications system, alternate procedures are established and used for the intended route or flight.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
15–00	Iridium Satellite Communication System (SATCOM) ***				
1)	Alternate procedures for SATCOM are established and used	C	1	0	May be inoperative provided alternate procedures are established and used. NOTE: SATCOM-based Datalink systems will not be available.
2)	Procedures do not require SATCOM	D	1	0	May be inoperative provided procedures do not require its use. NOTE: SATCOM-based Datalink systems will not be available.

1. PLACARD (P)

A. Put a SATCOM INOPERATIVE placard adjacent to the Control Tuning Panel (CTP).

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS				
21–00 Selective Calling (SELCAL) System ***				
1) Procedures require SELCAL	C	–	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Partial loss of SELCAL function will affect either left or right radios. To use the SELCAL function, flight crew must use operative side radios only.
2) Procedures do not require SELCAL	D	–	0	May be inoperative provided procedures do not require its use.

1. PLACARD (P)

A. Put a SELCAL INOPERATIVE placard adjacent to the Control Tuning Panel (CTP) on the pilot side.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative SELCAL system, keep a listening watch on the applicable frequencies.

NOTE: Flight crew can use Controller Pilot Datalink Communications (CPDLC) (if installed) to get dedicated text messages from Air Traffic Control (ATC).

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
22–00 Datalink System***					
1) Controller-Pilot Data Link Communications (CPDLC) Function					
A) Future Air Navigation System (FANS)					
1) Procedures where FANS is used routinely	C	–	0	(O)	May be inoperative provided alternate procedures are established and used. NOTE: Any portion of the function that is operative may be used.
2) Procedures where FANS is not-used routinely	D	–	0		May be inoperative provided procedures do not require its use. NOTE: Any portion of the function that is operative may be used.
B) Aeronautical Telecommunications Network (ATN)					
1) Procedures where ATN is used routinely	C	–	0	(O)	May be inoperative provided alternate procedures are established and used. NOTE: Any portion of the function that is operative may be used. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
22–00 Datalink System*** (Cont'd)					
2) Procedures where ATN is not-used routinely	D	–	0		May be inoperative provided procedures do not require its use. NOTE: Any portion of the function that is operative may be used.
2) Aircraft Communications Addressing and Reporting System (ACARS)					
A) Procedures where ACARS is used routinely	C	–	0	(O)	May be inoperative provided alternate procedures are established and used. NOTE: Any portion of the system that operates normally may be used.
B) Procedures where ACARS is not-used routinely	D	–	0		May be inoperative provided procedures do not require its use. NOTE: Any portion of the system that operates normally may be used.
3) CPDLC Push Buttons ACPT, RJCT, STBY, LOAD, Refresh (Glareshield Panel) ***	D	10	0	(O)	Any or all may be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. For an inoperative Datalink System or for an inoperative portion of the Datalink System, put the appropriate INOPERATIVE placard below the landing gear control panel.

B. For an inoperative CPDLC pushbutton(s), put the applicable CPDLC PUSHBUTTON(S) INOPERATIVE placard on the inbox interactive panel located on the glareshield panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative CPDLC FANS function, establish alternate procedures that use VHF COM or HF COM.

B. For an inoperative CPDLC ATN function, establish alternate procedures that use VHF COM or HF COM.

C. For an inoperative ACARS function, establish alternate procedures that use VHF COM or HF COM.

D. For an inoperative CPDLC push button, do the steps that follow:

(1) Use the buttons available on the opposite quick–response panel, or

(2) If the same pushbutton is inoperative on the two sides, use the CPDLC Multi Functional Window (MFW) page to receive and review a CPDLC message or to compose and send a response to a received CPDLC message, etc.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
30–01 Pre–recorded Announcement (Passenger Briefing System)	C	1	1	0	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a PRE–RECORDED ANNOUNCEMENT SYSTEM INOPERATIVE placard on the flight Crew Terminal(s).

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative pre–recorded announcement system, create procedures that includes reading safety briefing from a printed copy with the Passenger Address (PA) system or distribute printed copies to passengers along with live demonstration.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
30–04 Crew Member Interphone System					
1) Flight Deck/Cabin and Cabin/Cabin					
A) Operations with passengers	B	–	1	(O)	May be inoperative provided: (a) An operative flight deck/cabin interphone system (two way) is at an operative flight attendant seat, (b) The public address system is verified operative prior to each flight, and (c) Alternate communications procedures are established and used. NOTE: Any station function(s) that operates normally may be used.
B) Operations without passengers	A	–	0	(O)	May be inoperative for non-passenger carrying operations for one flight day provided: (a) Crew members are the only occupants of the aircraft, and, (b) Alternate procedures are established and used.
2) Flight Deck to Ground					
A) Procedures require flight deck to ground interphone	C	1	0	(O)	May be inoperative provided alternate procedures are established and used.
B) Procedures do not require flight deck to ground interphone	D	1	0		May be inoperative provided procedures are not dependent on its use.

1. PLACARD (P)

A. For an inoperative Flight Deck/Cabin and Cabin/Cabin Interphone System, put a INTERPHONE SYSTEM INOPERATIVE placard on the affected handset(s).

B. For an inoperative Flight Deck to Ground Interphone System, put a INTERPHONE SYSTEM INOPERATIVE placard on the affected station(s) or on the service intercom panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative crew member interphone flight deck/cabin and cabin/cabin (for passengers carrying operations), before each flight, do as follows:

(1) Make sure that the Passenger Address (PA) system is operative from the flight deck and from each operative flight attendant seat.

(2) Create alternative procedures based on the use of the PA system.

(3) The pilot in command should brief the cabin crew members about the alternate emergency procedures to be used.

B. For an inoperative crew member interphone flight deck/cabin and cabin/cabin (for non passenger carrying operations), before each flight, do as follows:

(1) Create alternative procedures to communicate emergency instructions to all crew members (e.g. use direct voice communication)

C. For an inoperative crew member interphone flight deck to ground, create alternative communication procedures with ground crew.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
30–05 Alerting System					
1) Flight Deck Call Visual Alerting System (CAB CALL on ACP)	B	1	0		May be inoperative provided the flight deck aural alert is operative.
2) Cabin Visual Alerting System	B	3	0		May be inoperative provided: (a) Passenger Address (PA) system is operative, and (b) All cabin smoke detection visual alerts are operative.
3) Cabin Aural Alerting System	B	–	0	(O)	May be inoperative provided: (a) Passenger Address (PA) system is operative, (b) Flight deck indication of lavatory smoke detector alert is operative, and (c) Alternate procedures for contacting flight attendants are established and used.

1. PLACARD (P)

A. For an inoperative visual CAB CALL on ACP, put a “CAB CALL VISUAL ALERT INOPERATIVE” placard on the audio control panel.

B. For an inoperative cabin visual alerting system, put a “CABIN VISUAL ALERTING SYSTEM INOPERATIVE” placard on the flight crew terminal(s).

C. For an inoperative cabin aural alerting system, put a “CABIN AURAL ALERTING SYSTEM INOPERATIVE” placard on the flight crew terminal(s).

2. MAINTENANCE (M)

A. Not Required.

3. OPERATIONS (O)

A. For an inoperative cabin aural alerting system, alternate procedures must be established to make sure that the flight attendants are aware of incoming interphone calls.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
31–01 Public Address System					
1) Procedures require public address system	B		1	0	(O) May be inoperative provided: (a) Alternate, normal and emergency procedures, and/or operating restrictions are established and used, (b) Flight deck/cabin interphone system (two way) with associated calls (e.g. chimes) is verified operative prior to each flight, (c) Megaphone(s) is/are readily available and operative, and (d) Operations are conducted with no less than one flight attendant for every 40 passengers, or Operations are conducted with no less than one flight attendant for every 50 passengers provided there are at least 2 flight attendants. NOTE: Any station function(s) that operates normally may be used.
2) Regulations do not require public address system	C		1	0	(O) May be inoperative provided: (a) It is not required by regulations, and (b) Alternate, normal and emergency procedures, and/or operating restrictions are established and used. NOTE: Any station function(s) that is (are) operative may be used.
3) Operations without passengers	A		1	0	(O) May be inoperative for non–passenger carrying operations for one flight day provided: (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
31–01 Public Address System (Cont'd)					(a) Crew members are the only occupants of the aircraft, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. Put a PUBLIC ADDRESS SYSTEM INOPERATIVE placard on the handsets.

2. MAINTENANCE (M)

A. Not Required.

3. OPERATIONS (O)

A. For an inoperative public address system (when required by regulations):

(1) After the failure has occurred, create alternative procedures for communicating information to passengers when required (e.g. direct voice communication with the help of the megaphone if the emergency condition generates noise).

(2) Before flight, do the steps that follow:

(a) The pilot in command must brief the cabin crew members on the procedures that will be used.

(b) Make sure that the flight compartment/cabin interphone system (two way) with associated calls (e.g. chimes) is operative as follows:

1 Make an interphone call to a cabin station through the Audio control panel (ACP) and a boom or hand held microphone and make sure that communication is established.

2 Make an interphone call between the flight compartment and the forward–cabin flight attendant station with the flight compartment handset, as follows:

a Find and pick up the COCKPIT PA HANDSET.

b ON the COCKPIT PA HANDSET, dial 22 for CI FWDHS.

c Make sure that the FWD PA HANDSET rings.

d Pick up the FWD FA PA HANDSET.

e Make sure that communication is established.

f Press the RESET button, on the FWD FA PA HANDSET, to end the call from the COCKPIT PA HANDSET

g Make sure that communication is terminated.

h Put the FWD FA PA HANDSET on its cradle.

B. For an inoperative public address system (when not requires by regulations):

(1) Operator to develop alternate procedures for communicating information to passengers when required (e.g. direct voice communication with the help of the megaphone if the emergency condition generates noise).

(2) Prior to flight, the pilot in command must brief cabin crew members on the procedures which will be used.

C. For an inoperative public address system (non–passenger carrying operations):

(1) Prior to flight, the pilot in command must brief crew members on the procedures which will be used.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
31–04 Handsets					
1) Flight Deck Handset					
A) Procedures require flight deck handset	C	1	0	(O)	May be inoperative provided: (a) Flight deck to cabin communication is operative, and (b) Alternate procedures are established and used.
B) Procedures do not require flight deck handset	D	1	0		May be inoperative provided routine procedures do not require its use.
2) Cabin Handsets	B	–	–	(O)	May be inoperative provided: (a) Fifty percent of cabin handsets are operative, (b) Operative handset(s) is located at an operative flight attendant seat, and (c) Alternate communications procedures between the affected flight attendant station(s) are established and used. NOTE 1: An operative handset at an inoperative flight attendant seat shall not be counted to satisfy the fifty percent requirement. NOTE 2: Any handset(s) function(s) that is (are) operative may be used.

1. PLACARD (P)

A. Put a HANDSETS INOPERATIVE placard on the affected handset.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative flight deck handset, do the steps that follow for passenger address:

(1) Use the hand held microphone.

(2) Press and hold the microphone PTT and the PA transmit control on the Audio Control Panel (ACP) simultaneously, then speak.

NOTE: Communication normally conducted using the flight deck handset can be conducted using the headset/boom microphone or using the hand held microphone.

B. For an inoperative cabin handset, do the steps that follow:

(1) Create alternative procedures based on the use of the passenger address system and/or the cabin interphone system.

(2) For aircraft with more that two cabin handsets, alternative procedures can be based on the remaining interphone terminals.

(3) For aircraft with two cabin handsets, alternative procedures can be based on passenger address or direct verbal communication.

(4) Before flight, the pilot in command must brief the cabin crew members on the alternative emergency procedures to be used.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
31–06	Flight Deck Speakers				
1)	Two speakers inoperative	C	2	0	May be inoperative provided: (a) Procedures are not dependent on their use, (b) Headsets are installed and used by each person on flight deck duty, (c) All aural alerts, messages and other communication which are normally routed through the flight deck speakers must be audible through the headsets, and (d) A spare headset must be readily available for crew use.
2)	One speaker inoperative	C	2	1	May be inoperative provided: (a) Procedures are not dependent on their use, (b) Headsets are installed and used by each person on flight deck duty, and (c) All aural alerts, messages and other communication which are normally routed through the flight deck speakers must be audible through the headsets.

1. PLACARD (P)

A. Put a FLIGHT DECK SPEAKER INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS				
31–07 Lavatory Speaker	C	–	0	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a LAVATORY SPEAKER INOPERATIVE placard at the attendant stations.

2. MAINTENANCE (M)

A. Not Required.

3. OPERATIONS (O)

A. For an inoperative lavatory speaker, the flight attendant will make sure that the lavatory(ies) with inoperative speaker is/are vacated when the FASTEN SEAT BELT signs are illuminated.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
50–35 Audio Control Panel					
1) Transmission Keys	C		–	–	One may be inoperative on left or right ACP. NOTE: For the observer Audio Control Panel, see ATA 25.

1. PLACARD (P)

A. Put the applicable TRANSMISSION KEY(S) INOPERATIVE placard on the affected audio control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
51–01 Push–to–Talk (PTT) Switches					
1) Sidestick	C		2	1	(O) One may be inoperative provided: (a) Associated side has at least one PTT switch that is operative, and (b) Affected switch is verified failed open (non–transmitting).
2) Flight Crew Audio Control Panel	C		2	1	(O) One may be inoperative provided: (a) Associated side has at least one PTT switch operative, and (b) Affected switch is verified failed open (non–transmitting).
3) Cursor Control Panel (CCP)	A		4	0	(O) One or more may be inoperative provided: (a) Associated side has at least one PTT switch that is operative, (b) Affected switch is verified failed open (non–transmitting), and (c) Repairs are made within thirty flight days.

1. PLACARD (P)

A. Put a PUSH–TO–TALK SWITCH INOPERATIVE placard on the sidestick and/or the crew control panel and/or the cursor control panel..

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative sidestick Push–to–Talk (PTT) switch, do the steps that follow:

(1) Use the microphone, without pressing other switches, to make sure that the inoperative switch did not fail in the transmit mode.

(2) Press another switch on the associated side to make sure that transmission is operational.

B. For an inoperative flight crew audio control panel PTT switch, do the steps that follow:

(1) Use the microphone, without pressing other switches, to make sure that the inoperative switch did not fail in the transmit mode.

(2) Press another switch on the associated side to make sure that transmission is operational.

C. For an inoperative Cursor Control panel (CCP) PTT switch, do the steps that follow:

(1) Make sure that the inoperative switch has not failed in the transmit mode.

(2) Use the microphone without pressing other switches. Then after, press another switch on the associated side to make sure that transmission is operational.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
51–02 INT Switch					
1) Sidestick		C	2	1	One may be inoperative open (non transmitting) provided associated ACP INT switch or associated hand microphone is operative.
2) ACP		C	2	1	(O) One may be inoperative open (non transmitting) provided associated sidestick INT switch or associated hand microphone is verified operative. NOTE: For the observer's ACP, see ATA 25.

1. PLACARD (P)

A. Put a INTERCOM SWITCH INOPERATIVE placard on the sidestick and/or the audio control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ACP INT switch, make sure that associated sidestick INT or associated hand microphone is operative as per FCOM.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
51–03	Flight Deck Hand Microphone Systems				
1)	One flight deck hand microphone inoperative	C	2	1	One may be inoperative (non transmitting) provided associated boom microphone is operative and is used.
2)	Two flight deck hand microphones inoperative	C	2	0	May be inoperative (non transmitting) provided: (a) Boom microphones are operative, and (b) Spare boom microphone is available in flight compartment.

1. PLACARD (P)

A. Put a FLIGHT DECK HAND MICROPHONE SYSTEM INOPERATIVE placard on the applicable hand microphone.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS				
51–04 Flight Deck Headsets Earphones/Headphones and Boom Microphones				
1) Active Noise Cancelling/Reduction Function	D	–	0	May be inoperative provided normal audio function of headset is operative.
2) Headset Earphones/Headphones				
A) Minimum required by regulations	C	–	1	May be inoperative provided associated flight deck speaker is operative.
B) In excess of those required by regulations	D	–	–	Any in excess of those required by regulation may be inoperative.
3) Boom Microphones	A	–	0	May be inoperative provided: (a) Flight Data Recorder (FDR) is operative, and (b) Repairs are made within three flight days.

1. PLACARD (P)

A. Put a ACTIVE NOISE CANCELLING/REDUCTION FUNCTION or a BOOM MICROPHONE INOPERATIVE placard on the audio control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS					
70–06 Cockpit Voice Recorder (CVR) System		A	1	0	May be inoperative provided: (a) Flight Data Recorder (FDR) is operative, and (b) Repairs are made within three flight days.
1) Independent Power Source		C	1	0	May be inoperative.

1. PLACARD (P)

A. Put a COCKPIT VOICE RECORDER SYSTEM INOPERATIVE placard on the CVR control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 – COMMUNICATIONS				
73–01 Flight Deck Door Surveillance System ***				
1) Procedures require flight deck door surveillance system	B	1	0	(O) May be inoperative provided alternate procedures are established and used.
2) Procedures do not require flight deck door surveillance system	D	1	0	May be inoperative provided procedures do not require its use.
3) Viewing port				
A) Procedures require an electronic flight deck door visual surveillance system	A	1	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, and (b) Repairs are made within three flight days.
B) Procedures do not require an electronic flight deck door visual surveillance system	C	1	0	(O) May be inoperative provided: (a) An electronic flight deck door visual surveillance system is installed and operative, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. For an inoperative flight deck door electronic surveillance system, put a FLIGHT DECK DOOR SURVEILLANCE SYSTEM INOPERATIVE placard on the cockpit door panel.

B. For an inoperative flight deck door viewing port, put a VIEWING PORT INOPERATIVE placard on the cockpit door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative flight deck door electronic surveillance system:

(1) Crew coordination is required before opening the flight deck door in order to make sure that the aft area of the flight deck door is safe in normal or non–normal conditions.

Before opening the door, choose one of the method below:

(a) METHOD 1: Do a check of the aft area of the flight deck door through the viewing port installed on the flight deck door panel, or

(b) METHOD 2: Use the interphone system to speak with the cabin crew to make sure that the area is safe to open the flight deck door.

B. For an inoperative flight deck door viewing port before to open the flight deck door, do as follows:

(1) Create alternative procedures in the event of failure of the two electronic systems and viewing port that can include the use of interphone system to properly allow communication between flight deck and cabin.

(2) Make sure there is a crew coordination before the opening of the flight deck door in a normal or non–normal conditions. The electronic surveillance system can be used to make sure that the aft area of the flight deck door is safety.

(3) Create procedures to make sure that the area aft of flight deck door is secure and cabin crew members requesting entry are not doing so under duress.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
00–01 Overhead Control Panel PBA Switch Lights (light function only)					
1) CABIN PWR “OFF”		C	1	0	
2) RAT GEN “ON”		C	1	0	
3) L(R) GEN (APU GEN) “FAIL”		C	3	0	May be inoperative provided associated L(R) GEN FAIL, or APU GEN FAIL Caution CAS message is not displayed. NOTE: If message is displayed, refer to the applicable MMEL item.
4) L(R) GEN (APU GEN) “OFF”		C	3	0	May be inoperative provided associated L(R) GEN OFF, APU GEN OFF status CAS message is not displayed when engines or APU are operated. NOTE: If message is displayed, refer to the applicable MMEL item.
5) EXT PWR “AVAIL”		C	1	0	
6) EXT PWR “IN USE”		C	1	0	
7) L(R) DISC “OIL”		C	2	0	
8) L/(R) DISC “DISC”		C	2	0	

1. PLACARD (P)

A. Put the applicable LIGHT FUNCTION INOPERATIVE placard on the electrical control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
00–02 Electrical/Towing Service Panel PBA Switch Lights (light function only)					
1) EXT AC SERV “AVAIL”	D	1	1	0	
2) EXT AC SERV “IN USE”	D	1	1	0	
3) BATT Annunciator Light	C	1	1	0	NOTE: Battery may deplete if not selected OFF.

1. PLACARD (P)

A. Put the applicable LIGHT FUNCTION INOPERATIVE placard on the external service control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
11–01 L DISC / R DISC Switch Guards		B	2	0	(O) May be inoperative provided: (a) Both VFG Systems are operative, and (b) EPC 1 and EPC 2 are verified operative.

1. PLACARD (P)

A. Put a L DISC or/and R DISC SWITCH GUARDS INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative or missing L (R) DISC switch guard:

(1) Check that EPC 1 and EPC 2 are operative by making sure that NONE of the following INFO messages are shown:

24 ELECTRICAL FAULT – EPC 1 DEGRADED

24 ELECTRICAL FAULT – EPC 2 DEGRADED

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
24 – ELECTRICAL POWER					
11–02 Variable Frequency Generator (VFG) Systems [each system includes Variable Frequency Generator (VFG), Generator Control Unit (GCU), Overvoltage Protection Unit (OPU), Generator Line Contactor (GLC), Line Current Transformer (LCT), Generator Control Switch (PBA)]	B	2	1	(O)	Except for extended operations, one may be inoperative provided: (a) Affected VFG is selected OFF, (b) APU is started before departure and operated continuously throughout flight, (c) All EPCs are verified operative, (d) All TRUs are verified operative, and (e) Opposite VFG is verified operative. NOTE: For L GEN FAIL (caution) or R GEN FAIL (caution) message, use Section 2 MMEL Relief 24–00–105–01 or 24–00–119–01.
1) Variable Frequency Generator (VFG) Coating	A	2	1	(M)(O)	Except for extended operations, generator coating may be damaged provided: (a) Affected VFG is selected OFF, (b) Oil from affected VFG is drained, (c) Affected VFG is disconnected, (d) APU is started before departure and operated continuously throughout flight, (e) All EPCs are verified operative, (f) All TRUs are verified operative, (g) Opposite VFG is verified operative, and (h) Repairs are made within 8 flight hours.

1. PLACARD (P)

A. Put a L or R VARIABLE FREQUENCY GENERATOR SYSTEM INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. For a damaged VFG external coating:

(1) On the affected side, drain the VFG oil (refer to BD500-A-J24-21-01-00AAA-222A-A).

(2) Disconnect the affected VFG:

(a) On the ELECTRICAL PANEL, press the guarded L(R) DISC switch.

NOTE: The white DISC portion of the switch will illuminate (only when the engine is running) to indicate that the associated generator is disconnected from the engine gearbox. The associated L(R) GEN DISC status message display on the EICAS.

3. OPERATIONS (O)

A. For dispatch with an inoperative VFG or dispatch with a damaged VFG external coating:

(1) Make sure that the affected VFG is selected OFF.

(2) Make sure that none of the following messages is displayed:

L GEN FAIL (caution) for Right VFG inoperative

R GEN FAIL (caution) for Left VFG inoperative

APU GEN FAIL (caution)

APU GEN OFF (status)

24 ELECTRICAL FAULT – EPC1 DEGRADED

24 ELECTRICAL FAULT – EPC2 DEGRADED

24 ELECTRICAL FAULT – EPC3 DEGRADED

24 TRU FAULT – TRU 1 INOP

24 TRU FAULT – TRU 2 INOP

24 TRU FAULT – TRU 3 INOP

(3) APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
12–01 VFG Oil System					
1) Generator Oil Level Indication (Remote Oil Level Sensor – ROLS)					
A) One or both ROLS inoperative for non–extended operations	A	2	0	(M)	Except for extended operations, may be inoperative provided: (a) Following info messages are not displayed: 24 ELECTRICAL FAULT – L GEN DEGRADED 24 ELECTRICAL FAULT – R GEN DEGRADED (b) Minimum oil level is verified once each flight day, and (c) Repairs are made prior to completion of next heavy maintenance visit.
B) One ROLS inoperative for extended operations	C	2	1	(M)	May be inoperative provided: (a) Following info messages are not displayed: 24 ELECTRICAL FAULT – L GEN DEGRADED 24 ELECTRICAL FAULT – R GEN DEGRADED, and (b) Minimum oil level is verified once each flight day.

1. PLACARD (P)

A. Put a VFG OIL LEVEL INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative VFG Remote Oil Level Sensor (ROLS), once each flight day:

(1) On the affected side(s), make sure the oil level is within operating range on the VFG sight glass (refer to BD500–A–J24–21–01–01AAA–200B–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
20–44 Permanent Magnet Generator (PMG)	C	2	1	(M)(O)	May be inoperative provided: (a) Affected PMG is disconnected, and (b) Both FBW Power Converters are operative.

1. PLACARD (P)

A. Put a LEFT (or RIGHT) PMG INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative PMG, deactivate the affected PMG before dispatch (refer to BD500–A–J24–33–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative PMG, as indicated by the INFO message
24 ELECTRICAL FAULT – L FBW PC PMG INOP or
24 ELECTRICAL FAULT – R FBW PC PMG INOP, make sure that none of the INFO messages that follow are shown:

24 ELECTRICAL FAULT – L FBW PC INOP

24 ELECTRICAL FAULT – R FBW PC INOP

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
22–01	Auxiliary Power Unit Generator (AGEN) System [includes APU Generator (AGEN), APU Generator Control Unit (AGCU), APU Overvoltage Protection Unit (OPU3), APU Line Contactor (ALC), Line Current Transformer (LCT3)]	C	1	0	Except for extended operations, may be inoperative provided: (a) L VFG and R VFG systems are operative, and (b) APU GEN is selected OFF.

1. PLACARD (P)

A. Put a AUXILIARY POWER UNIT GENERATOR INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER				
23–01 Ram Air Turbine (RAT) System – Deployed Sensor	C	1	0	(M)(O) May be inoperative provided RAT is visually verified stowed before each flight.

1. PLACARD (P)

A. Put a RAM AIR TURBINE SYSTEM DEPLOYED SENSOR INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. For an inoperative RAT deployed sensor, do a one time visual check of the RAT to make sure that the RAT is correctly stowed as follows:

(1) Deploy the RAT (refer to BD500–A–J24–23–01–01AAA–398B–A)

(2) Do the general visual check (refer to BD500–A–J24–23–01–01AAA–310D–A).

(3) Stow the RAT (refer to BD500–A–J24–23–01–01AAA–398C–A).

3. OPERATIONS (O)

A. For an inoperative RAT deployed sensor, before each flight, visually make sure that the RAT is not deployed.

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER				
23–03 RAT GEN Switch Guard	C	1	0	May be damaged or missing.

1. PLACARD (P)

A. Put a RAT GEN SWITCH GUARD INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
31–01 Transformer Rectifier Unit (TRU) 1 or 2	B	2	1	(M)(O)	Except for extended operations, may be inoperative provided: (a) TRU 3 and remaining TRU are verified operative, (b) Affected TRU is deactivated, (c) Both VFG systems are operative, and (d) All EPCs are verified operative.

1. PLACARD (P)

A. Put a TRANSFORMER RECTIFIER UNIT 1 (or 2) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative TRU 1 (or 2), do the steps that follow:

(1) For an inoperative TRU 1, on Electrical Power Center (EPC) 1, open the circuit breaker that follows (refer to BD500–A–J24–00–00–04AAA–398D–A):

– EPC1–A11 (TRU 1)

(2) For an inoperative TRU 2, on Electrical Power Center (EPC) 2, open the circuit breaker that follows (refer to BD500–A–J24–00–00–04AAA–398D–A):

– EPC2–A4 (TRU 2)

3. OPERATIONS (O)

A. For one inoperative TRU:

(1) Make sure that only one of the following info message is shown:

24 TRU FAULT – TRU 1 INOP, or

24 TRU FAULT – TRU 2 INOP

(2) Make sure that NONE of the following info message is shown:

24 ELECTRICAL FAULT – EPC 1 DEGRADED

24 ELECTRICAL FAULT – EPC 2 DEGRADED

24 ELECTRICAL FAULT – EPC 3 DEGRADED

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
33–03 AC Bus Tie Contactor (BTC)					
1) BTC 1	A	1	1	0	(O) Except for extended operations with passengers, may be inoperative provided: (a) EPC 2 is verified operative, (b) L VFG and R VFG Systems are operative, (c) External AC Power System is considered inoperative, and (d) Repairs are made within three flight days.
2) BTC 2	A	1	1	0	(O) May be inoperative provided: (a) EPC 1 and BTC 3 are verified operative, (b) L VFG and R VFG Systems are operative, (c) APU GEN is considered inoperative, and (d) Repairs are made within three flight days.
3) BTC 3	A	1	1	0	(O) Except for extended operations with passengers, may be inoperative provided: (a) EPC 1 and BTC 2 are verified operative, (b) L VFG and R VFG Systems are operative, (c) External AC Power System is considered inoperative, and (d) Repairs are made within three flight days.

1. PLACARD (P)

A. Put a AC BUS TIE CONTACTOR 1 (or 2, or 3) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative AC Bus Tie Contactor (BTC) 1:

(1) Make sure that info message 24 ELECTRICAL FAULT – EPC 2 DEGRADED is not shown.

B. For an inoperative AC Bus Tie Contactor (BTC) 2:

(1) Make sure that info message 24 ELECTRICAL FAULT – EPC 1 DEGRADED is not shown.

(2) Make sure that AC BUS 1 can be powered by AC EXT PWR.

NOTE: If AC BUS 1 can be powered by AC external power then the BTC 3 is verified operative.

C. For an inoperative AC Bus Tie Contactor (BTC) 3:

(1) Make sure that info message 24 ELECTRICAL FAULT – EPC 1 DEGRADED is not shown.

(2) Make sure that AC BUS 2 can be powered by APU GEN.

NOTE: If AC BUS 2 can be powered by the APU generator then the BTC 2 is verified operative.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
40–00	External AC Power System (includes EPCTA and ELC)	C	1	0	May be inoperative provided: (a) APU Generator operates normally, and (b) External Power is not used.

1. PLACARD (P)

A. Put a EXTERNAL AC POWER SYSTEM INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER				
40–02 Cockpit Thermal Circuit Breaker (TCB) Status Indication	C	–	0	May be inoperative for indication ”– –” provided cockpit lighting is operative.

1. PLACARD (P)

A. Put a CIRCUIT BREAKER STATUS INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER					
54–02 CABIN PWR Switch Guard		D	1	0	May be damaged or missing.

1. PLACARD (P)

A. Put a CABIN PWR SWITCH GUARD INOPERATIVE placard on the ELECTRICAL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 – ELECTRICAL POWER				
55–01 Maintenance Power Mode	D	1	0	(M) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a MAINTENANCE POWER MODE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative maintenance power mode, create and use alternative procedures for on–ground operations.

3. OPERATIONS (O)

A. Not required.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
00–01 Overhead Control Panel					
1) ELT “TEST” Light	C	1	1	0	(M) May be inoperative provided ELT test function is verified to be operative.
2) PBA Switch Light (light function only) EVAC CMD “ON”	C	1	1	0	(O) May be inoperative provided evacuation (EVAC) horn is verified to be operative.

1. PLACARD (P)

A. For an inoperative ELT “TEST” PBA switch light, put a ELT TEST PBA SWITCH LIGHT INOPERATIVE placard on the ELT control panel.

B. For an inoperative EVAC CMD “ON” PBA switch light, put a EVAC CMD TEST PBA SWITCH LIGHT INOPERATIVE placard on the EVAC / EMER LTS control panel.

2. MAINTENANCE (M)

A. For an inoperative ELT “TEST” PBA switch light, do the operational test of the ELT (refer to BD500–A–J25–62–00–01AAA–320A–A)

3. OPERATIONS (O)

A. For an inoperative EVAC CMD “ON” PBA switch light, do the steps that follow:

(1) On the EVAC / EMER LTS control panel, push the EVAC CMD switch to ON.

(2) Make sure that the EVAC horn is heard in the cabin.

(3) Push the EVAC CMD switch to ON again to turn off the horn.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
02–02	Observer Seat (Including Associated Equipment)				
1)	Observer seat not required	B	1	0	(M) May be inoperative except when required by a person in an official capacity provided seat is removed, stowed, or secured in retracted position. NOTE: Observer's seat associated equipment includes safety belt, shoulder harness, audio control panel, oxygen system, microphone, headset, lights, etc.
2)	Observer seat not required for extended periods of time	D	1	0	(M) May be inoperative provided: (a) Seat is not required to be occupied in an official capacity for extended periods of time, and (b) Seat is removed, stowed, or secured in the retracted position. NOTE: Observer's seat associated equipment includes safety belt, shoulder harness, audio control panel, oxygen system, microphone, headset, lights, etc.

1. PLACARD (P)

A. Put a OBSERVER SEAT INOPERATIVE placard on the observer seat.

2. MAINTENANCE (M)

A. For an inoperative observer seat (including associated equipment), remove, stow or retract the observer seat as necessary (refer to BD500–A–J25–11–07–01AAA–520A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS				
11–01 Pilot Seats				
1) Headrest Adjustments	C	2	0	May be inoperative provided seat is acceptable to affected crewmember.
2) Fore/Aft Adjustments	B	2	0	(M) May be inoperative provided: (a) Seat is secured in fore/aft position acceptable to affected crewmember, and (b) Egress is not impaired.
3) Powered Vertical Adjustments	C	2	0	(O) May be inoperative provided: (a) Manual vertical adjustment is operative, (b) Egress is not impaired, and (c) Vertical power adjustment shut-off switch is selected OFF.
4) Manual Vertical Adjustments	C	2	0	(O) May be inoperative provided: (a) Powered vertical adjustment is operative, and (b) Egress is not impaired.
5) Recline Adjustments	B	2	0	(M) May be inoperative provided backrest is secured in a position acceptable to affected crewmember.
6) Inboard Armrests	C	2	0	(M)(O) May be inoperative provided: (a) Affected armrest is secured in upright position or removed, and (b) Seat is acceptable to affected crewmember.
7) Outboard Armrest Adjustments	C	4	0	Vertical and/or tilt angle adjustments may be inoperative provided settings are acceptable to affected crewmember.
8) Armrest Position Display Indicator	C	2	0	May be inoperative.

(Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
11–01	Pilot Seats (Cont'd)				
9)	Lumbar Adjustments	C	4	0	May be inoperative in the lowest position provided seat is acceptable to affected crewmember.
10)	Thigh Lift Adjustments	C	2	0	May be inoperative provided seat is acceptable to affected crewmember.

1. PLACARD (P)

A. Put the applicable PILOT/COPILOT SEAT ADJUSTMENT INOPERATIVE placard on the affected pilot seat.

2. MAINTENANCE (M)

A. For inoperative fore/aft adjustments of the pilot seat, if necessary, do the steps that follow:

(1) Make sure the fore/aft position is acceptable to the crewmember.

(2) Disengage both metering pins from the seat track.

(3) Adjust the seat to a fore/aft position acceptable to the crewmember.

(4) Engage both metering pins into the seat track.

(5) If necessary, adjust the fore/aft position of the seat again, during the next crew change.

B. For an inoperative pilot seat recline adjustment, do the steps that follow:

(1) Make sure that the recline position is acceptable to the crewmember.

(2) Secure the affected seat in the recline position as follows:

(a) Remove the seat pan cushion assembly (refer to BD500–A–J25–21–20–02AAA–520A–A).

(b) Lift the metering pins and move the seat to a position that is acceptable to the flight crewmember.

(c) Engage the two metering pins.

(d) Install the seat pan cushion assembly (refer to BD500–A–J25–21–20–02AAA–720A–A).

(3) If necessary, adjust the recline position of the seat again, during the next crew change.

C. For an inoperative pilot seat inboard armrest(s), if necessary, do the steps that follow:

(1) Remove the seatback cushion and find the armrest spline within the cross-tube.

(2) Find and remove the armrest spline set-screw.

(3) Pull the armrest sideways until detached from the seatback.

3. OPERATIONS (O)

A. For an inoperative pilot seat powered adjustment, do the steps that follow:

(1) On the inboard side of the affected seat, set the vertical electrical power switch to the off position.

(2) Make sure that the vertical position is acceptable to the crewmember.

(3) If necessary, manually adjust the affected seat as follows:

(a) Lift the release lever on the outboard side of the seat, to adjust it in the vertical position.

(b) Keep body weight on the cushion pan while the lever is raised, to lower the seat.

(c) Lift body weight off the seat while the lever is lifted, to raise the seat.

B. For an inoperative pilot seat manual vertical adjustment, do the steps that follow:

(1) Make sure that the vertical position is acceptable to the crewmember.

(2) On the rear inboard side of the affected seat cushion, use the powered vertical adjustment switch to adjust the vertical position of the affected seat.

C. For an inoperative pilot seat inboard armrest, do the steps that follow:

(1) Rotate the armrest fully upright until detent holds.

(2) Slide the armrest into the seat back.

(3) If necessary, secure the armrest with adhesive tape.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
12–01	Overhead Storage Bin(s)/Cabin and Galley Storage Compartments/Closets				
1)	Door(s) secured CLOSED	C	–	–	(M) May be inoperative provided: (a) Procedures are established to secure bins/compartments/closets CLOSED, (b) Associated bin/compartment/closet is prominently placarded DO NOT USE, (c) Any emergency equipment located in affected bin/compartment/closet is considered inoperative, and (d) Affected bin/compartment/closet is not used for storage of any items except for those permanently affixed. NOTE 1: If no partitions are installed, the entire overhead storage compartment is considered one bin or compartment. NOTE 2: An inoperative lid/door latch renders the lid/door inoperative.
2)	Door(s) removed	C	–	–	(M)(O) May be inoperative provided: (a) Affected bin/compartment/closet door(s) is removed, (b) Associated bin/compartment/closet is not used for storage of any items, except those permanently affixed, (c) Associated bin/compartment/closet is prominently placarded DO NOT USE, (Cont'd)

System & Sequence Nº Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS 12–01 Overhead Storage Bin(s)/Cabin and Galley Storage Compartments/Closets (Cont'd)			(d) Procedures are established and used to alert crew members and passengers of inoperative bins/compartments/closets, and (e) Passengers are briefed that associated bin/compartment/closet is not used. NOTE 1: If no partitions are installed, entire overhead storage compartment is considered one bin or compartment. NOTE 2: Any emergency equipment located in the associated compartment (permanently affixed) is available for use. NOTE 3: An inoperative lid/door latch renders the lid/door inoperative.

1. PLACARD (P)

A. Put a STORAGE COMPARTMENT INOPERATIVE placard on the applicable storage compartment/closet.

2. MAINTENANCE (M)

A. For an inoperative storage bin/compartment/closet, do the steps that follow:

(1) Make sure that the inoperative storage bin/compartment/closet door than can be securely closed is secured CLOSED.

(2) Put a DO NOT USE placard on the inoperative storage bin/compartment/closet.

B. For an inoperative storage bin/compartment/closet, do the steps that follow:

(1) Remove the inoperative storage bin/compartment/closet door which cannot be securely closed.

(2) Put a DO NOT USE placard on the inoperative storage bin/compartment/closet.

3. OPERATIONS (O)

A. For an inoperative storage bin/compartment/closet, the aircraft operator must create alternative procedures to alert the crewmembers and the passengers of inoperative storage bins, and brief the passengers that the inoperative storage bins are not to be used.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS				
16–03 Footrests	C	4	0	One or more may be inoperative provided it is acceptable to affected flight crew member.

1. PLACARD (P)

A. Put a FOOTREST INOPERATIVE placard on the affected footrest.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
16–17	Eye Level Locator	C	1	0	May be inoperative or missing.

1. PLACARD (P)

A. Put a EYE LEVEL LOCATOR INOPERATIVE or MISSING placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
18–05 Cockpit Sun Visors/Sunshades					
1) Without visual obstruction	C	6	0		May be inoperative or missing provided affected sun visor/sunshade does not obstruct either pilot's field of view for takeoff and landing.
2) Cockpit sun visor/sunshade removed	C	6	0	(M)	May be inoperative provided affected sun visor/sunshade is removed.

1. PLACARD (P)

A. Put a COCKPIT SUN VISOR/SUNSHADE INOPERATIVE placard on the cockpit sun visor/sunshade.

2. MAINTENANCE (M)

A. For an inoperative sun visor, remove the sun visor (refer to BD500–A–J25–18–05–01AAA–520A–A).

B. For an inoperative sunshade, remove the sunshade (refer to BD500–A–J25–18–03–01AAA–520A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
21–01	Passenger Seats	D	–	–	(M) May be inoperative provided: (a) Seat does not block an Emergency Exit, (b) Seat does not restrict any passenger from access to main aircraft aisle, and (c) Affected seat is blocked and placarded “DO NOT OCCUPY”. NOTE 1: A seat with an inoperative seat belt is considered inoperative. NOTE 2: Affected seat(s) may include seat behind and/or adjacent outboard seats.
1)	Recline Mechanism	D	–	–	(M) May be inoperative and seat occupied provided seat is secured in full upright position.
2)	Underseat Baggage Restraining Bars	C	–	–	(M)(O) May be inoperative or missing provided: (a) Baggage is not stowed under associated seat or seat assembly, (b) Associated seat or seat assembly is placarded DO NOT STOW BAGGAGE UNDER THIS SEAT, and (c) Procedures are established to alert crew members of inoperative or missing restraining bar.
3)	Armrest with Recline Mechanism	D	–	–	(M) May be inoperative or missing and seat occupied provided: (a) Armrest does not block an Emergency Exit, (b) Armrest does not restrict any passenger from access to main aircraft aisle, and (c) If armrest is missing, seat is secured in full upright position.

1. PLACARD (P)

A. Put a PASSENGER SEAT INOPERATIVE placard on the applicable passenger seat(s)

2. MAINTENANCE (M)

A. For an inoperative Passenger Seat

(1) Make sure that seat is blocked and put a DO NOT OCCUPY placard on the seat

B. For an inoperative Passenger Seat Recline Mechanism:

(1) Make sure that the seat back is secured in the upright position.

C. For an inoperative or missing Passenger Seat Underseat Baggage Restraining Bar:

(1) Put a DO NOT STOW BAGGAGE UNDER THIS SEAT placard on the applicable seat.

D. For an inoperative or missing Passenger Armrest with Recline Mechanism:

(1) Make sure that the seat back is secured in the upright position.

3. OPERATIONS (O)

A. For an inoperative or missing Passenger Seat Underseat Baggage Restraining Bar:

(1) Operator to create procedures to make sure that baggage is not stowed under a seat with an inoperative or missing restraining bar, and alert the cabin crew of the inoperative restraining bar.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
21–02 “Fasten Seat Belt While Seated” Signs or Placards	C	–	–		One or more signs or placards may be illegible or missing provided a legible sign or placard is readable from each occupied passenger seat.

1. PLACARD (P)

A. Put a FASTEN SEAT BELT WHILE SEATED SIGN OR PLACARD INOPERATIVE placard in the passenger compartment.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
23–05 Flight Attendant Seat Assembly (single or dual position)					
1) Required Flight Attendant Seats	B	–	1	(M)(O)	One seat position or assembly (dual position) may be inoperative provided: (a) Affected seat position or seat assembly is not occupied, (b) Flight attendant(s) displaced by inoperative seat(s) occupies either an adjacent flight attendant seat or passenger seat which is most accessible to inoperative seat(s), so as to most effectively perform assigned duties, (c) Alternate procedures are established and used as published in crew member manuals, (d) Folding type seat stows automatically or is secured in the retracted position, and (e) Passenger seat assigned to flight attendant is placarded “FOR FLIGHT ATTENDANT USE ONLY”. NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative. NOTE 2: A seat position with a missing or inoperative required component, such as safety belt (including shoulder harness) or headrest, renders the seat inoperative.
2) Excess Flight Attendant Seats	D	–	–	(M)	Seats/assemblies in excess of requirements and not assigned to a flight attendant may be inoperative provided they are not occupied, are placarded and are: (Cont’d)

System & Sequence N° Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS 23–05 Flight Attendant Seat Assembly (single or dual position) (Cont'd)			(a) Properly stowed, or (b) Secured in the retracted position, or (c) Removed. NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative. NOTE 2: A seat position with a missing or inoperative required component, such as safety belt (including shoulder harness) or headrest, renders seat inoperative.

1. PLACARD (P)

A. Put a FLIGHT ATTENDANT SEAT INOPERATIVE placard on the affected flight attendant seat.

2. MAINTENANCE (M)

A. For an inoperative required flight attendant seat, put a FOR FLIGHT ATTENDANT USE ONLY placard on the passenger seat assigned to the flight attendant. If the folding type seat does not stow automatically, secure the seat in the retracted position.

B. For an inoperative excess flight attendant seat, if the folding type seat does not stow automatically, secure the seat in the retracted position.

3. OPERATIONS (O)

A. For an inoperative required flight attendant seat, the aircraft operator is to create and publish alternative procedures in the crewmember manual.

System & Sequence Nº Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS			
29–08 Passenger Convenience Items/Non Essential Equipment & Furnishings (NEF) ***			
1) Passenger Convenience Items	–	0	Passenger convenience items as expressed in this MMEL are those related to passenger convenience, comfort or entertainment, such as, but not limited to galley equipment, movie equipment, ashtrays, stereo equipment, and overhead reading lamps. Items addressed elsewhere in this document shall not be included. (M) and (O) procedures may be required and included in the MEL. NOTE 1: Exterior lavatory door ashtrays are not considered convenience items. NOTE 2: Galley equipment restraining devices such as latches, etc. must be serviceable or compartment must not be used for storage and placarded INOPERATIVE – DO NOT USE. NOTE 3: Movie equipment individual screens, if applicable, must be capable of being stowed. NOTE 4: Audio or audio–visual entertainment equipment which is used as sole means of providing safety briefings and demonstrations is not considered a passenger convenience item.
2) Non-Essential Equipment and Furnishings (NEF)	–	0	May be inoperative, damaged or missing provided that item(s) is deferred in accordance with the operator's defect rectification and control procedures. NEF policies are outlined in operator's (Cont'd)

System & Sequence N° Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS 29–08 Passenger Convenience Items/Non Essential Equipment & Furnishings (NEF) *** (Cont'd)			Maintenance Control Manual. (M) and (O) procedures, if required, must be available to flight crew and included in operator's appropriate document. NOTE: Exterior lavatory door ashtrays are not considered NEF items.

1. PLACARD (P)

A. Put a placard in accordance with operator's approved procedures.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
31–01 Galley Restraint Latches	C		–	–	(M)(O) One or both latches for each stowage compartment or serving cart position may be inoperative provided: (a) Associated compartment or position is empty, and (b) Associated compartment or position is placarded INOPERATIVE – DO NOT USE.

1. PLACARD (P)

A. Put a GALLEY RESTRAINT LATCH INOPERATIVE placard on the applicable galley.

2. MAINTENANCE (M)

A. For an inoperative galley restraint latch, put a INOPERATIVE – DO NOT USE placard in the associated compartment or position.

3. OPERATIONS (O)

A. For an inoperative galley restraint latch, the aircraft operator is to create procedures to make sure that the associated compartment or position is empty.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
31–02 Galley/Cabin Waste Receptacles Access Doors/Covers		C	–	–	(M)(O) May be inoperative provided: (a) Container is empty and access is secured to prevent waste introduction into compartment, and (b) Procedures are established to ensure that sufficient galley/cabin waste receptacles are available to accommodate all waste that may be generated on a flight.

1. PLACARD (P)

A. Put a GALLEY/CABIN WASTE RECEPTACLE ACCESS DOOR/COVER INOPERATIVE placard in the applicable galley/cabin.

2. MAINTENANCE (M)

A. For an inoperative galley/cabin waste receptacle access door/cover, empty the associated waste container and secure the associated access door in the closed position.

3. OPERATIONS (O)

A. For an inoperative galley/cabin waste receptacle access door/cover, make sure that sufficient galley waste receptacles are available to accommodate all waste that can be generated on the flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
41–05 Lavatory Waste Container Flapper/Access Doors	C	–	–	(M)	May be inoperative provided: (a) Associated waste container is empty and access is secured to prevent waste introduction into waste container, (b) Lavatory is used only by crewmembers, (c) Associated lavatory entrance door is locked closed and placarded INOPERATIVE – DO NOT ENTER, and (d) For extended operations with passengers there are at least two serviceable lavatories on the aircraft. NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.

1. PLACARD (P)

A. Put a LAVATORY WASTE CONTAINER FLAPPER/ACCESS DOOR INOPERATIVE placard in the lavatory.

2. MAINTENANCE (M)

A. For an inoperative lavatory waste container flapper/access door, do the steps that follow:

(1) Empty the associated waste container.

(2) Secure the inoperative access door/cover in a manner that will prevent waste from being deposited inside the receptacle.

(3) Close, lock, and put a INOPERATIVE – DO NOT ENTER placard on the associated lavatory entrance.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
41–06	Exterior Lavatory Door Ashtrays				
1)	More than 50% affected	A	–	–	More than 50 percent may be missing or inoperative for 3 days.
2)	Less or equal to 50% affected	A	–	–	Up to and including 50 percent may be missing or inoperative for 10 days.

1. PLACARD (P)

A. Put a EXTERIOR LAVATORY DOOR ASHTRAY INOPERATIVE placard on the applicable lavatory door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
41–08 Lavatory NO SMOKING Placards		B	–	–	May be missing provided associated lavatory smoke detection system is operative.

1. PLACARD (P)

A. Put a NO SMOKING placard on the affected lavatory door to replace the missing placard.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
60–01	Printed Supplemental Safety Information	C	–	0	(O) May be inoperative or missing provided: (a) No passengers are carried, (b) Only aircraft crew are carried, and (c) Alternate procedures are established and used. NOTE 1: For the purpose of this item, “aircraft crew” includes the operating crew members including the flight crew members, flight attendants, aircraft maintenance personnel and supervisory crew members. NOTE 2: The operator’s MEL must state the maximum number of aircraft crew permitted.

1. PLACARD (P)

A. Put a PRINTED SUPPLEMENTAL SAFETY INFORMATION MISSING placard on the applicable seat(s).

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative or missing printed supplemental safety information, the Pilot-In-Command shall make sure that a safety briefing is given to the aircraft occupants before takeoff.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
60–02 Emergency Evacuation Command System					
1) Procedures require emergency evacuation command system		C	1	0	(O) May be inoperative provided alternate procedures for initiating an emergency evacuation are established and used.
2) Procedures do not require emergency evacuation command system		D	1	0	May be inoperative provided procedures do not require its use.

1. PLACARD (P)

A. Put a EMERGENCY EVACUATION COMMAND SYSTEM INOPERATIVE placard on the EVAC / EMER LTS control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative emergency evacuation command system, do the steps that follow:

(1) Create alternative procedures for emergency evacuation. The procedures can make use of the passenger address system and/or the cabin/service interphone system and/or megaphone(s).

(2) Before the flight, the Pilot-In-Command should brief the cabin crewmembers on the emergency procedures that will be used.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
60–03	Emergency Medical Kit				
1)	In excess of those required by regulations	D	–	–	(O) Any kit or items contained in kit in excess of those required by regulations may be incomplete or missing provided procedures are established and used to alert crew members of missing or incomplete kits.
2)	Minimum required by regulations	A	–	0	(O) May be incomplete or missing provided: (a) Kit is sealed in manner that will identify it as a unit that cannot be mistaken for a fully serviceable unit, and (b) Replacements are made within one flight.
3)	Seal	B	–	–	(O) Seal affixed on the exterior of emergency medical kit may be missing or broken provided: (a) Emergency medical kit is fully equipped, (b) Kit includes a list of its contents, (c) An inventory is taken on contents of kit prior to departure, and (d) Procedures are established to alert crew members of: 1 Missing or broken seal, and 2 Need to perform an inventory under proviso (c).

1. PLACARD (P)

A. Put a EMERGENCY MEDICAL KIT (MISSING) (INCOMPLETE) placard on the forward crew station.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For a missing, incomplete or inoperative emergency medical kit, the aircraft operator to create their own procedures to alert crewmembers of incomplete or missing kit.

B. For a missing or broken emergency medical kit seal, the aircraft operator to create procedures to alert crew members of a missing or broken kit seal and the requirements to do a kit inventory prior to flight.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
60–04	Automatic External Defibrillator (AED) and/or Associated Equipment***	D	–	0	(O) May be incomplete, missing or inoperative provided procedures are established and used to alert crew members of incomplete, missing or inoperative units.

1. PLACARD (P)

A. Put a AUTOMATIC EXTERNAL DEFIBRILLATOR INOPERATIVE (MISSING) (INCOMPLETE) placard on the forward crew station.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Operators to define the procedures and get acceptance from their local authorities.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
61–01 First Aid Kit (FAK)		D	–	–	(O) Any kit or items contained in kit in excess of those required by regulations may be incomplete or missing provided: (a) Required distribution is maintained, and (b) Procedures are established to alert crew members of missing or incomplete kits.
1) First Aid Kit Seal (Required First Aid Kits)		A	–	–	(O) Seal affixed on exterior of any required first aid kit may be missing or broken for three flight days provided: (a) First aid kit is fully equipped or kit has a maximum of one missing item, (b) Kit includes a list of its contents, (c) An inventory is taken on contents of kit prior to departure, and (d) Procedures are established to alert crew members of: 1 Missing or broken seal, and 2 Need to perform an inventory under proviso (c).

1. PLACARD (P)

A. Put a FIRST AID KIT (MISSING) (INCOMPLETE) placard on the forward crew station.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For a missing or incomplete first aid kit, each aircraft operator must create procedures to alert the crew members of missing or incomplete kits.

B. For a missing or broken first aid kit seal, the aircraft operator to create procedures to alert the crew members of a missing or broken kit seal and the requirements to do a kit inventory prior to departure.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions	
25 – EQUIPMENT/FURNISHINGS						
61–03	Life Vests					
1)	If life vests required by regulations					
A)	In excess for each person on board	D	–	–		Any in excess of one life vest for each person on board may be inoperative or missing.
B)	Minimum required by regulations	D	–	–	(M)	May be inoperative or missing provided associated seat is placarded DO NOT OCCUPY.
2)	If life vests not required by regulations	D	–	–		May be inoperative or missing provided extended overwater operations are not conducted.

1. PLACARD (P)

A. Put a LIFE VEST MISSING OR INOPERATIVE placard on the life vest and/or its installed location.

2. MAINTENANCE (M)

A. For a missing life vest (if required by regulations), make sure that the associated seat is not occupied and is placarded DO NOT OCCUPY.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
61–06 Megaphones	D	–	–	(M)(O)	Any in excess of those required by regulations may be inoperative or missing provided: (a) Inoperative megaphone is removed from passenger cabin and its location is placarded INOPERATIVE, or it is removed from installed location, secured out of sight and megaphone and its installed location are placarded INOPERATIVE, (b) Required distribution is maintained, and (c) Procedures are established to alert crew members of inoperative or missing megaphones.

1. PLACARD (P)

A. Put a MEGAPHONE INOPERATIVE placard on the forward galley and/or the aft crew station..

2. MAINTENANCE (M)

A. For an inoperative megaphone, do the steps that follow:

(1) Remove the inoperative megaphone from its installed location.

(2) Put a INOPERATIVE placard in the removed location of the inoperative megaphone.

(3) Secure the inoperative megaphone out-of-sight and placard the megaphone INOPERATIVE.

3. OPERATIONS (O)

A. For an inoperative megaphone, the aircraft operator shall create procedures to alert crew members of inoperative or missing megaphones.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
61–07	Flight Attendant Flashlights/Flashlight Holders				
1)	Flashlights	C	–	0	(O) May be inoperative or missing provided each installed flight attendant flashlight is replaced with a flashlight of equivalent characteristics and is readily available.
2)	Holders	C	–	0	(M)(O) May be inoperative or missing provided alternate stowage provisions are provided.

1. PLACARD (P)

A. Put a FLIGHT ATTENDANT FLASHLIGHT/FLASHLIGHT HOLDER MISSING OR INOPERATIVE adjacent to the installed location of the affected flashlight/flashlight holder.

2. MAINTENANCE (M)

A. For an inoperative or missing flight attendant flashlight holder, make sure that:

(1) A suitable flashlight stowage location must be identified as an alternative for the inoperative or missing flashlight holder.

(2) A passenger seat back pocket is not used for the stowage of the flight attendant's flashlight.

(3) The alternative stowage location selected must be immediately accessible to the flight attendant assigned to the seat with the inoperative flashlight holder.

3. OPERATIONS (O)

A. For an inoperative or missing flight attendant flashlight or holder, make sure that the required crewmembers are aware of the electric torch/flashlight or holder change in terms of its location and/or alternative stowage provisions.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS					
62–01 Emergency Locator Transmitter (ELT)					
1) Fixed ELT Systems	A	–	–	(M)	May be inoperative provided: (a) Placard is displayed in the flight deck indicating the date ELT has been removed, and (b) Repair or replacement is made within the time interval prescribed by regulations.
2) Survival Type ELTs	D	–	–		Any in excess of those required by regulations may be inoperative or missing.
3) Low Frequency Underwater Locating Beacon (LF–ULB) ***	D	1	0	(M)	May be inoperative provided: (a) It is not required by regulations, and (b) Placard is displayed in the flight deck indicating the date the LF–ULB has been removed.

1. PLACARD (P)

A. For an inoperative fixed Emergency Locator Transmitter (ELT) System :

(1) Put a FIXED ELT MISSING placard on the ELT control panel.

NOTE: Placard must also indicate the date at which the fixed ELT was removed.

B. For an inoperative Survival Type Emergency Locator Transmitter System:

(1) Put a SURVIVAL TYPE ELT INOPERATIVE placard on the inoperative ELT and in the flight deck.

C. For an inoperative Low Frequency Underwater Locating Beacon (LF–ULB):

(1) Put a LOW FREQUENCY UNDERWATER LOCATING BEACON MISSING placard on the ELT control panel.

NOTE: Placard must also indicate the date at which the LF–ULB was removed.

2. MAINTENANCE (M)

A. For an inoperative fixed ELT:

(1) Remove the fixed ELT (refer to BD500–A–J25–62–01–01AAA–520A–A).

(2) Put a placard in the flight compartment with the date that the ELT was removed.

B. For an inoperative Low Frequency Underwater Locating Beacon (LF–ULB):

(1) Remove the LF–ULB (refer to AMP).

(2) Put a placard in the flight compartment with the date that the LF–ULB was removed.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 – EQUIPMENT/FURNISHINGS				
63–02 Overwing Emergency Exit Slides Condition Indications	C	–	0	(M) May be inoperative provided associated overwing emergency exit slide pressure is verified to be operative before each flight.

1. PLACARD (P)

A. Put an EMERGENCY EXIT SLIDE CONDITION EICAS INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Overwing Emergency Exit Slide Condition Indication, before each flight, select one of the methods that follow to make sure that the pressure indicator needle of the exit slide is within the green band:

(1) Method 1.

(a) Do the extension of the flaps and the slats to Position 5 (full extend) (refer to BD500–A–J27–53–00–01AAA–913A–A).

(b) Get access to the Aft Flap Track Panel (195BL(196BR)) Box Seal – Overwing Wing to Body Fairing (WTBF).

(c) Use a mirror and a flashlight to make sure that the pressure indicator needle, of the OWEED escape slide, is in the green band.

(d) Do the retraction of the flaps and the slats to position 0 (refer to BD500–A–J27–53–00–02AAA–913A–A).

(2) Method 2.

(a) Put a WARNING placard on the OWEED escape slide to prevent all operation.

(b) Disconnect the OWEED escape slide short cable (refer to BD500–J–52–21–17–01AAA–510A–A).

(c) Rotate the OWEED escape slide and make sure that the pressure indicator needle, of the OWEED escape slide, is in the green band.

(d) Connect the OWEED escape slide short cable (refer to BD500–J–52–21–17–01AAA–730A–A).

(e) Remove the WARNING placard from the OWEED escape slide.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
00–01 Overhead Control Panel PBA Switch Lights (Light Function Only)					
1) L ENG BTL 1(2), R ENG BTL 1(2), APU BTL – "AVAIL" Light Function		C	5	0	May be inoperative.
2) L ENG BTL 1(2), R ENG BTL 1(2), APU BTL – Amber Light Bar		C	5	0	May be inoperative.
3) CARGO BTL – "AVAIL" Light Function		C	1	0	May be inoperative.
4) CARGO BTL – Amber Light Bar		C	1	0	May be inoperative.

1. PLACARD (P)

A. Put the applicable LIGHT INOPERATIVE placard on the CARGO BTL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
10–01	FIDEX Control Unit				
1)	Channel A	C	1	0	(M)(O) Except for extended operations beyond 120 minutes, may be inoperative provided: (a) Other FIDEX Control Unit Channel is verified operative, (b) Forward lavatory is not used by passengers for any purpose, (c) Forward lavatory door is locked closed and placarded "INOPERATIVE – DO NOT ENTER", (d) Forward lavatory is used only by crew members, (e) In-flight service waste bags are not stored in forward lavatory, (f) Forward lavatory waste receptacle is empty, and (g) For extended operations with passengers there are at least two serviceable lavatories on the aircraft. NOTE: 1. The above-mentioned provisos are not intended to preclude crew member lavatory inspections, which are detailed in the Operational procedures. 2. Associated lavatory is considered inoperative, refer to the applicable item.
2)	Channel B	C	1	0	(M)(O) Except for extended operations, may be inoperative provided: (Cont'd)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION				
10–01 FIDEX Control Unit (Cont'd)				(a) Other FIDEX Control Unit Channel is verified operative, (b) Aft lavatory(ies) is/are not used by passengers for any purpose, (c) Aft lavatory door(s) is/are locked closed and placarded "INOPERATIVE – DO NOT ENTER", (d) Aft lavatory(ies) is/are used only by crew members, (e) In–flight service waste bags are not stored in aft lavatory(ies), and (f) Aft lavatory waste receptacle(s) is/are empty. NOTE: 1. The above-mentioned provisos are not intended to preclude crew member lavatory inspections, which are detailed in the Operational procedures. 2. All aft lavatories are considered inoperative, refer to the applicable item.

1. PLACARD (P)

A. Put a FIDEX SYSTEM LOSS OF REDUNDANCY placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative FIDEX Channel A, make sure that the forward lavatory door is locked closed and placarded "INOPERATIVE – DO NOT ENTER", to prohibit passengers from entering.

B. For an inoperative FIDEX Channel B, make sure that the aft lavatory(ies) door(s) is/are locked closed and placarded "INOPERATIVE – DO NOT ENTER", to prohibit passengers from entering.

3. OPERATIONS (O)

A. For an inoperative FIDEX Channel A, do the steps that follow:

(1) Before each flight, make sure that the messages that follow are not shown:

FIRE SYSTEM FAIL (Caution)

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B INOP

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B DEGRADED

(2) Before each flight, do an inspection to make sure that:

(a) The forward lavatory is not used by passengers for any purpose.

(b) The forward lavatory door is locked closed and placarded “INOPERATIVE – DO NOT ENTER”.

(c) The forward lavatory is used only by crew members.

(d) In-flight service waste bags are not stored in the forward lavatory.

(3) Once each flight day, inspect the forward lavatory to make sure that the waste receptacle is empty.

B. For an inoperative FIDEX Channel B, do the steps that follow:

(1) Before each flight, make sure that the messages that follow are not shown:

FIRE SYSTEM FAIL (Caution)

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A INOP

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A DEGRADED

(2) Before each flight, do an inspection to make sure that:

(a) The aft lavatory(ies) is/are not used by passengers for any purpose.

(b) The aft lavatory(ies) door(s) is/are locked closed and placarded “INOPERATIVE – DO NOT ENTER”.

(c) The aft lavatory(ies) is/are used only by crew members.

(d) In-flight service waste bags are not stored in the aft lavatory (ies).

(3) Once each flight day, inspect the aft lavatory(ies) to make sure that the waste receptacle(s) is/are empty.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION				
12–00 Auxiliary Power Unit (APU) Fire Detection Loops	C	2	0	(M) Except for extended operations, both may be inoperative provided: (a) APU is used for ground operations only, (b) APU is continuously monitored, (c) APU external control system is operative, and (d) APU is shut-down before taxi.

1. PLACARD (P)

A. Put a APU FIRE DETECTION LOOPS INOPERATIVE placard on the engines and APU fire panel.

2. MAINTENANCE (M)

A. For two inoperative APU fire detection loops, do the steps that follow:

(1) On ground, make sure that the APU is continuously monitored.

(2) If a fire is detected, shut down the APU, from the flight compartment or the external control panel, and activate the APU fire extinguishing system.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
14–00	Main Landing Gear Bay Overheat Detection Loops	B	2	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Brakes are inspected prior to each flight and are cool to the touch. (b) Landing gear is left extended for a minimum of ten minutes after takeoff, (c) Takeoff performance penalty is in accordance with AFM Supplement 5 (Operation with airplane systems inoperative), (d) Takeoff is not conducted in icing conditions, and (e) Operations with Steep Approach are not conducted. NOTE: In case the brake temperature (BTMS) indications are not green, the landing gear should be left extended until the brake temperature (BTMS) indications turn to the green range for maximum brake temperature for gear retraction (BTMS digit 07 and is decreasing).

1. PLACARD (P)

A. Put a MAIN LANDING GEAR BAY OVERHEAT DETECTION LOOPS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For one or both inoperative main landing gear overheat detection loop(s), before each flight, do an inspection of the wheel brakes and make sure that they are cool to the touch.

3. OPERATIONS (O)

A. For one or both inoperative main landing gear overheat detection loop(s), do the steps that follow:

(1) Observe takeoff performance penalties in accordance with AFM Supplement 5 (Operation with airplane systems inoperative).

(2) Leave landing gear extended for a minimum of ten minutes after takeoff.

(3) Make sure that operations with Steep Approach are not conducted.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION				
15–05 Overhead CARGO BTL Panel				
1) FWD FIRE PBA Switch Guard	C	1	0	(O) May be damaged or missing provided live animals or temperature sensitive cargo is not carried in forward cargo compartment.
2) AFT FIRE PBA Switch Guard	C	1	0	(O) May be damaged or missing provided live animals or temperature sensitive cargo is not carried in aft cargo compartment.

1. PLACARD (P)

A. Put a OVERHEAD CARGO BTL PANEL INOPERATIVE placard on the CARGO BTL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative CARGO BTL panel FWD FIRE PBA or AFT FIRE PBA Switch Guard, establish and use procedures to make sure that all affected company personnel are aware of dispatch limitation.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
16–01	Lavatory Smoke Detection Systems				
1)	Lavatory not used by passengers	C	–	–	(M)(O) May be inoperative provided: (a) Associated FIREX Control Unit Channel is operative, (b) Associated lavatory is not used by passengers for any purpose, (c) Associated lavatory waste receptacle is empty, (d) Associated lavatory door is locked closed and placarded INOPERATIVE – DO NOT ENTER, (e) Associated lavatory is used only by crew members, (f) In-flight service waste bags are not stored in associated lavatory, and (g) For extended operations with passengers there are at least two serviceable lavatories on the aircraft. NOTE: Above-mentioned provisos are not intended to preclude crew member lavatory inspections, which must be detailed in (O) procedures.
2)	Operations without passengers	B	–	0	(O) For each lavatory, the lavatory smoke detection system may be inoperative for non-passenger carrying operations provided: (a) Crew members are the only occupants of the aircraft, (b) Occupants are briefed as to which smoke detection system(s) is/are inoperative, and (Cont'd)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION				
16–01 Lavatory Smoke Detection Systems (Cont'd)				(c) In-flight service waste bags are not stored in lavatory. NOTE: Above-mentioned provisos are not intended to preclude crew member lavatory inspections, which must be detailed in (O) procedures.

1. PLACARD (P)

A. Put a LAVATORY SMOKE DETECTOR INOPERATIVE placard on the affected lavatory door.

2. MAINTENANCE (M)

A. For an inoperative Lavatory Smoke Detector, do the steps that follow:

(1) Make sure that the lavatory waste receptacle is empty.

(2) For associated lavatory(ies):

(a) Close and lock the lavatory door.

(b) Put a INOPERATIVE – DO NOT ENTER placard on the lavatory door.

3. OPERATIONS (O)

A. For an inoperative Lavatory Smoke Detector (passengers carrying operations):

(1) For an inoperative forward Lavatory Smoke Detector as indicated by the INFO message
26 LAV SMOKE FAIL – FWD LAV A SMOKE DET INOP

Make sure the following INFO message is not displayed:

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A INOP

(2) For an inoperative aft Lavatory Smoke Detector as indicated by the INFO message
26 LAV SMOKE FAIL – AFT LAV C SMOKE DET INOP, or
26 LAV SMOKE FAIL – AFT LAV D SMOKE DET INOP, or
26 LAV SMOKE FAIL – AFT LAV E SMOKE DET INOP

Make sure the following INFO message is not displayed:

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B INOP

(3) The cabin crew must make sure that the associated lavatory door remains closed and locked

(4) Make sure that the associated lavatory is used by crew members only.

(5) In–flight, make sure that service waste bags are not stored in the associated lavatory.

(6) Make sure that the associated lavatory is inspected every 30 minutes for signs of smoke.

B. For an inoperative lavatory smoke detector (non–passenger carrying operations), do the steps that follow:

(1) Occupants must be briefed as to which smoke detection system is inoperative.

(2) Cabin crew to inspect associated lavatory every 30 minutes for signs of smoke.

(3) Cabin crew to make sure that in–flight waste service bags are not stored in associated lavatory.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION				
20–01 Portable Fire Extinguisher	D	–	–	(M)(O) Any in excess of those required by regulations may be inoperative or missing provided: (a) Inoperative fire extinguisher(s) is/are removed from passenger cabin and/or flight deck and its location is placarded INOPERATIVE, or it is removed from the installed location, secured out of sight and fire extinguisher and its installed location are placarded INOPERATIVE, (b) Required distribution is maintained in the passenger compartment and flight deck, and (c) Procedures are established to alert crew members of missing portable fire extinguishers.

1. PLACARD (P)

A. Put a PORTABLE FIRE EXTINGUISHER INOPERATIVE placard on the installed location of the inoperative portable fire extinguisher.

2. MAINTENANCE (M)

A. For an inoperative portable fire extinguisher, do the steps that follow:

(1) Make sure that the inoperative fire extinguisher is removed from the passenger cabin and/or flight compartment and its location is placarded INOPERATIVE, or it is removed from the installed location, secured out of sight, and the fire extinguisher and its installed location are placarded INOPERATIVE.

(2) Make sure that necessary distribution is kept in the passenger compartment and the flight compartment.

3. OPERATIONS (O)

A. For an inoperative portable fire extinguisher, create procedures to alert crew members of inoperative or missing fire extinguishers

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
22–10	Overhead ENGINE & APU FIRE Panel				
1)	APU FIRE PBA Switch Guard	C	1	0	May be inoperative, damaged or missing.

1. PLACARD (P)

A. Put a APU FIRE PBA SWITCH GUARD INOPERATIVE placard on the Engine and APU fire panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–01 Cargo Bay Fire Extinguisher, High Rate Discharge (HRD)					
1) Pressure Switch	C	1	1	0	(O) May be inoperative provided procedures are established and used to ensure that both cargo compartments remain empty, or are verified to contain only empty cargo handling equipment or ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a CARGO BAY FIRE EXTINGUISHER HRD PRESSURE SWITCH INOPERATIVE placard on the CARGO BTL panel.

2. MAINTENANCE (M)

A. Not required

3. OPERATIONS (O)

A. For an inoperative cargo bay fire extinguisher HRD pressure switch, operator shall establish and use a procedure that verifies that the two cargo compartments are empty or contain only empty cargo handling equipment or ballast.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–02	Cargo High Rate Discharge (HRD) Fire Extinguisher Cartridge Bridgewire				
1)	Forward (FWD) Bay Port				
A)	One bridgewire inoperative	C	2	1	One may be inoperative.
B)	Both bridgewires inoperative	C	2	0	(O) Both may be inoperative provided procedures are established and used to ensure that forward cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or Kevlar) of sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a FWD BAY PORT CARGO HRD FIRE EXTINGUISHER INOPERATIVE placard on the CARGO BTL panel

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For both forward cargo HRD fire–extinguisher cartridge–bridgewire inoperative , as indicated by the CAUTION message FWD CARGO BTL FAIL, create and use a procedure to make sure that the forward cargo compartment is empty or contains only empty cargo handling equipment, ballast, and/or Fly Away Kits.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–03 Cargo High Rate Discharge (HRD) Fire Extinguisher Cartridge Bridgewire					
1) AFT Bay Port					
A) One bridgewire inoperative	C	2	1		One may be inoperative.
B) Both bridgewires inoperative	C	2	0	(O)	Both may be inoperative provided procedures are established and used to ensure aft cargo compartment remains empty, or is verified to contain only empty cargo handling equipment or ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or Kevlar) of sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a AFT BAY PORT CARGO HRD FIRE EXTINGUISHER INOPERATIVE placard on the CARGO BTL panel

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative aft cargo HRD fire–extinguisher cartridge–bridgewire, create and use a procedure to make sure that the aft cargo compartment is empty or contains only empty cargo handling equipment, ballast, and/or Fly Away Kits.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–04 Cargo Bay Fire Extinguisher, Low Rate Discharge (LRD) 1					
1) Pressure Switch		C	1	0	(O) May be inoperative provided procedures are established and used to ensure that both cargo compartments remain empty, or are verified to contain only empty cargo handling equipment or ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or Kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a CARGO BAY FIRE EXTINGUISHER LRD 1 PRESSURE SWITCH INOPERATIVE placard on the CARGO BTL panel.

2. MAINTENANCE (M)

A. Not required

3. OPERATIONS (O)

A. For an inoperative cargo bay fire extinguisher LRD 1 pressure switch, operator shall establish and use a procedure that verifies that both cargo compartments are empty or contain only empty cargo handling equipment or ballast.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–06 Cargo Low Rate Discharge (LRD) 1 Fire Extinguisher Cartridge Bridgewire					
1) Forward (FWD) Bay Port					
A) One bridgewire inoperative		C	2	1	One may be inoperative.
B) Both bridgewires inoperative		C	2	0	(O) Both may be inoperative provided procedures are established and used to ensure forward cargo compartment remains empty, or is verified to contain only empty cargo handling equipment or ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a CARGO FIRE EXTINGUISHER LRD 1 CARTRIDGE BRIDGEWIRE INOPERATIVE placard on the CARGO BTL panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For dispatch with both FWD cargo LRD fire extinguisher cartridge bridgewire inoperative, as indicated by FWD CARGO BTL FAIL, create and use a procedure that verifies that the forward cargo compartment is empty or contains only empty cargo handling equipment or ballast.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
25–08 Cargo Low Rate Discharge (LRD) 1 Fire Extinguisher Cartridge Bridgewire					
1) AFT Bay Port					
A) One bridgewire inoperative	C		2	1	One may be inoperative.
B) Both bridgewires inoperative	C		2	0	(O) Both may be inoperative provided procedures are established and used to ensure aft cargo compartment remains empty, or is verified to contain only empty cargo handling equipment or ballast. NOTE: For ballast purposes, use of bags (made of glass fibre or kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a CARGO FIRE EXTINGUISHER CARTRIDGE BRIDGEWIRE LRD 1 INOPERATIVE placard on the CARGO BTL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For two inoperative aft cargo fire extinguisher cartridge bridgewire LRD 1, as indicated by the CAUTION message AFT CARGO BTL FAIL, create and use a procedure that verifies that the aft cargo compartment is empty or contains only empty cargo handling equipment or ballast.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
26 – FIRE PROTECTION					
26–00 Lavatory Fire Extinguishing Systems					
1) Lavatory used		C	–	–	(O) For each lavatory, the lavatory fire extinguishing system may be inoperative provided lavatory smoke detection system is operative.
2) Lavatory not used		C	–	–	(M)(O) May be inoperative provided: (a) Associated lavatory is not used by passengers for any purpose, (b) Associated lavatory waste receptacle is empty, (c) Associated lavatory door is locked closed and placarded INOPERATIVE – DO NOT ENTER, (d) Associated lavatory is used only by crew members, and (e) For extended operations with passengers there are at least two serviceable lavatories on the aircraft. NOTE: Above–mentioned provisos are not intended to preclude crew member lavatory inspections, which must be detailed in (O) procedures.

1. PLACARD (P)

A. Put a LAVATORY FIRE EXTINGUISHING SYSTEM INOPERATIVE placard on the affected lavatory door and on the flight attendant station.

2. MAINTENANCE (M)

A. For an inoperative lavatory fire extinguishing system, do the steps that follow:

(1) Make sure that the lavatory waste receptacle is empty,

(2) For associated lavatory(ies):

(a) Close and lock the lavatory door.

(b) Put a INOPERATIVE – DO NOT ENTER placard on the lavatory door.

3. OPERATIONS (O)

A. For an inoperative lavatory fire extinguishing system, do the steps that follow:

(1) The cabin crew shall do a visual inspection of the associated lavatory, every 30 minutes, for signs of smoke

(2) Make sure that the associated lavatory door remains locked and is not entered, except for use or inspection by crew members.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS				
00–01 Overhead Control Panel Cut Out Switch Light (light function only) PFCC 1(2)(3) “OFF”	D	3	0	May be inoperative.

1. PLACARD (P)

A. Put a OVERHEAD CONTROL PANEL CUT OUT SWITCH LIGHT 1 (or 2, or 3) INOPERATIVE placard on the PRIM FLT CTRL panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
00–02	PFCC 1(2)(3) Cut Out Switch Guards	C	3	1	May be damaged or missing provided: (a) At least one operative PFCC has a switch guard.

1. PLACARD (P)

A. Put a PFCC 1 (or 2, or 3) CUT OUT SWITCH GUARD INOPERATIVE placard on the PRIM FLT CTRL panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
01–05 Primary Flight Control Computer – Cut Out Switch					
1) Primary Flight Control Computer 1 (PFCC 1) – Cut Out Switch	C	1	0	(M)	May be inoperative provided: (a) Associated PFCC 1 is deactivated, and (b) Remaining two PFCCs are operative.
2) Primary Flight Control Computer 2 (PFCC 2) – Cut Out Switch	C	1	0	(M)	May be inoperative provided: (a) Associated PFCC 2 is deactivated, and (b) Remaining two PFCCs are operative.
3) Primary Flight Control Computer 3 (PFCC 3) – Cut Out Switch	C	1	0	(O)	May be inoperative provided: (a) Associated PFCC 3 is deactivated, (b) Remaining two PFCCs are operative, and (c) APU and APU Generator are operative and selected ON.

1. PLACARD (P)

A. Put a PFCC 1 (or 2, or 3) CUTOUT SWITCH INOPERATIVE placard on the PRIM FLT CTRL panel.

2. MAINTENANCE (M)

A. For an inoperative PFCC 1 cutout switch:

(1) Deactivate the associated PFCC 1 (refer to BD500–A–J27–04–05–01AAA–560A–A).

NOTE: Associated INFO message 27 FLT CTRL FAULT – PFCC 1 CUTOUT SW INOP and FLT CTRL FAULT (advisory) will clear. As a result, the associated EICAS message PFCC 1 FAIL (advisory) will be posted.

(2) Make sure that none of the EICAS/INFO messages that follow are shown for the remaining 2 PFCCs:

PFCC 2 (3) OFF (status)

PFCC 2 (3) FAIL (advisory)

27 FLT CTRL FAULT PFCC 2 (3) DEGRADED

B. For an inoperative PFCC 2 cutout switch:

(1) Deactivate the associated PFCC 2 (refer to BD500–A–J27–04–05–02AAA–560A–A).

NOTE: Associated INFO message 27 FLT CTRL FAULT – PFCC 2 CUTOUT SW INOP and FLT CTRL FAULT (advisory) will clear. As a result, the associated EICAS message PFCC 2 FAIL (advisory) will be posted.

(2) Make sure that none of the EICAS/INFO messages that follow are shown for the remaining 2 PFCCs:

PFCC 1 (3) OFF (status)

PFCC 1 (3) FAIL (advisory)

27 FLT CTRL FAULT PFCC 1 (3) DEGRADED

3. OPERATIONS (O)

A. For an inoperative PFCC 3 cutout switch, as indicated by the INFO message 27 FLT CTRL FAULT – PFCC 3 CUTOUT SW INOP:

(1) On Circuit Breaker panel 1, open the circuit breaker that follows:

L–CBP–B5 (PFCC 3)

NOTE: The PFCC 3 (Advisory) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 CUTOUT SW INOP and FLT CTRL FAULT (Advisory) messages will clear.

(2) Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

(3) Before each flight, make sure that APU and APU Generator are operative and selected ON.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
21–00 Rudder Pedals Adjustment Systems – Handles		D	2	0	(O) May be inoperative provided rudder pedals adjustment system is verified operative.

1. PLACARD (P)

A. Put a RUDDER PEDALS ADJUSTMENT SYSTEM HANDLE(S) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative rudder pedals adjustment handle, turn the wheel with your hand to move the rudder pedals to the correct position to agree with the pilot requirements.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
53–01	High Lift Select Lever (HLSL)				
1)	Slat Channel 1 RVDT (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	2	1	(O) One HLSL RVDT related to Slat Channel 1 may be inoperative provided: (a) Both Flap channels are operative, (b) Slat Channel 2 is operative, (c) SFECU Slat Channel 1 is deactivated, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane systems Inoperative), and (e) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.
2)	Slat Channel 1 RVDT (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	2	1	(O) One HLSL RVDT related to Slat Channel 1 may be inoperative provided: (a) Both Flap channels are operative, (b) Slat Channel 2 is operative, (c) SFECU Slat Channel 1 is deactivated, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane systems Inoperative), and (e) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.
3)	Flap Channel 2 RVDT (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	2	1	(O) One HLSL RVDT related to Flap Channel 2 may be inoperative provided: (a) Both Slat channels are operative, (b) Flap Channel 1 is operative, (c) SFECU Flap Channel 2 is deactivated, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
53–01 High Lift Select Lever (HLSL) (Cont'd)					(d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane systems Inoperative), and (e) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.
4) Flap Channel 2 RVDT (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	2	1	(O)	One HLSL RVDT related to Flap Channel 2 may be inoperative provided: (a) Both Slat channels are operative, (b) Flap Channel 1 is operative, (c) SFECU Flap Channel 2 is deactivated, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane systems Inoperative), and (e) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.
5) Panel Lightplate	C	1	0		May be inoperative.

1. PLACARD (P)

A. Put a HLSL LOSS OF REDUNDANT SIGNALS and/or a LIGHTPLATE INOPERATIVE placard on the SLAT/FLAP control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative HLSL Slat Channel 1 RVDT (A/C without SB BD500–314002 or Modsum RC500T101030), do the steps that follow:

(1) Confirm that one of the following Onboard Maintenance System (OMS) fault messages is displayed:

SLAT FLAP SELECTOR LEVER (A296) LANE 1 RVDT FAULT / REPORTED BY SFECU1A (SLAT CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) LANE 2 RVDT FAULT / REPORTED BY SFECU1A (SLAT CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) INVALID POSITION REPORTED BY SFECU 1A (SLAT CHANNEL)

(2) Open the CB that follows:

L–CBP–C1 (SLAT CH 1)

(3) Before each flight, make sure that none of the following CAS or INFO messages are displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(4) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 1 deactivation:

SLAT FAULT (advisory)**

FLAP FAULT (advisory)

FLAP SLOW (advisory)*

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS**

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 1 INOP*

NOTE: * This message will only appear after at least one engine is started.

** This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

(5) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(6) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

B. For an inoperative HLSL Slat Channel 1 RVDT (A/C with SB BD500–314002 or Modsum RC500T101030), do the steps that follow:

(1) Confirm that one of the following Onboard Maintenance System (OMS) fault messages is displayed:

SLAT FLAP SELECTOR LEVER (A296) LANE 1 RVDT FAULT / REPORTED BY SFECU1A (SLAT CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) LANE 2 RVDT FAULT / REPORTED BY SFECU1A (SLAT CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) INVALID POSITION REPORTED BY SFECU 1A (SLAT CHANNEL)

(2) Open the CB that follows:

L–CBP–C1 (SLAT CH 1)

(3) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 1 deactivation:

SLAT FAULT (advisory)**

FLAP FAULT (advisory)

SLAT SLOW (advisory)*

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS**

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 1 INOP*

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

NOTE: * This message will only appear after at least one engine is started.

** This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

(4) Before each flight, make sure that none of the following INFO messages are displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(5) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(6) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

C. For an inoperative HLSL Flap Channel 2 RVDT (A/C without SB BD500–314002 or Modsum RC500T101030), do the steps that follow:

(1) Confirm that one of the following Onboard Maintenance System (OMS) fault messages is displayed:

SLAT FLAP SELECTOR LEVER (A296) LANE 1 RVDT FAULT / REPORTED BY SFECU2B (FLAP CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) LANE 2 RVDT FAULT / REPORTED BY SFECU2B (FLAP CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) INVALID POSITION REPORTED BY SFECU 2B (FLAP CHANNEL)

(2) On Circuit Breaker Panel (CBP) 1, open the Circuit Breaker (CB) that follows:

L–CBP–C2 (FLAP CH 2)

(3) Before each flight, make sure that none of the following CAS or INFO messages are displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(4) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 2 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)**

FLAP SLOW (advisory)*

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS**

27 FLAP SLOW – CHAN 2 INOP*

NOTE: * This message will only appear after at least one engine is started.

** This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

(5) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(6) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

D. For an inoperative HLSL Flap Channel 2 RVDT (A/C with SB BD500–314002 or Modsum RC500T101030), do the steps that follow:

(1) Confirm that one of the following Onboard Maintenance System (OMS) fault messages is displayed:

SLAT FLAP SELECTOR LEVER (A296) LANE 1 RVDT FAULT / REPORTED BY SFECU2B (FLAP CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) LANE 2 RVDT FAULT / REPORTED BY SFECU2B (FLAP CHANNEL)

SLAT FLAP SELECTOR LEVER (A296) INVALID POSITION REPORTED BY SFECU 2B (FLAP CHANNEL)

(2) On Circuit Breaker Panel (CBP) 1, open the Circuit Breaker (CB) that follows:

L–CBP–C2 (FLAP CH 2)

(3) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 2 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)**

FLAP SLOW (advisory)*

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS**

27 FLAP SLOW – CHAN 2 INOP*

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

NOTE: * This message will only appear after at least one engine is started.

** This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

(4) Before each flight, make sure that none of the following INFO messages are displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(5) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(6) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS					
61–01 Ground Spoiler (GS) System		C	1	0	(M)(O) May be inoperative provided: (a) Ground Spoiler Actuators are retracted and Ground Spoiler Control Module is disabled, (b) GS lock-down mechanism is confirmed operative, (c) Inoperative ground spoiler surfaces are verified retracted prior to each flight, (d) All multifunction spoiler surfaces are operative, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a GROUND SPOILER SYSTEM INOPERATIVE placard on the SPOILER control panel.

2. MAINTENANCE (M)

A. For an inoperative ground spoiler system, do the steps that follow:

(1) Deactivate the Ground Spoiler Control Module (GSCM) (refer to BD500–A–J27–63–01–01AAA–560A–A).

(2) Do the test that follows to make sure that the ground spoiler lock–down function is operational:

(a) Move High Lift surfaces to position 5 (in order to gain access to spoiler surfaces).

(b) Turn the three hydraulic systems to OFF.

(c) Access GS panels from below, and attempt to push panels up.

(d) Make sure that the GS panels do not move from the retracted position.

(e) Restore the aircraft to its original configuration.

3. OPERATIONS (O)

A. For an inoperative ground spoiler system, do the steps that follow before each flight:

(1) Apply performance penalty (take–off and landing distance) in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(2) Do a visual inspection to make sure that ground spoiler surfaces are fully retracted.

NOTE: 27 FLT CTRL FAULT – GND SPOILER INOP info message will be displayed once the system is deactivated. The message will clear at aircraft power up but will be reinstated as 27 FLT CTRL FAULT – GND SPOILER INOP if/when ground spoilers are checked (manual deployment on ground via spoiler lever command selection to FULL position).

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 – FLIGHT CONTROLS				
62–01 Multi-Function Spoiler (MFS) #1 System	A	1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) MFS 1 REU is deactivated, (b) Ground Spoiler System is operative, (c) Left and Right MFS 1 PCU lock–down mechanisms are confirmed operative, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted. (f) Autoland Operations are not conducted. (g) Aircraft is not powered down. (h) Electronic FCS Test (PBIT) is not performed, and (i) May be inoperative for one calendar day.

1. PLACARD (P)

A. Put a MULTI FUNCTION SPOILER #1 SYSTEM INOPERATIVE placard on the SPOILER control panel.

2. MAINTENANCE (M)

A. For an inoperative MFS #1 system:

(1) Deactivate the MFS #1 (refer to BD500–A–J27–64–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative MFS #1 system, do the steps that follow before each flight:

(1) Apply performance penalty (take–off and landing distances, altitude limitation) in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
00–01 Fuel System Synoptic Page Indications		C	–	–	Indications other than fuel quantity and fuel temperature on FUEL synoptic page may be inoperative with no limitations. NOTE 1: Any portion of FUEL synoptic page that is operative may be used. NOTE 2: For fuel quantity and temperature indications, refer to specific items in section 1 or section 2.

1. PLACARD (P)

A. Put a FUEL SYSTEM SYNOPTIC PAGE INDICATIONS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
11–15	Water Drain Valves				
1)	At least one center tank water drain valve is operative	C	6	3	(M) One or more may be inoperative provided: (a) Water drain valve at each collector tank is operative, (b) One water drain valve in center tank is operative, and (c) There is no evidence of leakage.
2)	Both center tank water drain valves are inoperative	C	6	2	(M) One or more may be inoperative provided: (a) Water drain valve at each collector tank is operative, (b) There is no evidence of leakage, and (c) Center tank remains empty.

1. PLACARD (P)

A. Put a WATER DRAIN VALVE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative water drain valve, do the operation test of the Lightning safe fuel drain valve, to make sure that there is no fuel leak (refer to BD500–A–J28–11–15–01AAA–320A–A)

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL				
12–05 Fuel Tank Pressure Relief Valves (PRVs)	C	3	0	(M) One or more PRVs for the wing tanks may be inoperative provided: (a) Affected Valve is verified closed, (b) Fuel Venting System is verified operative before each flight, (c) Following messages are not displayed: 28 FUEL FAULT – FUEL GAUGING SNSR INOP 28 FUEL FAULT – GAUGING SNSR SHORT CIRCUIT, (d) Fuel quantity indications on Engine Indicating and Crew Alerting System (EICAS) are operative, and (e) PRVs for center tanks are operative.

1. PLACARD (P)

A. Put a FUEL TANK PRESSURE RELIEF VALVE INOPERATIVE placard on the REFUEL / DEFUEL PANEL.

2. MAINTENANCE (M)

A. For an inoperative fuel tank pressure relief valve.

(1) Make sure that there is no leak at the applicable fuel tank relief valve.

(2) Before each flight, make sure that the fuel venting system is operative as follows:

(a) During refuelling, make sure that air comes out of the NACA scoops.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
21–55 Auxiliary Power Unit (APU) Fuel Feed Shutoff Valve (SOV) Actuator		C	1	0	(M) Except for extended operations, may be inoperative provided: (a) APU Fuel Feed Shutoff Valve (SOV) is secured CLOSED, and (b) APU is considered inoperative.

1. PLACARD (P)

A. Put a APU FUEL FEED SHUTOFF VALVE INOPERATIVE / APU CONSIDERED INOPERATIVE placard on the APU control panel.

2. MAINTENANCE (M)

A. For an inoperative Auxiliary Power Unit (APU) Fuel Shutoff Valve (SOV):

(1) On the Electrical Power Center (EPC) 1 open the circuit breaker that follows (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–B6 (APU FUEL SOV)

(2) Gain access to the APU Fuel Feed Shutoff Valve (SOV) Actuator and set the actuator manual lever to the CLOSED position.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
22–03	Overhead FUEL Control Panel PBA Switch Lights (light function only)				
1)	FUEL GRAV XFR “ON”	C	1	0	May be inoperative.

1. PLACARD (P)

A. Put a FUEL CONTROL PANEL PBA SWITCH LIGHTS (LIGHT FUNCTION ONLY) INOPERATIVE placard on the FUEL control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
22–04 Center Tank Fuel Transfer Systems		C	2	0	(M)(O) Except for extended operations, one or both may be inoperative provided center tank is empty.

1. PLACARD (P)

A. Put a CENTER TANK FUEL TRANSFER SYSTEMS INOPERATIVE placard on the FUEL control panel.

2. MAINTENANCE (M)

A. For an inoperative center tank fuel transfer system, if necessary, defuel the center tank (refer to BD500–A–J12–10–28–01AAA–221A–A or BD500–A–J12–10–28–02AAA–221A–A).

3. OPERATIONS (O)

A. For an inoperative center tank fuel transfer system, do not transfer fuel to the center tank during flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
22–15 Gravity Transfer Shutoff Valve (SOV)	C	1	0	(M)	Except for extended operations, may be inoperative provided: (a) Defuel/Isolation Transfer SOV is operative, (b) Left Boost Pump and Right Boost Pump are operative, (c) Center/Right/Left fuel tank refuel systems are operative, and (d) Gravity Transfer Shutoff Valve (SOV) is secured closed.

1. PLACARD (P)

A. Put a GRAVITY TRANSFER SHUTOFF VALVE (SOV) INOPERATIVE placard on the FUEL control panel.

2. MAINTENANCE (M)

A. For an inoperative gravity transfer SOV, deactivate the gravity transfer SOV actuator in the CLOSED position (refer to BD500–A–J28–22–20–01AAA–560A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
23–02 L AC Boost Pump	B	1	0	(M)(O)	Except for extended operations, may be inoperative provided: (a) Left AC Boost Pump is selected to AUTO before flight, (b) Left AC Boost Pump is deactivated, (c) Right AC Boost Pump is selected to AUTO before each flight, (d) Left and Right Engine Feed primary Ejector Pumps are verified operative before each flight, (e) None of the following messages is displayed: R BOOST PUMP FAIL (advisory) FUEL GRAV XFR FAIL (advisory) 28 FUEL FAULT – DEFUEL/XFR SOV INOP (info), (f) Procedures are established and used to correct aircraft lateral fuel imbalance when required, (g) APU is started before departure and operated continuously throughout the flight, (h) Both wing tanks fuel quantity of at least 5400 lbs is maintained throughout the flight, and (i) Flight is conducted at or below 22 000 ft. MSL and bulk fuel temperature at takeoff to be below 25 deg C. NOTE: As long as there is fuel in the center tank throughout the flight, 5400 lbs wing tanks fuel quantity is achieved automatically.

1. PLACARD (P)

A. Put a L AC BOOST PUMP INOPERATIVE placard on the FUEL control panel.

2. MAINTENANCE (M)

A. For an inoperative Left Boost Pump, deactivate the pump as follows:

(1) Get access to the Forward Avionics Compartment (refer to BD500–A–J52–42–00–01AAA–540A–A).

(2) On the Electronic Power Center 3 (EPC 3), open and collar the circuit breaker that follows (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC3–F1 (L FUEL PUMP)

3. OPERATIONS (O)

A. For an inoperative Left Boost Pump, do as follows:

(1) Before each flight, on the FUEL control panel

(a) Set the L BOOST PUMP switch to AUTO.

(b) Set the R BOOST PUMP switch to AUTO.

(2) After engine start, do the operational test of each engine–feed primary ejector as follows:

(a) On the FUEL synoptic page, make sure that the icon of the engine–feed primary ejector–pump, on each side, becomes green and stays green while the applicable engine is running.

(b) On the EICAS, make sure that the messages that follows are not shown:

L FUEL EJECTOR FAIL (advisory)

R FUEL EJECTOR FAIL (advisory)

(3) Before each flight, make sure that the messages that follows are not shown:

R BOOST PUMP FAIL (advisory)

FUEL GRAV XFR FAIL (advisory)

28 FUEL FAULT – DEFUEL/XFR SOV INOP (info)

(4) Establish and use procedures to correct aircraft lateral fuel imbalance, when required.

(5) Start and operate the APU continuously during flight.

(6) Make sure that the quantity of fuel in both wing tanks is maintained at 5,400 lbs. throughout the flight.

(7) Make sure that flight is conducted at or below 22,000 ft. MSL and bulk fuel temperature is below 25 degrees C during takeoff.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
23–05	Defuel/Isolation Transfer Shutoff Valve (SOV)				
1)	Defuel/Isolation Transfer Shutoff Valve (SOV) secured closed	C	1	0	Except for extended operations, may be inoperative provided: (a) Affected valve is secured closed, (b) AC boost pumps are operative, and (c) Gravity transfer SOV is operative. NOTE: Manual fuel transfer function will not be available.
2)	Defuel/Isolation Transfer Shutoff Valve (SOV) failed open	C	1	0	(O) Except for extended operations, may be inoperative open provided: (a) Refuel SOVs are verified operative, (b) AC boost pumps are operative, (c) Gravity transfer SOV is operative, and (d) All fuel tank indications on EICAS are operative.
3)	Position Indication (microswitches)	C	1	0	(M)(O) May be inoperative provided: (a) Associated valve is verified operative once each flight day, (b) All fuel tank quantity indications on EICAS are operative, and (c) Gravity transfer SOV is operative.

1. PLACARD (P)

A. Put a DEFUEL/ISOLATION TRANSFER SHUTOFF VALVE (SOV) OR POSITION INDICATION INOPERATIVE placard on the FUEL control panel.

2. MAINTENANCE (M)

A. For an inoperative defuel/isolation transfer SOV position indication, do the steps that follow before each flight day:

(1) Get access to the defuel/isolation transfer SOV and the position indicator.

(2) Establish communication with the flight compartment.

(3) Make sure that the MAN XFR switch, on the FUEL control panel, is in the OFF position, and that the indicator on the valve actuator shows the CLOSED position.

(4) Set the MAN XFR switch, on the FUEL control panel, to the L or the R position and make sure that the indicator on the valve actuator shows the OPEN position.

NOTE: For extended operations, the maintenance (M) procedure must be done before each flight.

3. OPERATIONS (O)

A. For a fuel imbalance.

NOTE 1: Use the Gravity SOV to correct fuel imbalance.

NOTE 2: If fuel imbalance message is displayed and a boost pumps starts, the applicable boost pump should be selected off, if the fuel imbalance message continues to show.

B. To make sure that the refuel SOVs are operative, on the FUEL control panel, do the steps that follow before each flight day:

(1) Do a manual fuel transfer from the left wing tank to the right wing tank as follows:

(a) Set the MAN XFR switch to the R position.

(b) Set the L BOOST PUMP switch to ON.

(c) Make sure that the FUEL MAN XFR FAIL caution message is not displayed.

(d) Set the L BOOST PUMP switch to OFF.

(2) Do a manual fuel transfer from the right wing tank to the left wing tank as follows:

(a) Set the MAN XFR switch to the L position.

(b) Set the R BOOST PUMP switch to ON.

(c) Make sure that the FUEL MAN XFR FAIL caution message is not displayed.

(d) Set R BOOST PUMP switch to OFF.

(3) Do a manual fuel transfer from the right wing tank or the left wing tank to the center tank as follows:

(a) Set the MAN XFR switch to the CTR position.

(b) Set the L BOOST PUMP or the R BOOST PUMP switch to ON.

(c) Make sure that the FUEL MAN XFR FAIL caution message is not displayed.

(d) Set the L BOOST PUMP or the R BOOST PUMP switch to OFF.

(e) Set the MAN XFR switch to the OFF.

(f) Set the L BOOST PUMP and the R BOOST PUMP switch to AUTO/OFF, as applicable.

C. For an inoperative defuel/isolation transfer SOV position indication (micro–switches), do the steps that follow during manual fuel transfer operations:

(1) Make sure that the wing fuel quantity indications on the EICAS fuel synoptic page are operative.

(2) Make sure that the fuel quantity of one wing tank increases and the fuel quantity of the other wing tank decreases.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL				
23–20 Refuel/Defuel Adapter Cap				
1) Right Wing Side	C	1	0	(M) Except for extended operations, may be inoperative or missing provided there is no evidence of fuel leaking from the Refuel/Defuel adaptor while the manual fuel transfer is operated once each flight day.
2) Left Wing Side ***	C	1	0	(M) Except for extended operations, may be inoperative or missing provided there is no evidence of fuel leaking from the Refuel/Defuel adaptor while the manual fuel transfer is operated once each flight day.

1. PLACARD (P)

A. Put a L and/or R REFUEL/DEFUEL ADAPTER CAP INOPERATIVE (MISSING) placard on the REFUEL / DEFUEL PANEL.

2. MAINTENANCE (M)

A. For an inoperative or missing Refuel/Defuel Adapter Cap, once each flight day, make sure there is no evidence of fuel leaking from the affecetd Refuel/Defuel Adaptor as follows:

(1) Pressurize the fuel system by doing a manual fuel transfer to the center tank.

NOTE 1: On the REFUEL / DEFUEL PANEL, make sure the ON/OFF switch is set to OFF.

NOTE 2: The REFUEL / DEFUEL PANEL door must be closed prior to manual fuel transfer.

NOTE 3: Make sure that there is a minimum of 1500 lbs. (680.39 kg) of fuel in each fuel wing tank, and make sure there is enough space in the center tank to allow fuel transfer.

(2) Establish communication between the flight deck and the Fuel/Defuel Panel position.

(3) On the FUEL control panel, select:

(a) L BOOST PUMP and R BOOST PUMP to AUTO.

(b) MAN XFR to CTR.

(4) On the FUEL synoptic page, make sure that the indications below are shown:

(a) The left and right boost pump boxes shows green.

(b) The DEFUEL/ISOLATION/XFR Shut–Off Valve (SOV) is OPEN.

(c) The CENTER REFUEL SOV is OPEN.

(5) On the EICAS display, make sure that FUEL MAN XFER TO CTR (status) message is shown.

(6) Make sure that the fuel quantity increases in the center tank.

(7) Simultaneously at the Fuel/Defuel Panel, and while the system is pressurized, make sure there is no indication of fuel leaking from the affected Refuel/Defuel adaptor.

(8) On the FUEL control panel, select:

(a) MAN XFR to OFF.

(b) L BOOST PUMP and R BOOST PUMP to OFF.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
23–25 Refuel Shutoff Valve (SOV)					
1) Left/Right Wing Tank	B		2	1	Except for extended operations, one may be inoperative closed provided: (a) Boost pumps are operative, (b) Gravity Transfer Shutoff Valve (SOV) is operative, and (c) Both center tank fuel transfer systems are operative. NOTE: Refueling of affected wing tank will not be possible.
2) Center Tank	C		1	0	Except for extended operations, may be inoperative closed. NOTE: Refueling the center tank will not be possible.

1. PLACARD (P)

A. Put a REFUEL SHUTOFF VALVE INOPERATIVE placard on the REFUEL / DEFUEL PANEL.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
23–30	Refuel / Defuel Control panel				
1)	Fuel Quantity Display Indications	C	4	0	(O) One or more may be inoperative provided: (a) Pressure Refueling System Manual Mode is operative and used, and (b) Fuel quantity for each fuel tank is verified on EICAS during refueling.
2)	Pre Select Quantity	C	1	0	(O) May be inoperative provided pressure refueling system manual mode is operative and used.
3)	Auto Mode	C	1	0	May be inoperative provided pressure refueling system manual mode is operative and used.
4)	Manual Mode	C	1	0	May be inoperative provided pressure refueling system auto mode is operative and used.
5)	Start/Stop Selector	C	1	0	May be inoperative provided pressure refueling system manual mode is operative and used.
6)	Manual REFUEL/DEFUEL Switch (DEFUEL Position)	C	1	0	(O) May be inoperative provided: (a) Defuel/Isolation Transfer Shutoff Valve (SOV) is verified closed before each flight, and (b) Alternate defueling procedures are established and used.

1. PLACARD (P)

A. Put a REFUEL / DEFUEL PANEL (XXX) INOPERATIVE placard on the REFUEL / DEFUEL PANEL.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative REFUEL / DEFUEL PANEL fuel quantity display indications, do the steps that follow during refueling or defueling:

(1) Monitor the EICAS or the FUEL synoptic page fuel quantity indications.

(2) Establish direct communication between the refuel truck and the flight compartment.

B. For an inoperative REFUEL / DEFUEL PANEL preselect quantity:

(1) Use the manual pressure refuel method.

(2) For aircraft equipped with the Flight Deck Virtual Refuel Panel, fuel preselection may be done from the cockpit and automatic pressure refuel may be used as follows:

(a) On the REFUEL / DEFUEL PANEL, set the ON/OFF switch to ON.

(b) On the REFUEL / DEFUEL PANEL, set the AUTO/MANUAL switch to AUTO.

(c) Preselect the fuel quantity from the cockpit:

1 At the bottom of the FUEL synoptic page, select CKPT on the Virtual Refuel Panel.

2 Enter the required fuel quantity in the REQUESTED field, then press ENTER.

NOTE: When the preselection of fuel is complete on the Virtual Preselect Panel, the COCKPIT message and the quantity of fuel requested are displayed alternately on the PRESEL window of the REFUEL / DEFUEL panel.

(3) Once the preselected fuel quantity is displayed on the PRESEL window of the REFUEL / DEFUEL PANEL, continue with the normal automatic pressure refuel procedure.

C. For an inoperative REFUEL / DEFUEL PANEL manual REFUEL/DEFUEL switch (DEFUEL position), before each flight, do the steps that follow:

(1) Select the FUEL synoptic page.

(2) Make sure that the Defuel/Isolation Shutoff Valve (SOV) indication shows closed.

(3) If defueling a wing tank is necessary before a repair, do the steps that follow:

(a) If possible, it is recommended that you use the manual fuel transfer function to transfer the fuel from the wing tank to the center tank.

(b) If possible, it is recommended that you defuel the center tank through the Manual Defuel Valve (refer to BD500–A–J12–10–28–01AAA–221A–A or BD500–A–J12–10–28–02AAA–221A–A).

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
23–31	Flight Deck Virtual Refuel Panel ***	D	1	0	May be inoperative.

1. PLACARD (P)

A. Put a FLIGHT DECK VIRTUAL REFUEL PANEL INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL					
41–01 EICAS Fuel Quantity Indication System					
1) Wing Tanks	C		2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Fuel quantity and balance are verified before each flight, (b) FUEL USED on FUEL synoptic page is operative, (c) Flight Management Systems (FMS 1 and FMS 2) are operative, (d) Fuel quantity indication for the center tank is operative, (e) Gravity transfer shutoff valve (SOV) is operative, (f) Manual fuel transfer system is operative, (g) Center Tank Fuel Transfer Systems are operative, (h) Low fuel indication is verified operative, (i) None of the following messages are displayed: 28 FUEL FAULT – L WING RDC INOP, 28 FUEL FAULT – R WING RDC INOP, L FUEL FLOW DEGRADED, R FUEL FLOW DEGRADED, and (j) Alternate procedures for monitoring fuel load during refueling are established and used. NOTE: Total fuel quantity will not be indicated.
2) Center Tank	C		1	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Center Tank Fuel Transfer Systems are operative, (Cont'd)

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 – FUEL				
41–01	EICAS Fuel Quantity Indication System (Cont'd)			(b) Center tank is verified empty before each flight, and (c) Center tank is not refueled. NOTE: Total fuel quantity will not be indicated.

1. PLACARD (P)

A. Put a FUEL QUANTITY EICAS INDICATIONS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative EICAS fuel quantity indication in the wing tanks, do the steps that follow before each flight:

(1) Defuel the affected tank and refuel with known quantity of fuel (refer to BD500–A–J12–10–28–01AAA–221A–A or BD500–A–J12–10–28–02AAA–221A–A and BD500–A–J12–10–28–01AAA–211A–A or BD500–A–J12–10–28–02AAA–211A–A).

(2) During the defueling operation, make sure that low fuel indication L FUEL LO QTY caution message or R FUEL LO QTY caution message is shown for the affected wing tank when the quantity is below 975 lbs (442.25 Kg).

NOTE: Limit the amount of fuel in the affected tank to 6675 lbs (3028 Kg). The fuel computer may not stop the refueling if a high level is reached.

B. For an inoperative EICAS fuel quantity indication in the center tank, defuel the center tank from the manual defuel valve on the center tank (refer to BD500–A–J12–10–28–01AAA–221A–A).

3. OPERATIONS (O)

A. Fuel Log For Dispatch With One Wing Tank Quantity Inoperative Table

(1)	INITIAL FUEL LOAD											
Time in Flight		0+00	0+30	1+00	1+30	2+00	2+30	3+00	3+30	4+00	4+30	5+00
Fuel Remaining in Tanks with Operative Quantity Readouts	L											

Fuel Remaining in Tanks with Operative Quantity Readouts		R										
Fuel Remaining in Tanks with Operative Quantity Readouts		C										
(2)	TOTAL (Operative Quantity Readouts)											
(3)	TOTAL FUEL USED (from Fuel Synoptic Page)											
(4)	TOTAL FUEL ACCOUNTED FOR (Line 2+Line 3)											
	FUEL REMAINING IN AFFECTED TANK (Line 1–Line 4)											

B. For an inoperative Wing Tank EICAS Fuel Quantity Indication, do the steps that follow:

(1) In the event of engine failure, obey AFM fuel imbalance limitations.

(2) Every 30 minutes, during flight, calculate the fuel remaining in the affected tank using the flight fuel log (refer to table below).

C. For an inoperative Center Tank EICAS Fuel Quantity Indication, before each flight, make sure the center is empty as follows:

(1) Make sure there is no more than 5000 lbs (2268 kg) of fuel in each wing tank.

NOTE: Fuel transfer from center tank is inhibited when the fuel level in the applicable wing tank is above the fuel transfer float valve, approximately 5000 lbs (2268 kg).

CAUTION: Maximum test duration with engines and APU operative should not exceed 10 minutes as it can cause damage to the equipment.

(2) On the FUEL control panel, do the steps that follow:

(a) Set the L BOOST PUMP switch to ON.

(b) Set the R BOOST PUMP switch to ON.

(3) Access the FUEL synoptic page.

(4) Make sure that the quantity of fuel in the left wing tank and in the right wing tank does not increase.

NOTE: This procedure is not required if the center tank is defueled before the intended flight.

(5) If necessary, complete the refueling of the wing tanks with the required fuel quantity for the intended flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–01 Power Transfer Unit (PTU) Switch					
1) AUTO position		C	1	0	(O) May be inoperative provided: (a) PTU is verified operative in the ON position before each flight, and (b) PTU is selected ON before takeoff and landing.

1. PLACARD (P)

A. Put a PTU AUTO MODE SWITCH INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative PTU switch AUTO position, do the steps that follow:

(1) Before each flight:

(a) On the HYDRAULIC panel, set the PTU switch to the ON position.

(b) Make sure that the HYD PTU ON status message is shown.

(2) Before takeoff, make sure that the PTU switch is set to the ON position.

NOTE: If right engine taxi is conducted, make sure that the PTU switch is set to the ON position before taxi.

(3) After takeoff and climb, set the PTU switch to the OFF position.

(4) Before landing, set the PTU switch to the ON position.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–02	AC Motor Pump (ACMP) No.2B Switch				
1)	AUTO Position	C	1	0	(O) May be inoperative provided ACMP 2B is selected ON during entire flight.

1. PLACARD (P)

A. Put a ACMP 2B AUTO MODE SWITCH INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ACMP HYD 2 2B switch AUTO position, do the steps that follow before takeoff:

(1) On the HYDRAULIC control panel, set the HYD 2 2B switch to the ON position and leave it ON for the entire flight.

(2) Make sure that HYD PUMP 2B ON status message is shown.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–03 AC Motor Pump (ACMP) No.3A Switch					
1) AUTO Position	C		1	0	(O) May be inoperative provided ACMP 3A is selected ON during entire flight.

1. PLACARD (P)

A. Put a ACMP 3A AUTO MODE SWITCH INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ACMP HYD 3 3A switch AUTO position, do the steps that follow before takeoff:

(1) On the HYDRAULIC control panel, set the HYD 3 3A switch to the ON position for the entire flight.

(2) Make sure that HYD PUMP 3A ON status messages is shown.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–04	AC Motor Pump (ACMP) No.3B Switch				
1)	AUTO Position	C	1	0	(O) May be inoperative provided ACMP 3B is selected ON during entire flight.

1. PLACARD (P)

A. Put a ACMP 3B AUTO MODE SWITCH INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ACMP HYD 3 3B switch AUTO position, do the steps that follow before takeoff:

(1) On the HYDRAULIC control panel, set the HYD 3 3B switch to the ON position and leave it ON for the entire flight.

(2) Make sure that HYD PUMP 3B ON status message is shown.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–05 Pressure Filter Manifold					
1) Differential Pressure Indicators (DPI), Systems 1, 2 and 3	C	3	2	(M)	One may be inoperative provided: (a) Case Drain and Return filters DPI of associated system are verified for non–activated condition, and (b) Associated filter element is replaced.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM 1 (2)(3) PRESSURE FILTER MANIFOLD DPI INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic system pressure filter manifold DPI, do the steps that follow:

(1) For systems 1 or 2, replace associated filter element (refer to BD500–A–J29–11–09–01AAA–921B–A).

(2) For system 3, replace associated filter element (refer to BD500–A–J29–12–15–01AAA–921B–A).

(3) Make sure that the red indicators of the case drain and return filter DPIs, of the affected system, are not activated.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–06 Case Drain Filter Manifold					
1) Differential Pressure Indicators (DPI), Systems 1, 2 and 3		C	6	0	(M) One or more may be inoperative provided: (a) Pressure and Return filters DPI of associated system are verified for non-activated condition, (b) Associated filter element is replaced, and (c) Associated Synoptic page Pressure indication is operative.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM 1 (2)(3) CASE DRAIN FILTER DIFFERENTIAL PRESSURE INDICATOR INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic system case drain filter manifold DPI, do the steps that follow:

(1) For systems 1 and/or 2, replace associated filter element(s) (refer to BD500–A–J29–11–40–01AAA–921B–A).

(2) For system 3, replace associated filter element(s) (refer to BD500–A–J29–12–36–01AAA–921B–A).

(3) Make sure that the red indicators of the pressure and return filter DPIs, of the affected system, are not activated.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–07 Return Filter Manifold					
1) Differential Pressure Indicators (DPI), Systems 1, 2 and 3		C	3	0	(M) One or more may be inoperative provided: (a) Pressure and Case Drain filters DPI of associated system are verified for Non–Activated condition, and (b) Associated filter element is replaced.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM 1 (2)(3) RETURN FILTER MANIFOLD DPI INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic system return filter manifold DPI, do the steps that follow:

(1) For systems 1 and/or 2, replace associated filter element(s) (refer to BD500–A–J29–11–46–01AAA–921B–A).

(2) For system 3, replace associated filter element (refer to BD500–A–J29–12–40–01AAA–921B–A).

(3) Make sure that the red indicators of the pressure and return case drain filter DPIs, of the affected system, are not activated.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
11–30	Hydraulic Reservoir Quantity Level Transducers (Systems 1, 2 and 3)	C	3	0	(M)(O) One or more may be inoperative provided: (a) Affected Hydraulic Reservoir Quantity Level Transducer is deactivated, (b) Associated Hydraulic System reservoir quantity is visually verified once each flight day, (c) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (d) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM 1 (2)(3) RESERVOIR QUANTITY LEVEL TRANSDUCER INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic-reservoir quantity-level transducer, deactivate the applicable quantity level transducer(s):

(1) For Hydraulic System 1, refer to BD500–A–J29–11–30–01AAA–560A–A.

(2) For Hydraulic System 2, refer to BD500–A–J29–11–30–02AAA–560A–A.

(3) For Hydraulic System 3, refer to BD500–A–J29–12–30–01AAA–560A–A.

B. Once each flight day, make sure that quantity level of the inoperative hydraulic reservoir is correct (refer to BD500–A–J29–11–30–01AAA–200B–A).

3. OPERATIONS (O)

A. For a subsequent in–flight failure:

(1) If HYD 1 LO PRESS (caution) is displayed, apply AFM Supplement 5 (Operation with Airplane Systems Inoperative).

(2) If HYD 2 LO PRESS (caution) is displayed, apply AFM Supplement 5 (Operation with Airplane Systems Inoperative).

(3) If HYD 3 LO PRESS (caution) is displayed, apply AFM Supplement 5 (Operation with Airplane Systems Inoperative).

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER				
12–30 Maintenance Free Accumulator (MFA) (System 1 and System 2)	C	2	0	(M) One or both may be inoperative provided: (a) Associated Hydraulic Reservoir Bleed/Relief valve is operative, and (b) Associated reservoir is bled.

1. PLACARD (P)

A. Put a HYDRAULIC RESERVOIR ACCUMULATOR(S) 1 (2) INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic reservoir accumulator, do the hydraulic bleed procedure (refer to BD500–A–J12–10–29–01AAA–231A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
12–32 Hydraulic Reservoir Bleed/Relief Valve		C	3	2	(M) One may be inoperative provided affected Hydraulic Reservoir Bleed/Relief Valve has no evidence of leakage.

1. PLACARD (P)

A. Put a HYDRAULIC RESERVOIR 1 (2)(3) BLEED/RELIEF VALVE INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic reservoir bleed/relief valve, do the steps that follow:

(1) Make sure that there are no evidence of leaks on the inoperative valve.

(2) If necessary, bleed the associated hydraulic system (refer to BD500–A–J12–10–29–01AAA–231A–A and/or BD500–A–J12–10–29–02AAA–231A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
12–52 Hydraulic Accumulator Pressure Gauge System No. 3	C	2	0	(O)	One or both may be inoperative provided: (a) Associated accumulator is verified to not have degraded pressure before each flight, and (b) Associated accumulator pressure sensor/transducer is verified operative before each flight.

1. PLACARD (P)

A. Put a HYDRAULIC ACCUMULATOR 1 (2) PRESSURE GAUGE SYSTEM NO. 3 INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative system No. 3 hydraulic accumulator pressure gauge, do the steps that follow before each flight:

(1) Make sure that none of the messages that follow are shown:

29 HYDRAULIC FAULT – HYD 3 ACCUM 1 PRESS DEGRADED

29 HYDRAULIC FAULT – HYD 3 ACCUM 2 PRESS DEGRADED

(2) If system No. 3 Hydraulic Accumulator No. 1 Pressure Gauge is inoperative, make sure that the message that follows is not shown:

29 HYDRAULIC FAULT – HYD 3 ACCUM 1 SNSR INOP

(3) If system No. 3 Hydraulic Accumulator No. 2 Pressure Gauge is inoperative, make sure that the message that follows is not shown:

29 HYDRAULIC FAULT – HYD 3 ACCUM 2 SNSR INOP

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
13–01	Overhead HYD Control Panel Pushbutton Annunciator (PBA) Switchlights (light function only)				
1)	HYD 1(2) SOV – CLSD	C	2	0	(O) One or both may be inoperative provided associated valve position is verified on EICAS, if commanded closed.

1. PLACARD (P)

A. Put a HYDRAULIC 1 (2) SOV PBA SWITCHLIGHT INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative HYDRAULIC control panel PBA switchlight, do the steps that follow:

(1) If HYD 1 SOV is commanded closed, make sure that HYD 1 SOV CLSD (status) message is shown on EICAS.

(2) If HYD 2 SOV is commanded closed, make sure that HYD 2 SOV CLSD (status) message is shown on EICAS.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
14–03 Ground Servicing Panel					
1) Fill Quick Disconnects	C		3	0	(M) One or more may be inoperative provided affected Fill Quick Disconnects have no evidence of leakage.

1. PLACARD (P)

A. Put a GROUND SERVICING PANEL – FILL QUICK DISCONNECT INOPERATIVE placard on the ground servicing panel.

2. MAINTENANCE (M)

A. For an inoperative ground servicing panel quick disconnect, make sure that the affected fill quick disconnect has no sign of leakage.

3. OPERATIONS (O)

A. Not required

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
14–05 Ground Servicing Panel					
1) Pressure Quick Disconnects	C		3	0	(M) One or more may be inoperative provided affected Pressure Quick Disconnects have no evidence of leakage.

1. PLACARD (P)

A. Put a GROUND SERVICING PANEL PRESSURE QUICK DISCONNECT INOPERATIVE placard on the ground servicing panel.

2. MAINTENANCE (M)

A. For an inoperative ground servicing panel, make sure that there is no sign of leakage on the affected pressure quick disconnect.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
14–07 Ground Servicing Panel					
1) Return Quick Disconnects	C		3	0	(M) One or more may be inoperative provided affected Return Quick Disconnects have no evidence of leakage.

1. PLACARD (P)

A. Put a GROUND SERVICING PANEL RETURN QUICK DISCONNECT INOPERATIVE placard on the ground servicing panel.

2. MAINTENANCE (M)

A. For an inoperative ground servicing panel, make sure that there is no sign of leakage on the affected pressure return quick disconnect.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
14–09 Ground Servicing Panel					
1) Cap, connection		D	9	0	(M) One or more may be damaged or missing.

1. PLACARD (P)

A. Put a GROUND SERVICING PANEL CAP INOPERATIVE (MISSING) placard on the ground servicing panel.

2. MAINTENANCE (M)

A. For a damaged ground servicing panel disconnect cap, remove the affected cap if it does not screw onto the connection.

NOTE: To prevent fluid contamination, the affected quick disconnect must be cleaned before connecting to cart.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
30–00 Hydraulic System (HYD) Synoptic Page Indications		C	–	–	Indications other than Firewall Shut-Off Valve (FWSOV) positions, temperature, pressure and quantity on HYD synoptic page may be inoperative. NOTE 1: Any portion of HYD synoptic page that is operative may be used. NOTE 2: For pressure and quantity indications, see applicable MMEL items in Section 1 or Section 2.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEMS SYNOPTIC DISPLAY INDICATIONS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
31–01	Hydraulic Accumulator Pressure Sensors/Transducers System 3	C	2	0	(M) One or both may be inoperative provided: (a) Affected System 3 Hydraulic Accumulator Pressure Sensors/Transducers are deactivated, and (b) Associated accumulator is verified operative before each flight.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM 3 PRESSURE SENSOR/TRANSDUCER 1 (2) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic accumulator pressure sensor/transducer of System 3, do as follows:

(1) Deactivate the affected pressure sensor(s)/transducer(s) of the Hydraulic System No. 3 (refer to BD500–A–J29–31–01–01AAA–560A–A).

(2) Before each flight:

(a) Depressurize hydraulic System 3 (refer to BD500–A–J12–10–29–02AAA–562A–A).

(b) Make sure that the pressure gauges on the hydraulic accumulator shows a pressure value within the limit shown on the placard for System 3, depressurized.

(c) Pressurize hydraulic System 3 (refer to BD500–A–J12–10–29–02AAA–762A–A).

(d) Make sure that the pressure gauge on the hydraulic accumulator shows a pressure of 3000 PSI ±200.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER				
31–02 Hydraulic System Pressure Sensors/Transducers	B	3	2	(M)(O) One may be inoperative provided: (a) Affected Hydraulic System Pressure Sensor/Transducer is deactivated, and (b) Associated hydraulic pump pressure switches are operative.

1. PLACARD (P)

A. Put a HYDRAULIC SYSTEM (1) (2) (3) PRESSURE SENSOR/TRANSDUCER INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative Hydraulic System 3 Pressure Sensor/Transducer, as indicated by the messages below:

HYDRAULIC FAULT (advisory), and 29 HYDRAULIC FAULT HYD 3 PRESS SNSR INOP (info)

(1) Deactivate the Hydraulic System 3 Pressure Sensor/Transducer (refer to BD500–A–J29–31–01–02AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative Hydraulic System 1 Pressure Sensor/Transducer, as indicated by the messages below:

HYDRAULIC FAULT (advisory), and

29 HYDRAULIC FAULT – HYD 1 PRESS SNSR INOP (info)

(1) Deactivate the Hydraulic System 1 Pressure Sensor/Transducer.

(a) On the Circuit Breaker (CB) synoptic page, set to OUT and LOCK the following circuit breaker:

CDC1–9–18 (HYD 1 PRESS XDCR)

(2) Before each flight, do the following check:

– NOTE: Engine is not operational for steps a) thru e).

(a) On the HYDRAULIC panel turn the PTU switch to ON.

(b) On the HYDRAULIC panel turn the 2B switch to ON.

(c) Make sure the following messages are not displayed:

HYD 1 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD PTU PRESS SW INOP

(d) On the HYDRAULIC panel turn the PTU switch to OFF.

(e) On the HYDRAULIC panel turn the 2B switch to OFF.

(f) Start the left engine.

(g) Make sure the following messages are not displayed:

HYD 1 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD EDP 1A PRESS SW INOP

(3) Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

B. For an inoperative Hydraulic System 2 Pressure Sensor/Transducer, as indicated by the two messages below:

HYDRAULIC FAULT (advisory), and

29 HYDRAULIC FAULT – HYD 2 PRESS SNSR INOP (info)

(1) Deactivate the Hydraulic System 2 Pressure Sensor/Transducer.

(a) On the Circuit Breaker (CB) synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–10–12 (HYD 2 PRESS XDCR)

(2) Before each flight, do the following check:

– NOTE: Engine is not operational for steps a) thru d).

(a) Make sure right engine is not running.

(b) On the HYDRAULIC panel turn the 2B switch to ON.

(c) Make sure the following messages are not displayed:

HYD 2 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD PUMP 2B PRESS SW INOP

(d) On the HYDRAULIC panel turn the 2B switch to OFF.

(e) Start the right engine.

(f) Make sure the following messages are not displayed:

HYD 2 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD EDP 2A PRESS SW INOP

(3) Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

C. For an inoperative Hydraulic System 3 Pressure Sensor/Transducer, as indicated by the two messages below:

HYDRAULIC FAULT (advisory), and

29 HYDRAULIC FAULT – HYD 3 PRESS SNSR INOP (info)

(1) Before each flight, do the following check:

(a) On the HYDRAULIC panel turn the 3A switch to ON.

(b) On the HYDRAULIC panel turn the 3B switch to OFF.

(c) Make sure the following messages are not displayed:

HYD 3 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD PUMP 3A PRESS SW INOP

(d) On the HYDRAULIC panel turn the 3A switch to OFF.

(e) On the HYDRAULIC panel turn the 3B switch to ON.

(f) Make sure the following messages are not displayed:

HYD 3 LO PRESS (caution)

29 HYDRAULIC FAULT – HYD PUMP 3B PRESS SW INOP

(2) Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 – HYDRAULIC POWER					
31–03	Hydraulic Pump Pressure Switches				
1)	Hydraulic System 1 Pressure Switches	C	2	1	(M)(O) One may be inoperative provided: (a) Affected Hydraulic Pump Pressure Switch is deactivated, (b) Associated pump pressure sensor/transducer is operative, (c) Associated hydraulic pump is verified operative before each flight, and (d) PTU and ACMP 2B are selected ON if right engine taxi is conducted.
2)	Hydraulic System 2 Pressure Switches	C	2	1	(M)(O) One may be inoperative provided: (a) Affected Hydraulic Pump Pressure Switch is deactivated, (b) Associated pump pressure sensor/transducer is operative, (c) Associated hydraulic pump is verified operative before each flight, and (d) ACMP 2B is selected ON if EDP 2A Pressure Switch is inoperative and left engine taxi is conducted.
3)	Hydraulic System 3 Pressure Switches	C	2	1	(M)(O) One may be inoperative provided: (a) Affected Hydraulic Pump Pressure Switch is deactivated, (b) Associated pump pressure sensor/transducer is operative, and (c) Associated hydraulic pump is verified operative before each flight.

1. PLACARD (P)

A. Put a the applicable HYDRAULIC PUMP (1), (2), or (3) PRESSURE SWITCH INOPERATIVE placard on the HYDRAULIC control panel.

2. MAINTENANCE (M)

A. For an inoperative hydraulic–pump pressure–switch, deactivate the affected pressure switch (refer to BD500–A–J29–35–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative Hydraulic System 1 Pump Pressure Switch, before each flight, do as follows:

(1) For the Engine Driven Pump (EDP 1A) pressure switch as indicated by one of the info messages below:

29 HYDRAULIC FAULT – HYD EDP 1A PRESS SW INOP, or
29 HYDRAULIC FAULT – HYD CDC EDP 1A PRESS SW INOP

(a) Do an operational check of the EDP 1A.

1 Make sure left engine is running.

2 On the HYDRAULIC panel, turn the PTU switch to OFF.

3 On the HYD synoptic page, make sure that HYD 1 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

4 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

(2) For the Power Transfer Unit (PTU) pressure switch as indicated by the info message below:

29 HYDRAULIC FAULT – HYD PTU PRESS SW INOP

(a) Do an operational check of the PTU.

1 Make sure left engine is not running.

2 On the HYDRAULIC panel, turn the PTU switch to ON.

3 On the HYDRAULIC panel, turn the 2B switch to ON.

4 On the HYD synoptic page, make sure that HYD 1 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

5 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

B. For an inoperative Hydraulic System 2 Pump Pressure Switch, before each flight, do as follows:

(1) For the Engine Driven Pump (EDP 2A) pressure switch as indicated by one of the info messages below:

29 HYDRAULIC FAULT – HYD EDP 2A PRESS SW INOP, or
29 HYDRAULIC FAULT – HYD CDC EDP 2A PRESS SW INOP

(a) Do an operational check of the EDP 2A.

1 Make sure right engine is running.

2 On the HYDRAULIC panel, turn the 2B switch to OFF.

3 On the HYD synoptic page, make sure that HYD 2 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

4 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

(2) For the AC Motor Pump (ACMP 2B) pressure switch as indicated by the info message below:

29 HYDRAULIC FAULT – HYD PUMP 2B PRESS SW INOP

(a) Do an operational check of the hydraulic pump 2B.

1 Make sure right engine is not running.

2 On the HYDRAULIC panel, turn the HYD 2 switch to ON.

3 On the HYD synoptic page, make sure that HYD 2 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

4 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

C. For an inoperative Hydraulic System 3 Pump Pressure Switch, before each flight, do as follows:

(1) For the AC Motor Pump (ACMP 3A) pressure switch as indicated by one of the info messages below:

29 HYDRAULIC FAULT – HYD PUMP 3A PRESS SW INOP, or
29 HYDRAULIC FAULT – HYD CDC ACMP 3A PRESS SW INOP

(a) Do an operational check of the ACMP 3A.

1 On the HYDRAULIC panel, turn the 3A switch to ON.

2 On the HYDRAULIC panel, turn the 3B switch to OFF.

3 On the HYD synoptic page, make sure that HYD 3 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

4 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

(2) For the AC Motor Pump (ACMP 3B) pressure switch as indicated by one of the info messages below:

29 HYDRAULIC FAULT – HYD PUMP 3B PRESS SW INOP, or
29 HYDRAULIC FAULT – HYD CDC ACMP 3B PRESS SW INOP

(a) Do an operational check of the ACMP 3B.

1 On the HYDRAULIC panel, turn the 3B switch to ON.

2 On the HYDRAULIC panel, turn the 3A switch to OFF.

3 On the HYD synoptic page, make sure that HYD 3 pressure is between 2800 psig (19305 kPa) and 3200 psig (22063 kPa).

4 Configure hydraulic system for flight as per AFM NORMAL PROCEDURES.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
00–01 Overhead Control Panel PBA Switchlight (Light function only)					
1) L SIDE “OFF”		C	1	0	
2) L WSHLD “OFF”		C	1	0	
3) R WSHLD “OFF”		C	1	0	
4) R SIDE “OFF”		C	1	0	

1. PLACARD (P)

A. Put a OVERHEAD CONTROL PANEL PBA SWITCHLIGHT INOPERATIVE placard on the WINDOW HEAT control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
11–09	Wing Anti Ice Valve (WAIV)	C	2	0	(M)(O) Except for extended operations beyond 120 minutes, one or both may be inoperative provided: (a) Both WAI Pressure Sensors are verified operative before each flight, (b) Both WAI Temperature Sensors are verified operative before each flight, (c) Both Ice Detection Systems are verified operative before each flight, (d) Wing Anti Ice (WAI) System is selected OFF before each flight, (e) Affected WAIV(s) is(are) secured CLOSED, and (f) Aircraft is not operated in known or forecast icing conditions.

1. PLACARD (P)

A. Put a LH (or RH) WING ANTI-ICE VALVE INOPERATIVE placard on the ANTI–ICE control panel.

2. MAINTENANCE (M)

A. For an inoperative WAIV, deactivate the associated WAIV(s) in the CLOSED position (refer to BD500–A–J30–12–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative WAIV, do the steps that follow before each flight:

(1) To confirm that the WAI Pressure and Temperature Sensors are operative, on the ANTI–ICE panel set the WING switch to AUTO and make sure that the messages that follow are not shown:

WING A/ICE FAIL (Caution)

30 L WING A/ICE LO HEAT – L WING A/ICE TEMP SNSR INOP (Info)

30 R WING A/ICE LO HEAT – R WING A/ICE TEMP SNSR INOP (Info)

30 WING A/ICE FAULT – L WING A/ICE PRESS SNSR INOP (Info)

30 WING A/ICE FAULT – R WING A/ICE PRESS SNSR INOP (Info)

(2) To confirm that the two Ice Detection Systems are operative, make sure that the caution messages that follow are not shown:

L ICE DET FAIL

R ICE DET FAIL

(3) Set the WAI System to OFF.

(4) Do not operate the aircraft into known of forecast icing conditions.

NOTE 1: When the deactivation procedure is completed, the Wing Anti Ice Valve (WAIV) symbol on the AIR synoptic page may appear invalid or different from the actual valve position.

NOTE 2: The WING A/ICE OFF (Status) or WING A/ICE ON (Status) message may show.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
12–01	Wing Anti Ice Pressure Sensors	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Wing Anti Ice (WAI) System is selected OFF, (b) Crossbleed Valve (CBV) is selected MAN CLSD, (c) Associated WAI Valve is secured closed, (d) Both Ice Detection Systems are operative, (e) Same side Engine Bleed Pressure Regulating Shutoff Valve (PRSOV) and Air Conditioning Pack are considered inoperative, and (f) Aircraft is not operated in known or forecast icing conditions.

1. PLACARD (P)

A. Put a WING ANTI–ICE PRESSURE SENSORS INOPERATIVE placard on the ANTI–ICE panel.

2. MAINTENANCE (M)

A. For an inoperative wing anti–ice pressure sensor, deactivate the associated WAI valve in the CLOSED position (refer to BD500–A–J30–12–01–01AAA–560A).

3. OPERATIONS (O)

A. For an inoperative left side Wing Anti–Ice Pressure Sensor, before each flight do as follows:

(1) Make sure that none of the following messages are displayed:

30 WING A/ICE FAULT – R WING A/ICE PRESS SNSR INOP

L ICE DET FAIL (caution)

R ICE DET FAIL (caution)

(2) On the ANTI–ICE control panel, set the WING switch to OFF.

(3) On the AIR control panel, set the XBLEED switch to MAN CLSD.

(4) Make sure that the aircraft is not flown into known of forecast icing conditions.

B. For an inoperative right side Wing Anti–Ice Pressure Sensor, before each flight do as follows:

(1) Make sure that none of the following messages are displayed:

30 WING A/ICE FAULT – L WING A/ICE PRESS SNSR INOP

L ICE DET FAIL (caution)

R ICE DET FAIL (caution)

(2) On the ANTI–ICE control panel, set the WING switch to OFF.

(3) On the AIR control panel, set the XBLEED switch to MAN CLSD.

(4) Make sure that the aircraft is not flown into known of forecast icing conditions.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
21–00 Engine Cowl Anti Ice System					
1) AUTO Function		C	2	0	(O) One or both may be inoperative provided associated Engine Cowl Anti–Ice system is operated manually as required in flight.

1. PLACARD (P)

A. Put a LH (or RH) ENGINE COWL ANTI-ICE SYSTEM AUTO FUNCTION INOPERATIVE placard on the ANTI–ICE control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative engine cowl anti-ice system, select Cowl Anti-Ice to ON when in icing condition per AFM.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION				
22–01 Engine Cowl Anti–Ice Valves (CAIV) – Pressure Regulating Shutoff Valve (PRSOV)	B	4	2	(M) One per engine may be inoperative provided: (a) Affected valve(s) is secured open, and (b) Remaining onside Engine PRSOV Anti–Ice Valve is verified operative.

1. PLACARD (P)

A. Put a LH or RH ENGINE CAIV PRSOV INOPERATIVE placard on the ANTI–ICE control panel.

2. MAINTENANCE (M)

A. For an inoperative engine PRSOV Anti–Ice Valve, do the steps that follow to secure open the engine PRSOV anti–ice valve:

(1) Open the right fan cowl door (refer to BD500–A–J71–11–00–00AAA–520A–A).

(2) Deactivate the thrust reverser for maintenance (refer to BD500–A–J78–30–00–00AAA–563A–A).

(3) Open the right door of the thrust reverser (refer to BD500–A–J78–30–00–00AAA–540A–A).

(4) Deactivate the affected engine PRSOV anti–ice valve in the OPEN position (refer to BD500–A–J30–21–01–00AAA–560A–A or BD500–A–J30–21–02–00AAA–560A–A).

(5) Close the right door of the thrust reverser (refer to BD500–A–J78–30–00–00AAA–740A–A).

(6) Reactivate the thrust reverser (refer to BD500–A–J78–30–00–00AAA–760A–A).

(7) Close the right fan cowl door (refer to BD500–A–J71–11–00–00AAA–720A–A).

(8) Do the engine Return To Service (RTS) test (refer to BD500–A–J71–00–00–00AAA–0B2A–A).

B. For an inoperative engine PRSOV Anti–Ice Valve in the OFF position, do the steps that follow:

(1) Deactivate the affected engine PRSOV in the OPEN position (refer to BD500–A–J30–21–01–00AAA–560A–A or BD500–A–J30–21–02–00AAA–560A–A).

(2) Start the affected engine (the EEC will initiate IDLE BIT checks on the valves) (refer to BD500–A–J71–00–00–00AAA–130B–A).

(3) If no fault message is shown on CAS and OMS, the remaining onside engine PRSOV anti–ice valve is operational.

NOTE: For a detailed procedure, refer to Thermal Anti–Ice System – Test and inspection in BD500–A–J30–21–00–01AAA–322A–A.

C. If the engine PRSOV Anti–Ice Valve failed regulating low or high, do the steps that follow:

(1) Make sure that the ambient temperature is no higher than 15 °C (60 °F).

(2) Deactivate the failed engine PRSOV in the OPEN position (refer to BD500–A–J30–21–01–00AAA–560A–A or BD500–A–J30–21–02–00AAA–560A–A).

(3) Do the engine operation power test (run engine to 85% of N2) (refer to BD500–A–J71–00–00–00AAA–0B2A–A).

(4) On the ANTI–ICE control panel, turn the L COWL and the R COWL switches to ON.

(5) If no fault message is shown on CAS and OMS, the remaining onside engine PRSOV is operational.

NOTE: For a detailed procedure, refer to Thermal Anti–Ice System – Test and inspection in BD500–A–J30–21–00–00AAA–322A–A.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION				
41–08 Windshield Heating System				
1) Windshield Heat System	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Airplane is not operated in known or forecast icing conditions, (b) Affected heat controller is deactivated, (c) Approach minimums do not require its use, and (d) APPR 2 (CAT II) and Autoland Operations are not conducted.

1. PLACARD (P)

A. Put a LH (or RH) WINDSHIELD HEATING SYSTEM INOPERATIVE placard on the WINDOW HEAT control panel.

2. MAINTENANCE (M)

A. For an inoperative windshield heat system, deactivate the applicable heat controller (refer to BD500–A–J30–41–06–02AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative windshield heat controller:

(1) Avoid flights into known or forecast icing conditions.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
42–01	Windshield Wiper Systems	C	2	0	(O) One or both may be inoperative provided: (a) Flight is not conducted in precipitation within five nautical miles of the airport of takeoff or intended landing, (b) Approach minimums do not require their use, and (c) APPR 2 (CAT II) and Autoland Operations are not conducted.
1)	OFF (Park Position)				
A)	Wiper parked out of view	C	2	0	May be inoperative provided the wipers can be parked out of the pilots' view.
B)	Wiper removed	C	2	0	(M) One or both may be inoperative provided: (a) Affected wiper is removed, and (b) Affected wiper system is considered inoperative.
2)	Intermittent (INT) Mode	C	2	0	One or both may be inoperative provided associated SLOW mode or associated FAST mode is operative.
3)	SLOW Mode	C	2	0	One or both may be inoperative provided associated FAST mode is operative.
4)	FAST Mode	C	2	0	One or both may be inoperative provided associated SLOW mode is operative.

1. PLACARD (P)

A. Put a LH (or RH) WINDSHIELD WIPER SYSTEM INOPERATIVE placard adjacent to the WIPER control switch.

2. MAINTENANCE (M)

A. For an inoperative windshield wiper in the OFF (Park) position, remove the applicable windshield wiper (refer to BD500–A–J30–42–10–01AAA–520A–A).

3. OPERATIONS (O)

A. For an inoperative windshield wiper system(s):

(1) Make sure that the aircraft is not operated in precipitation within 5 NM of the takeoff or intended landing airport.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
71–00 Drain Mast Heater Systems		C	2	1	(M)(O) May be inoperative provided: (a) Water supply to the associated galley and lavatory is secured OFF, and (b) Procedures are established and used to ensure that the associated sink is not used.

1. PLACARD (P)

A. For an inoperative forward drain mast heater,

(1) Put a FWD DRAIN MAST HEATER SYSTEM INOPERATIVE placard below the landing gear control panel.

(2) Put a DO NOT USE SINK placard on the forward galley sink.

(3) Put a DO NOT USE SINK placard in the forward lavatory sink.

B. For an inoperative aft drain mast heater,

(1) Put an AFT DRAIN MAST HEATER SYSTEM INOPERATIVE placard below the landing gear control panel.

(2) Put a DO NOT USE SINK placard on the aft galley sink.

(3) Put a DO NOT USE SINK placard in the aft lavatory sink.

2. MAINTENANCE (M)

A. For an inoperative forward drain mast heater, deactivate the manual Shutoff Valve (SOV) in the associated galley sink and lavatory sink (refer to BD500–A–J38–12–33–01AAA–560A–A).

B. For an inoperative aft drain mast heater, deactivate the manual SOV in the associated galley sink and lavatory sink (refer to BD500–A–J38–12–33–04AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative drain mast heater, operator to create and follow alternative procedures to make sure that the cabin crew is advised that associated galley sink and lavatory sinks drains must not be used.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 – ICE AND RAIN PROTECTION					
81–01	Ice Detector Systems (IDS)				
1)	Operations conducted in icing conditions	C	2	0	(O) One or both may be inoperative provided: (a) Wing and Cowl Anti–Ice Systems are operative, (b) Alternate procedures are established and used, and (c) Flights are conducted at or below FL350.
2)	Operations not conducted in icing conditions	C	2	0	(O) Except for extended operations beyond 120 minutes, one or both may be inoperative provided: (a) Flight is not conducted in known or forecast icing conditions, and (b) Wing Anti Ice System is selected to OFF.

1. PLACARD (P)

A. Put a LH (or RH, or BOTH) ICE DETECTOR SYSTEM(S) INOPERATIVE placard on the ANTI–ICE control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For one or both Ice Detectors inoperative, (with Wing and Cowl Anti–Ice Systems operative):

(1) During icing conditions, on the ANTI–ICE control panel, manually operate the anti–ice system as follows:

(a) Set the L COWL switch to ON.

(b) Set the WING switch to ON.

(c) Set the R COWL switch to ON.

(2) Create and obey alternative procedure to determine the conditions where the anti–ice system must be activated manually.

(3) Use of AUTO mode is prohibited.

(4) Conduct operations at or below FL350.

B. For one or both Ice Detectors inoperative (with Wing Anti–Ice System OFF):

(1) Plan flight for operation in no known or forecast icing conditions

(2) Make sure Wing Anti–Ice System is selected OFF.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
00–02 Reversion Switch Panel (RSP) (light function only)					
1) DSPL TUNE INHIBIT Light Bar	C	1	1	0	(O) May be inoperative provided Display Tuning Inhibit is verified operative.
2) L CURSOR R/ INHIB Light Bars	C	2	2	0	One or both may be inoperative provided associated cursor inhibit function is verified operative.

1. PLACARD (P)

A. For an inoperative DSPL TUNE INHIBIT light bar, put a DSPL TUNE INHIBIT LIGHT BAR INOPERATIVE placard on the Reversion Switch Panel (RSP).

For an inoperative L CURSOR light bar, put a L LIGHT BAR INOPERATIVE placard on the RSP.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative DSPL TUNE INHIB light bar, do the steps that follow:

(1) On the Reversion Switch Panel (RSP), push the DSPL TUNE INHIB pushbutton.

(2) Make sure that DSPL TUNE INHIB status message is shown on the EICAS.

(3) On Control Tuning Panel 1 (CTP 1), make sure that radio tuning is operative as follows:

(a) Select a preselected frequency.

(b) Make sure that the selected frequency becomes active.

(c) Make sure that the active frequency is shown in green and remains green after three seconds.

(4) On CTP 2, make sure that radio tuning is operative as follows:

(a) Select a preselected frequency.

(b) Make sure that the selected frequency becomes active.

(c) Make sure that the active frequency is shown in green and remains green after three seconds.

(5) Make sure that automation tuning function of Emergency Frequency 121.5 MHz is operative as follows:

(a) Turn off CTP 1 and CTP 2.

(b) Make sure that the left and the right VHF COM are automatically tuned to 121.5 MHz.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
12–01 Glareshield Panel					
1) OUTBD, INBD Dimming Rotary Knobs		C	4	2	(O) One on each side may be inoperative provided: (a) Light intensity is acceptable to flight crew, and (b) Affected Dimming Rotary Knobs are verified operative in the OFF position.
2) CHRONO Push Button					
A) One CHRONO pushbutton inoperative		D	2	1	
B) Both CHRONO pushbuttons inoperative		C	2	0	Both may be inoperative provided a reliable and functioning timepiece is readily available to all flight deck crewmembers.

1. PLACARD (P)

A. Put a OUTBD or INBD DIMMING ROTARY KNOBS INOPERATIVE placard on the glareshield panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative glareshield panel OUTBD or INBD dimming rotary knobs, make sure that the associated Display Unit (DU) can be turned off when the affected dimming rotary knob is turned to the OFF position.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
21–01	Clock Indications on AFD				
1)	Universal Time Coordination Display (UTC), Chronometer (CHR)	C	2	0	Aircraft clock may be inoperative provided a reliable and functioning timepiece is readily available to all flight deck crewmembers.
2)	Automatic Updated Function	C	2	0	(O) May be inoperative provided: (a) Manual mode is operative, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. Put the appropriate CLOCK INDICATIONS INOPERATIVE or CLOCK AUTOMATIC UPDATE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative automatic update function of the clock indications on the Adaptive Flight Display (AFD), set the time manually as follows:

(1) On the Control Tuning Panel (CTP), turn the BRT/OFF knob to the OFF position.

(2) Wait a few seconds and turn the BRT/OFF knob toward the BRT position.

NOTE: This is done to reset the CTP and unlock access to the MANUAL TIME function.

(3) On the CTP, press the TUNE/MENU button once.

(4) Press the CLOCK Line Select Key (LSK), to bring up the CLOCK page.

(5) If MANUAL TIME is displayed, press the upper left LSK.

(6) Rotate the outer ring of the TUNE/DATA knob to move the focus indicator.

(7) Rotate the inner knob to increase or decrease the time and date values.

(8) When done, press the upper left LSK to save the new time setting.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
31–01 Flight Data Recorder (FDR) System	A	1	0		May be inoperative provided: (a) Cockpit Voice Recorder is operative, and (b) Repairs are made within three flight days.
1) Digital FDR Recording Parameters required by regulations	A	–	–		Up to three digital recording parameters may be inoperative provided: (a) Cockpit Voice Recorder is operative, and (b) Repairs are made within twenty calendar days.
2) Digital FDR Recording Parameters not required by regulations	A	–	–		May be inoperative provided repairs are made before the completion of the next heavy maintenance visit.

1. PLACARD (P)

A. Put a FLIGHT DATA RECORDER (FDR) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
41–17	Master Warning/Master Caution Switch/Light				
1)	Warning Lights (light function only)	C	2	1	
2)	Warning Alarm Cancel Function	B	2	1	
3)	Caution Lights (light function only)	C	2	1	
4)	Caution Alarm Cancel Function	B	2	1	

1. PLACARD (P)

A. Put a MASTER WARNING/MASTER CAUTION SWITCH/LIGHT [xx] INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
60–00 Control Tuning Panel (CTP)					
1) Whole unit	C		2	1	(O) One may be inoperative provided: (a) Left Cursor Control Panel (CCP 1) and Right Cursor Control Panel (CCP 2) are operative, (b) Left Multifunction Keyboard Panel (MKP 1) and right Multifunction Keyboard Panel (MKP 2) are operative, (c) Radio tuning reversion is verified operative, (d) All RIU channels are operative, and (e) Affected CTP is selected OFF.
2) Display Access Keys: L, R, MAP, FMS, CNS, CHKL, SYN, DATA	C		16	8	(O) Any button may be inoperative provided: (a) The same Display Key is operative on the opposite CTP, (b) On–side Cursor Control Panel (CCP) is operative, and (c) Alternate procedures are established and used.
3) Map Range Rotary knob	C		2	1	One may be inoperative provided associated CCP DSK knob is operative.
A) STBY/ WXR ON Push button	C		2	1	One may be inoperative provided Weather Mode is selectable on CTP Weather page.
4) NAV SRC Push Button	C		2	1	(O) One may be inoperative provided: (a) Operative button is on Pilot Flying (PF) side, and (b) Alternate procedures are established and used. (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
60–00	Control Tuning Panel (CTP) (Cont'd)				
5)	BARO Rotary Knob	C	2	1	(O) One may be inoperative provided alternate procedures are established and used.
A)	BARO Unit Selector (inHg/Hpa)	C	2	1	One may be inoperative provided the required barometric reference unit for the intended flight is available.
B)	BARO Standard Push button	C	2	0	
6)	Traffic (TFC) Push Button	C	2	1	
7)	Weather (WX) Push Button	C	2	1	
8)	Terrain (TERR) Push Button	C	2	1	
9)	BRT/OFF Rotary Knob Dimming Function	C	2	1	One may be inoperative provided: (a) Brightness level is acceptable to affected flight crew member, (b) Affected Control Tuning Panel (CTP) and Radio Tuning System Application are operative, and (c) OFF position is verified operative.
10)	TUNE/MENU Push Button	C	2	1	
11)	IDENT Push Button	C	2	1	(O) May be inoperative provided IDENT is provided by other means. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
60–00 Control Tuning Panel (CTP) (Cont'd)					
12) "1/2" Push Button		C	2	1	
13) TUNE/DATA Rotary knob		C	2	1	(O) May be inoperative provided: (a) Associated CCP is operative, (b) Radio Tuning System Application (RTSA) is operative, and (c) Alternate procedures are established and used.
14) Display Option (Bezel) Push Buttons (Line Select Keys)		C	14	7	(O) Any button may be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. PUT a CONTROL TUNING PANEL (X) INOPERATIVE placard on the control tuning panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative Control Tuning Panel 1 (CTP 1), do the steps that follow:

(1) On CTP 1, turn the OFF / BRT knob fully counterclockwise to the OFF position.

NOTE: Caution message TCAS OFF may be shown. This message will clear after takeoff.

(2) Make sure that the reversionary tuning is operative on CTP 2 as follows:

(a) On CTP 2, momentarily push the 1/2 pushbutton.

– Radio System 1 is shown.

(b) On CTP 2, push the R1 Line Select key.

– Tune window moves to VHF 1 preselect frequency readout.

(c) On CTP 2, turn the TUNE / DATA selector knob to a new preselected frequency.

(d) On CTP 2, push the R1 Line Select key.

– On CTP 2 VHF 1 Radio Tuning page, the preselected frequency goes active.

– On CTP 2 the VHF 1 active frequency is shown in green and remains green after three seconds.

(3) Verify the pilot display tuning as follows:

(a) Using Cursor Control Panel 1 (CCP 1) and the Multi Function Window (MFW) of Adaptive Flight Display 2 (AFD 2), select the TUNE tab through the Tune Format menu and select the VHF 1 button.

(b) Using CCP 1, select VHF 1 preselect frequency control field.

(c) Using CCP 1 DSK knob, turn the selector knob to select a new preselect frequency.

(d) Using CCP 1, select VHF 1 Frequency Swap Button.

– On ADF 2 tuning MFW, VHF 1 active frequency is shown in green and remains green after three seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remian locked in its last stage.

B. For an inoperative CTP 2, do the steps that follow:

(1) On CTP 2, turn the OFF / BRT knob fully counterclockwise to the OFF position.

NOTE: Caution message TCAS OFF may be shown. This message will clear after takeoff.

(2) Make sure that the reversionary tuning is operative on CTP 1 as follows:

(a) On CTP 1, momentarily push the 1/2 pushbutton.

– Radio System 2 is shown.

(b) On CTP 1, push the R1 Line Select key.

– Tune window moves to VHF 2 preselect frequency readout.

(c) On CTP 1, turn the TUNE / DATA selector knob to a new preselected frequency.

(d) On CTP 1, push the R1 Line Select key.

– On CTP 1 VHF 2 Radio Tuning page, the preselected frequency goes active.

– On CTP 1 the VHF 2 active frequency is shown in green and remains green after three seconds.

(3) Verify the copilot display tuning as follows:

(a) Using CCP 2 and the MFW of AFD 3, select the TUNE tab through the Tune Format menu and select the VHF 2 button.

(b) Using CCP 2, select VHF 2 preselect frequency control field.

(c) Using CCP 2 DSK knob, turn the selector knob to select a new preselect frequency.

(d) Using CCP 2, select VHF 2 Frequency Swap Button.

– On ADF 3 tuning MFW, VHF 2 active frequency is shown in green and remains green after three seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remian locked in its last stage.

C. For inoperative CTP display access key, do the steps that follow on the onboard CCP:

(1) Press the MENU button.

(2) Select the desired format.

(3) The other option is moving the cursor to the respective AFD and making the selection on the page using the drop down menus.

D. For an inoperative CTP NAV SRC pushbutton, select the desired NAV source on the AVIONIC CTP synoptic page.

E. For an inoperative CTP BARO rotary knob, select the barometric pressure on the AVIONIC CTP synoptic page.

F. For an inoperative CTP IDENT pushbutton, use alternative procedures that include replying to ATC (voice). Use the IDENT soft button available in the ATC/TCAS control menu on AFD.

G. For an inoperative CTP TUNE/DATA rotary knob, alternative procedures that include the use of Radio Tuning System Application (RTSA) or Pilot Non Flying (PNF) controlling the radios.

H. For an inoperative CTP display option (Bezel) pushbutton (Line Select Key), use the same button, on the opposite CTP, to make the applicable selection (AVIONICS CTP page or RTSA).

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
60–30 Center Console Display Lighting Control Panel					
1) LWR DSPL/ISI Dimming Rotary Knob	C	1	0		May be inoperative provided: (a) LWR DSPL and ISI light intensities are acceptable to flightcrew, and (b) LWR DSPL can be turned OFF.

1. PLACARD (P)

A. Put a LWR DSPL AND ISI LIGHTING CONTROL INOPERATIVE on the center console display lighting control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS				
61–05 Cursor Control Panel (CCP)				
1) Double Stack Knob (DSK)	C	2	1	Any or all functions of one DSK knob may be inoperative provided all functions of associated Multifunction Keyboard Panel are operative.
2) MENU Push Button	C	2	1	(O) One may be inoperative provided all Quick Access Keys (MAP, FMS, CNS, CHKL, SYN, DATA) are operative on the affected side CTP and MKP.
3) DSPL SEL – UPR & LWR Push Buttons	C	4	1	May be inoperative provided one LWR Pushbutton is operative.
4) Cursor Select Buttons				
A) One cursor select button inoperative on each CCP	C	4	2	One may be inoperative on each CCP.
B) Both cursor select buttons inoperative on one CCP	C	4	2	Both may be inoperative on one CCP provided associated DSK ENTER push button and associated MKP ENTER push button are operative.
5) Trackballs	B	2	1	(O) One may be inoperative provided: (a) All Multifunction Keyboard Panels switches are operative, and (b) Affected CCP trackball is inhibited using associated CURSOR INHIB pushbutton.

1. PLACARD (P)

A. Put the applicable CURSOR CONTROL PANEL FUNCTION INOPERATIVE placard on the CCP.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative CCP MENU pushbutton, use the quick access keys of the Control Tuning Panel (CTP), the respective Multi Function Keyboard Panel (MKP) direct access keys, the MKP arrows, and the ENTER button to select MENU on the associated display. This will make sure that the quick access keys are operative on the affected side CTP and MKP.

B. For an inoperative CCP trackball, inhibit the affected cursor and make sure that the CURSOR INHIB status message is shown.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS				
61–07 Multifunction Keyboard Panel (MKP)				
1) Whole Unit	C	2	1	One may be inoperative provided: (a) All switches on both Cursor Control Panels (CCP) are operative, and (b) Radio tuning capability is operative on both CTPs.
2) Readout Line	D	2	0	One or both may be inoperative. NOTE: Failure of Readout line does not prevent data entry.
3) FMS Keys: MSG, ROUTE, D–>, DEP/ARR, Push buttons	C	8	0	One or more may be inoperative. NOTE: Any portion that remains operative may be used.
4) Alpha Numeric, Arrow, PREV NEXT, CLR/DEL, CNCL, EXEC, ENTER Keys	C	100	50	Any key may be inoperative provided: (a) All keys on opposite MKP are operative, and (b) Affected side CCP is fully operative. NOTE: Any key that is operative may be used.
5) Direct Access Keys: MAP, FMS, CNS, CHKL, SYN, DATA	C	12	6	Any button may be inoperative provided: (a) The same Display Key is available on the opposite MKP, and (b) Associated CCP is operative.

1. PLACARD (P)

A. Put the applicable MULTIFUNCTION KEYBOARD PANEL FUNCTION INOPERATIVE placard on the MKP.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
61–09 Reversion Switch Panel (RSP)					
1) L&R CURSOR INHIB Push Button		C	2	0	(O) One or both may be inoperative provided cursor Track Ball on associated CCP is verified operative.
2) L & R IRS Push Button		C	2	1	(O) One may be inoperative provided: (a) All Inertial Reference Systems (IRS) are operative, and (b) Remaining IRS Push Button is verified operative.

1. PLACARD (P)

A. Put a REVERSION SWITCH PANEL INOPERATIVE placard on the RSP.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative RSP L & R CURSOR INHIB pushbutton, make sure that the cursor track ball on the associated Cursor Control Panel (CCP) is operative.

B. For an inoperative RSP L & R IRS pushbutton, do the steps that follow:

(1) Do the manual reversion of the remaining Inertial Reference Unit (IRU).

(2) On the RSP, press the L or the R pushbutton multiple times to make sure that all three IRS sources can be selected.

(3) Select the default IRS source (IRS 1 for L PFD or IRS 2 for R PFD).

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
61–24 Adaptative Flight Display					
1) Display Unit #3 (DU3)	A	1	0	(O)	May be inoperative provided: (a) DU3 is deactivated, (b) All remaining DUs are operative, and (c) Repairs are made within one flight day.
2) Display Unit #4 (DU4)	A	1	0	(O)	May be inoperative provided: (a) DU4 is deactivated, and (b) All remaining DUs are operative, and (c) Repairs are made within one flight day.
3) Display Unit #5 (DU5)	A	1	0	(O)	May be inoperative provided: (a) DU5 is deactivated, and (b) All remaining DUs are operative, and (c) Repairs are made within three flight days.

1. PLACARD (P)

A. Put the appropriate DU(3)(4)(5) INOPERATIVE placard below the affected display unit.

2. OPERATIONS (O)

A. For an inoperative DU3 (right inboard position):

(1) On the right side of the glareshield, set the INBD dimming switch to OFF.

(2) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC3-6-2 (R INBD DSPL)

B. For an inoperative DU4 (right outboard position):

(1) On the right side of the glareshield, set the OUTBD dimming switch to OFF.

(2) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC4-6-2 (R OUTBD DSPL)

C. For an inoperative DU5 (center pedestal position):

(1) On the pedestal, set the outer knob of the DSPL/LWR/ISI dimming switch to OFF.

(2) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC4-6-6 (LWR DSPL)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 – INDICATING/RECORDING SYSTEMS					
74–00	Electronic Checklist (ECL) Function				
1)	Required by procedures	C	1	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: The ECL is considered inoperative if the ECL part numbers do not match the latest available Airplane Flight Manual issue.
2)	Not required by procedures	D	1	0	May be inoperative provided procedures do not require its use. NOTE: The ECL is considered inoperative if the ECL part numbers do not match the latest available Airplane Flight Manual issue.

1. PLACARD (P)

A. Put an ELECTRONIC CHECKLIST INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative electronic checklist, establish alternative procedures to accomplish Normal and Non–normal procedures.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
00–01 Main Instrument Panel PBA Switch Lights (light function only)					
1) NOSE STEER “OFF”		C	1	0	
2) GEAR AURAL “CNCL”		C	1	0	
3) ALTN BRAKE “ON”		C	1	0	

1. PLACARD (P)

A. Put the appropriate PBA INOPERATIVE (LIGHT FUNCTION ONLY) placard on the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
00–02	External Service Control Panel PBA Switch Lights (light function only)				
1)	TOW PWR “ON”				
A)	TOW STATUS light inoperative	C	1	0	(M) May be inoperative provided alternate procedure for towing or pushback are established and used.
B)	TOW STATUS light operative	C	1	0	(M) May be inoperative provided TOW STATUS “NO TOW”, “TOW” Switch Light is operative.
2)	External Service Control Panel Lights TOW STATUS “NO TOW”, “TOW”	C	2	0	(M) May be inoperative provided: (a) TOW PWR switch on external service control panel is operative, (b) Parking brake and nose wheel steering are verified to be in OFF position before towing or pushback operations, and (c) Establish and use alternate procedure for towing or pushback.

1. PLACARD (P)

A. For an inoperative TOW PWR ”ON” (light function), put a TOW PWR ”ON” (LIGHT FUNCTION ONLY) INOPERATIVE placard on the external service control panel.

B. For an inoperative ”TOW” light, put a ”TOW” LIGHT INOPERATIVE placard on the external service control panel.

C. For an inoperative ”NO TOW” light, put a ”NO TOW” LIGHT INOPERATIVE placard on the external service control panel.

2. MAINTENANCE (M)

A. For an inoperative TOW PWR “ON” PBA switch light, do the steps that follow before the aircraft is towed:

(1) On the Electrical/Towing Service Panel, push in and hold the LAMP TEST switch.

(2) If the NO TOW/TOW and the TOW PWR “ON“ lights do not illuminate, establish communication with the flight crew to make sure that the parking brake and the nose steering switch are set to the OFF position.

(3) Use an alternative procedure for towing or pushback.

B. For an inoperative TOW STATUS “NO TOW”, “TOW” light, do the steps that follow before the aircraft is towed:

(1) Make sure that the NOSE STEER PBA, on the landing gear control panel, is disengaged.

(2) Make sure that the parking brake, on the PARK BRAKE control panel, is set to OFF.

NOTE: To check the brake status, aircraft power is necessary (i.e. make sure that the brake assemblies are at running clearance.

(3) Establish and use alternative procedures for towing.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR				
30–00 Landing Gear Actuation System, Alternate Extension System	B	1	0	(M)(O) Except for extended operations and extended over-water operations, may be inoperative provided: (a) There is no evidence of external leakage of hydraulic fluid, (b) Nose and main landing gear are secured in down position for dispatch, (c) Landing gear control valve is deactivated, (d) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a LANDING GEAR ALTERNATE EXTENSION SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative landing gear actuation system/alternate extension system, do the steps that follow:

(1) Lock the landing gear assemblies in the DOWN position (refer to BD500–A–J10–10–01–01AAA–720A–A and BD500–A–J10–10–01–02AAA–720A–A).

(2) Deactivate the Landing Gear Control Valve (LGCV) (refer to BD500–A–J32–31–12–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative alternate extension system:

(1) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative),

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
43–03 Electric Motor Actuator Controller (EMAC)	C	8	6	(M)(O)	One EMAC per landing gear may be inoperative provided: (a) Associated EMAs are retracted and deactivated, (b) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (c) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a BRAKE DEGRADED placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative EMAC, do the steps that follow:

(1) Make sure the associated EMAs are retracted (refer to BD500–A–J05–50–32–01AAA–521A–A).

(2) Deactivate the Electric Motor Actuator Controller (EMAC) and the associated pair of Electrical Motor Actuator (EMA) (refer to BD500–A–J32–43–01–02AAB–560A–A).

NOTE: When the deactivation procedure is completed, the messages below will show:

L BRAKE DEGRADED (advisory), and

32 L BRAKE DEGRADED – L GEAR EMAC INOP (info)

or

R BRAKE DEGRADED (advisory), and

32 R BRAKE DEGRADED – R GEAR EMAC INOP (info)

3. OPERATIONS (O)

A. For an inoperative EMAC, do as follows:

(1) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative),

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
43–05	Electro–Mechanical Actuators (EMA)	C	16	12	(M)(O) Up to two EMAs per landing gear may be inoperative provided: (a) Affected EMA is retracted and deactivated, (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (c) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a BRAKE DEGRADED placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Deactivate associated EMA(s) per landing gear:

(1) Make sure the affected EMA(s) is/are retracted (refer to BD500–A–J05–50–32–01AAA–521A–A).

(2) Deactivate the defective EMA(s) by one of the following methods:

METHOD 1 (Cap and stow affected EMA(s)):

(a) Cap and stow electrical connectors of defective EMA(s) (refer to BD500–A–J32–43–01–02AAA–560A–A).

NOTE: When the deactivation procedure is completed, the messages below may show:

L BRAKE DEGRADED (advisory)

32 L BRAKE DEGRADED – L GEAR 1 EMA INOP (info)

32 L BRAKE DEGRADED – L GEAR 2 EMA INOP (info)

or

R BRAKE DEGRADED (advisory)

32 R BRAKE DEGRADED – R GEAR 1 EMA INOP (info)

32 R BRAKE DEGRADED – R GEAR 2 EMA INOP (info)

METHOD 2 (Deactivate associated EMAC(s)):

(b) Remove electrical power (CBs out) of the associated EMAC to the defective EMA(s).

NOTE 1: The method above is not applicable if two failed EMAs are powered by two different EMACs on the same landing gear.

NOTE 2: When the deactivation procedure is completed, the messages below will show:

L BRAKE DEGRADED (advisory), and

32 L BRAKE DEGRADED – L GEAR EMAC INOP (info)

or

R BRAKE DEGRADED (advisory), and

32 R BRAKE DEGRADED – R GEAR EMAC INOP (info)

3. OPERATIONS (O)

A. For an inoperative EMA, do as follows:

(1) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative),

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
43–15 AutoBrake System (ABS)		C	1	0	(O) May be inoperative provided AUTOBRAKE control knob is selected OFF.

1. PLACARD (P)

A. Put an AUTOBRAKE SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative autobrake system, do the steps that follow:

(1) Make sure that the AUTOBRAKE switch on the landing gear control panel is set to OFF.

(2) Use normal braking procedures.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
44–02 Wheel Speed Transducer (WST) – Channels (2 per sensor)		C	8	6	(M)(O) One channel per landing gear may be inoperative provided: (a) Associated EMAC is deactivated, (b) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (c) Operations with steep approach are not conducted.

1. PLACARD (P)

A. Put a WHEEL SPEED TRANSDUCER CHANNEL INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative WST channel, do as follows:

(1) Make sure that the affected EMA(s) is/are retracted (refer to BD500–A–J05–50–32–01AAA–521A–A).

(2) Deactivate the associated Electromechanical Actuator Controller (EMAC):

(a) For the LEFT GEAR SIDE.

1 For Channel A of the left outboard WST, on Electrical Power Center (EPC) 1 open the Circuit Breakers (CBs) that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–A1 (BRK EMAC TOWING 1A)

EPC1–L1 (BRK EMAC 1A)

2 For Channel B of the left outboard WST, on EPC 1 and EPC 2 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–D1 (BRK EMAC TOWING 2B)

EPC2–J12 (BRK EMAC 2B)

3 For Channel A of the left inboard WST, on EPC 1 and EPC 2 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–F1 (BRK EMAC TOWING 3B)

EPC2–K12 (BRK EMAC 3B)

4 For Channel B of the left inboard WST, on EPC 1 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–G1 (BRK EMAC TOWING 4A)

EPC1–O1 (BRK EMAC 4A)

NOTE: When the deactivation procedure of the associated EMAC is completed (left gear), the following message will show:

32 L BRAKE DEGRADED – L GEAR EMAC INOP

(b) For the RIGHT GEAR SIDE.

1 For Channel A of the right outboard WST, on EPC 1 and EPC 2 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–B1 (BRK EMAC TOWING 1B)

EPC2–I12 (BRK EMAC 1B)

2 For Channel B of the right outboard EMAC, on EPC 1 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–C1 (BRK EMAC TOWING 2A)

EPC1–M1 (BRK EMAC 2A)

3 For Channel A of the right inboard WST, on EPC 1 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–E1 (BRK EMAC TOWING 3A)

EPC1–N1 (BRK EMAC 3A)

4 For Channel B of the right inboard WST, on EPC 1 and EPC 2 open the CBs that follow (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–H1 (BRK EMAC TOWING 4B)

EPC2–L12 (BRK EMAC 4B)

NOTE: When the deactivation procedure of the associated EMAC is completed (right gear), the following message will show:

32 R BRAKE DEGRADED – R GEAR EMAC INOP

3. OPERATIONS (O)

A. For an inoperative WST channel, do as follows:

(1) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative),

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
45–01 External PARK BRK Switch		D	1	0	(O) May be inoperative provided cockpit PARK BRAKE switch is operative.

1. PLACARD (P)

A. Put a PRK BRAKE SWITCH INOPERATIVE placard on the ELECTRICAL/TOWING SERVICE PANEL.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative external PARK BRAKE switch, do the steps that follow:

(1) Make sure that the park brakes are available with the cockpit park brake switch.

(2) Establish communications with ground crew to confirm that park brake is selected ON from the switch in the cockpit, when required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
46–02 Brake Temperature Monitoring System (BTMS)		C	1	0	(M)(O) May be inoperative provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative, and (b) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a BRAKE TEMPERATURE MONITORING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative BTMS, do a general visual inspection of the visible components of the brakes.

(1) Make sure that there is no visible damage.

(2) Make sure that the Brake Temperature Sensors (BTS) and the Electric Motor Actuators (EMAs) are safely secured.

(3) Check the brake wear condition on each of the wear pins.

NOTE: Fully worn condition is shown when the wear pin is flush with the brake carrier plate.

3. OPERATIONS (O)

A. For an inoperative BTMS, do as follows:

(1) Operations are conducted in accordance with AFM Supplement 5 (Observe AFM Maximum Permissible Quick Turn-Around Landing Weight).

NOTE: At crew change, inbound crew should leave details of landing weight and V_{app} used for next crew to calculate brake cooling times. If no data forwarded, next operating crew should assume maximum landing weight for their calculations.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
49–17	Brake Temperature Sensor (BTS) Synoptic Readout Indications	C	4	0	(M)(O) One or more BTS Synoptic Readout Indications per each side may be inoperative provided: (a) Affected sensors are deactivated, and (b) Brake Temperature Monitoring System (BTMS) is considered inoperative.

1. PLACARD (P)

A. Put a BRAKE TEMPERATURE SENSOR SYNOPTIC READOUT INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Brake Temperature Sensor (BTS) Synoptic Readout Indications, as indicated by:

BRAKE FAULT (advisory)

32 BRAKE FAULT – BRAKE TEMP SENSOR INOP

(1) Deactivate the applicable BTS (refer to BD500–A–J32–46–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative BTS Synoptic Readout Indications, do as follows:

(1) Operations are conducted in accordance with AFM Supplement 5 (Observe AFM Maximum Permissible Quick Turn-Around Landing Weight).

NOTE: At crew change, inbound crew should leave details of landing weight and V_{app} used for next crew to calculate brake cooling times. If no data forwarded, next operating crew should assume maximum landing weight for their calculations.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
49–20 Brake Wear Monitoring System					
1) Brake Wear Annunciation		C	4	0	(O) May be inoperative provided alternate procedures are established and used.
2) Brake Wear Pins					
A) EICAS brake wear annunciation is operative		C	4	0	May be inoperative or missing provided EICAS brake wear annunciation is operative.
B) EICAS brake wear annunciation is inoperative		C	4	0	(M) May be inoperative or missing provided alternate procedures are established and used.

1. PLACARD (P)

A. For an inoperative Brake Wear Annunciation, put the appropriate (LH I/B, LH O/B, RH I/B or RH O/B) BRAKE WEAR ANNUNCIATION INOPERATIVE placard below the landing gear control panel.

B. For an inoperative or missing Brake Wear Pins put the appropriate (LH I/B, LH O/B, RH I/B or RH O/B) BRAKE WEAR PIN INOPERATIVE (MISSING) placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative or missing Brake Wear Pin in combination with an inoperative STATUS synoptic page Brake Wear Annunciation, once each flight day, do as follows:

(1) Do a Brake Maximum Wear – Visual Examination (Refer to BD500–A–J12–10–32–00AAA–310C–A).

3. OPERATIONS (O)

A. For an inoperative Brake Wear Annunciation, as indicated by BRAKE FAULT (status) in combination with an amber cross symbol displayed on the BRAKE WEAR indication of the STATUS synoptic page:

(1) Once each flight day, do as follows:

(a) Make sure that the PARK BRAKE is set to ON.

(b) Get access to the lower section of the brake assembly.

(c) Make sure that the Brake Wear Pin is protruding from the carrier plate.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
51–37 Steering Disconnect					
1) PEDAL DISC on Tiller		C	–	0	(O) May be inoperative provided: (a) NOSE STEER PBA is verified to be operative, and (b) PEDAL STEER DISC status message is not displayed.

1. PLACARD (P)

A. Put a STEERING DISCONNECT INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative steering disconnect on tiller, do the steps that follow:

(1) Make sure that the NOSE STEER PBA, on the landing gear panel, is operative.

(2) Make sure that PEDAL STEER DISC status message is not shown.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
51–38	Towing Control Box “NO TOWING” “TOW” Lights	C	2	0	(O) May be inoperative provided: (a) NOSE STEER PBA is selected OFF before towing aircraft , and (b) Parking brake and steering status are verified before towing airplane.

1. PLACARD (P)

A. Put a TOWING CONTROL BOX INDICATIONS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative towing control box indication, do the steps that follow before the aircraft is towed:

(1) Make sure that the aircraft is electrically powered.

(2) Make sure that the NOSE STEER PBA, on the landing gear control panel, is set to OFF.

(3) Make sure that the parking brake is OFF.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 – LANDING GEAR					
51–40 Towing Lug on NLG					
1) Lug inoperative	C	1	0	(M)	May be inoperative provided alternate towing procedures are established and used.
2) Lug missing	C	1	0	(O)	May be missing provided alternate towing procedures are established and used.

1. PLACARD (P)

A. Put a TOWING LUG ON NLG INOPERATIVE OR MISSING placard in the NLG.

2. MAINTENANCE (M)

A. For an inoperative NLG towing lug, remove damaged towing lug and create and use alternative towing procedures for towbarless towing.

3. OPERATIONS (O)

A. For a missing NLG towing lug, create and use alternative towing procedures for towbarless towing.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
00–00 External Service Control Panel PBA Switch Lights (light function only)					
1) "LAMP TEST"		C	1	0	May be inoperative provided associated system on External Service Panel is considered inoperative.

1. PLACARD (P)

A. Put a LAMP TEST FUNCTION INOPERATIVE placard on the External Service Control Panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
11–01	Flight Deck and Instrument Panel Lighting Systems				
1)	Day and night operations	C	–	–	Individual lights may be inoperative provided remaining lights are: (a) Sufficient to clearly illuminate all required instruments, controls and other devices for which it is provided, (b) Positioned so that direct rays are shielded from flight crew members eyes, (c) Main instrument flood lights and dome lights are operative, and (d) Lighting configuration and intensity is acceptable to the flight crew.
2)	Day operations	D	–	–	May be inoperative for day operations.

1. PLACARD (P)

A. Put a FLIGHT DECK AND INSTRUMENT PANEL LIGHTING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
13–15 Entry Lights		C	6	0	One or more may be inoperative.

1. PLACARD (P)

A. Put a ENTRY LIGHT INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
20–01 Cabin Interior Lights (Ceiling Lights/Sidewall Lights) System		C	–	–	(O) Up to 50% of total length of ceiling upwash lights and of sidewall downwash lights may be inoperative provided: (a) Sufficient lighting is operative for cabin crew to perform required duties, (b) No more than 2 adjacent ceiling light assemblies in the longitudinal or lateral direction are inoperative, and (c) Photoluminescent escape route marking system is charged for 30 minutes prior to first flight of each day.

1. PLACARD (P)

A. Put a CABIN INTERIOR LIGHTS SYSTEM INOPERATIVE placard below the landing gear control.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative cabin interior lights system, before the first flight of each day, turn all ceiling lights to full bright for at least 30 minutes in order to adequately charge the photoluminescent escape route marking system.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
20–04 No PED/Fasten Seat Belt/Return To Cabin Lights System					
1) Affected seat or lavatories are not occupied		C	–	–	(M)(O) May be inoperative provided: (a) Passenger seats, flight attendant seats or lavatories from which a light is not readily legible shall not be occupied and must be blocked and placarded DO NOT OCCUPY, and (b) For extended operations with passengers there are at least two serviceable lavatories on the aircraft.
2) Affected seat or lavatories are occupied		C	–	–	(O) Affected seats or lavatories may be occupied provided: (a) The crew call/cabin interphone system including associated chimes and Passenger Address (PA) system are operative, and (b) Procedures are established and used to alert flight attendants and notify passengers when seat belts should be fastened, return to seat is requested and use of PED is prohibited.
3) Operations without passengers		A	–	–	(O) May be inoperative for one flight day for non-passenger carrying operations provided: (a) Crew members are the only occupants of airplane, and (b) Alternate procedures are established and used.
4) Aural Tone Function		C	–	0	(O) May be inoperative provided alternate procedures are established and used.
5) Automatic Function		C	–	0	(O) May be inoperative provided: (Cont'd)

System & Sequence N° Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS 20–04 No PED/Fasten Seat Belt/Return To Cabin Lights System (Cont'd)			(a) Manual control function is operative, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. Put a PASSENGER INFORMATION SIGN INOPERATIVE placard in the passenger compartment.

2. MAINTENANCE (M)

A. For inoperative passenger address signs, prevent access to associated passenger seat, the flight attendant seat or the lavatory door and put a DO NOT OCCUPY placard.

3. OPERATIONS (O)

A. For an inoperative passenger address sign (dispatch with associated seats or lavatories not occupied):

(1) Cabin crew must be advised of the inoperative equipment and review this procedure.

(2) For an associated lavatory, lavatory door should remain closed, except for use or inspections by crewmembers.

B. For an inoperative passenger address sign (dispatch with associated seats or lavatories occupied):

(1) Each operator shall establish procedures for when the pilot in command shall alert flight attendants and notify passengers when seat belts should be fastened, return to seat is requested and smoking and use of PEDs is prohibited.

C. For an inoperative passenger address sign (dispatch in non–passenger carrying operations):

(1) Each operator shall establish procedures for when the pilot in command shall alert flight attendants and notify passengers when seat belts should be fastened, return to seat is requested and smoking and use of PEDs is prohibited.

D. For inoperative passenger address sign aural tone function, each operator shall establish procedures for when the PIC shall alert FA's and notify passengers when ever the status of the sign is changed.

E. For inoperative passenger address sign automatic function, each operator shall establish procedures for when the PIC shall turn the signs ON.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
22–01 Area Call Panel Lights System		C	3	0	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a AREA CALL PANEL LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative area call panel light, operator needs to establish and use alternative procedures.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
31–01 Cargo Compartment Lights System		D	–	–	Individual lights may be inoperative provided sufficient lighting is available for ground personnel to perform their duties.

1. PLACARD (P)

A. Put a CARGO COMPARTMENT LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS				
32–00 Service and Maintenance Lights System	D	19	0	Individual lights may be inoperative provided sufficient lighting is available for ground personnel to perform their duties.

1. PLACARD (P)

A. Put a SERVICE AND MAINTENANCE LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS				
32–03 Wing Inspection Lights System	C	2	0	May be inoperative provided ground deicing procedures do not require their use.

1. PLACARD (P)

A. Put a WING INSPECTION LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
41–03 Landing Lights System					
1) Nose Light					
A) Day and night operations	C		1	0	May be inoperative provided: (a) Both wing–to–body fairing landing lights are operative, and (b) Nose taxi light is operative.
B) Day operations	D		1	0	May be inoperative for daylight operations.
2) Wing–to–Body Fairing Lights					
A) Day and night operations	C		2	1	One may be inoperative provided: (a) Associated wing–to–body taxi light is operative, and (b) Nose landing light is operative.
B) Day operations	D		2	0	Both may be inoperative for daylight operations.

1. PLACARD (P)

A. Put a LANDING LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which landing light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
41–06 Taxi Lights System					
1) Nose Taxi Light					
A) Day and night operations	C		1	0	May be inoperative provided: (a) Both wing–to–body fairing taxi lights are operative, and (b) Nose landing light is operative.
B) Day operations	D		1	0	May be inoperative for daylight operations.
2) Wing–to–Body Fairing Taxi Lights					
A) Day and night operations	C		2	1	One may be inoperative provided nose taxi light is operative.
B) Day operations	D		2	0	Both may be inoperative for daylight operations.

1. PLACARD (P)

A. Put a TAXI LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which taxi light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
42–02	Navigation Lights System				
1)	Day and night operations	C	6	3	Any light may be inoperative provided the following minimum configuration is complied with: (a) One green light at right wing tip position, (b) One red light at left wing tip position, and (c) One white aft navigation light.
2)	Day operations	C	6	0	May be inoperative for daylight operations.

1. PLACARD (P)

A. Put a NAVIGATION LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which navigation light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
44–02 White Strobe Lights System					
1) Day and night operations	C		3	0	May be inoperative provided both red beacon lights are operative.
2) Day operations	C		3	0	May be inoperative for daylight operations.

1. PLACARD (P)

A. Put a WHITE STROBE LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which strobe light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
44–07 Red Beacon Lights System					
1) Day and night operations		C	2	0	(O) One or both may be inoperative provided: (a) All white strobe lights are operative, and (b) Alternate procedures are established and used.
2) Day operations		C	2	0	(O) One or both may be inoperative provided: (a) Airplane is not operated at night, and (b) Alternate procedures are established and used.

1. PLACARD (P)

A. Put a ANTI COLLISION LIGHT SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which red beacon light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative red beacon light, operators to develop alternative procedures to advise ground crew when the engines will be started on ground (hand signals, etc.).

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
46–01 Logo Lights System ***		D	2	0	One or both may be inoperative.

1. PLACARD (P)

A. Put a LOGO LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which logo light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
50–01 Aisle Overhead Emergency Lights		C	8	6	One or two non-adjacent lights may be inoperative.

1. PLACARD (P)

A. Put an AISLE OVERHEAD EMERGENCY LIGHTS INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which overhead emergency light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS				
50–02 Exit Identifier Signs System	–	–	–	One may be inoperative provided that associated door/exit is considered inoperative. NOTE: If any twin overwing exits are served by a single sign, both exits should be considered inoperative.

1. PLACARD (P)

A. Put a EXIT IDENTIFIER SIGNS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which exit identifier sign(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
54–01 Floor Proximity Emergency Escape Path Markings					
1) Photoluminescent Systems	C	1	1	(O)	Up to four (4) aisle sections may be inoperative, detached or missing provided: (a) Sections are not longer than 0.25 m (10 in.), (b) Sections are not directly opposite each other and not closer than 2.0 m (79 in.), (c) There is an unbroken path to exits that are fore and aft of all seat rows, and (d) Photoluminescent escape route marking system is charged for 30 minutes prior to first flight of each day.

1. PLACARD (P)

A. Put a FLOOR PROXIMITY EMERGENCY ESCAPE PATH MARKING INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative photoluminescent system, before first flight of each day, turn all ceiling lights to full bright for at least 30 minutes in order to adequately charge the photoluminescent escape route marking system.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 – LIGHTS					
55–02 Exterior Emergency Lights System					
1) Overwing Emergency Lights					
A) Day operations	C		4	0	May be inoperative for day operations.
B) Operations without passengers	A		4	0	(O) May be inoperative for one flight day provided: (a) Airplane crew are only occupants of airplane, and (b) Alternate procedures are established and used. NOTE: Operator's MEL must state maximum number of airplane crew permitted.
2) Door Emergency Lights					
A) Operations without passengers	A		4	0	(O) May be inoperative for one flight day provided: (a) Airplane crew are only occupants of airplane, and (b) Alternate procedures are established and used. NOTE: Operator's MEL must state maximum number of airplane crew permitted.
B) Day operations	C		4	0	May be inoperative for day operations.

1. PLACARD (P)

A. Put a EXTERIOR EMERGENCY LIGHTS SYSTEM INOPERATIVE placard below the landing gear control panel.

NOTE: The placard instruction should specify which exterior emergency light(s) is (are) inoperative.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative overwing emergency light, cabin crew must be advised on inoperative system and use flashlights as required to assess exterior conditions in the event of cabin evacuation.

B. For an inoperative door emergency light, cabin crew must be advised on inoperative system and use flashlights as required to assess exterior conditions in the event of cabin evacuation.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
11–03 Overhead Control Panel PBA Switch Light					
1) PROBE HEAT “GND ON” (Light function only)	C		1	0	May be inoperative.
2) PROBE HEAT “GND ON” (Override function)	C		1	0	May be inoperative provided ground operations do not require its use.

1. PLACARD (P)

A. Put a PROBE HEAT “GND ON” (LIGHT FUNCTION ONLY) INOPERATIVE or a PROBE HEAT “GND ON” (OVERRIDE FUNCTION) INOPERATIVE placard adjacent to the PROBE HEAT switch.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
22–00 Non–Stabilized Magnetic Compass (Standby)					
1) Three Inertial Reference Systems (IRS) operative	B	1	0		May be inoperative provided three IRS stabilized Compass Systems are operative.
2) Two Inertial Reference Systems (IRS) operative	B	1	0	(O)	May be inoperative provided: (a) Any combination of two IRS stabilized compass systems operate normally, and (b) Aircraft is operated: 1 With dual independent navigation capability, and 2 Under positive radar control by ATC during the en–route flight phase, or one of the navigation systems is using GPS.
3) Operations within areas of magnetic unreliability	C	1	0	(O)	May be inoperative for flights that are entirely within areas of magnetic unreliability provided at least two Inertial Reference System (IRS) stabilized directional gyro systems are installed and operative.

1. PLACARD (P)

A. Put a NON–STABILIZED MAGNETIC COMPASS (STANDBY) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative non–stabilized magnetic compass, the aircraft operator must ensure that the planned routing complies with qualifying conditions.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
42–02 Terrain Awareness and Warning System (TAWS) – Class A		A	1	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, (b) Repairs are made within three flight days, and (c) RNP AR Approach Operations are not conducted.
1) Ground Proximity Warning System (GPWS)		A	1	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, (b) Repairs are made within three flight days, and (c) RNP AR Approach Operations are not conducted.
	A) Modes 1 to 4	A	4	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, (b) Repairs are made within three flight days, and (c) RNP AR Approach Operations are not conducted.
	B) Test Mode	A	1	0	May be inoperative provided: (a) GPWS is considered inoperative, (b) Repairs are made within three flight days, and (c) RNP AR Approach Operations are not conducted.
	C) Glideslope Deviation (Mode 5)	B	1	0	May be inoperative provided RNP AR Approach Operations are not conducted.
	D) Advisory Callouts (Mode 6)	C	–	0	(O) May be inoperative provided: (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
42–02	Terrain Awareness and Warning System (TAWS) – Class A (Cont'd)				(a) Alternate procedures are established and used, and (b) RNP AR Approach Operations are not conducted.
	E) Windshear Mode (Mode 7)				
	1) Weather radar windshear detection system (predictive) operative	C	1	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, (b) Weather Radar Windshear Detection System (Predictive) is operative, and (c) RNP AR Approach Operations are not conducted.
	2) Weather radar windshear detection system (predictive) inoperative	B	1	0	(O) May be inoperative provided: (a) Alternate procedures are established and used, (b) Takeoffs and landings are not conducted in known or forecast windshear conditions, and (c) RNP AR Approach Operations are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
42–02 Terrain Awareness and Warning System (TAWS) – Class A (Cont'd)					
2) Terrain System – Forward Looking Terrain Avoidance (FLTA) and Premature Descent Alert (PDA) Functions	B	1	0		May be inoperative provided RNP AR Approach Operations are not conducted.
3) Terrain Displays (Overlays and Maps)	B	–	0		May be inoperative provided RNP AR Approach Operations are not conducted.

1. PLACARD (P)

A. Put the applicable TAWS function INOPERATIVE placard on the flight TAWS control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative TAWS, establish alternative procedures to make sure that the flight crew have required situational awareness at any time during flight.

B. For an inoperative GPWS, establish alternative procedures to make sure that the flight crew have required situational awareness at any time during flight.

C. For an inoperative Modes 1 to 4, establish alternative procedures to make sure that the flight crew have required situational awareness at any time during flight.

D. For an inoperative Advisory Callouts Mode 6, establish alternative procedures to make sure that the flight crew have required situational awareness at any time during flight.

E. For an inoperative TAWS GPWS Windshear Mode 7, establish alternative procedures to make sure that the flight crew have required situational awareness at any time during flight.

F. For an inoperative TAWS GPWS Windshear Mode 7, do as follows:

(1) With the Weather Radar Windshear Detection System (Predictive) operative:

(a) Operator must establish alternate cockpit procedures based on the predictive windshear detection system.

(2) Without the Weather Radar Windshear Detection System (Predictive):

(a) Operator must establish alternate procedures to make sure flight crew have required situational awareness at any time during flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
42–03 Overhead Control Panel PBA Switchlights (light function only)					
1) TAWS GEAR ”INHIB”	C	1	1	0	(O) May be inoperative provided the TAWS GEAR “INHIB” PBA switch function is verified operative.
2) TAWS TERR ”INHIB”	C	1	1	0	(O) May be inoperative provided the TAWS TERR ”INHIB” PBA switch function is verified operative.
3) TAWS FLAP “INHIB”	C	1	1	0	(O) May be inoperative provided the TAWS FLAP ”INHIB” PBA switch function is verified operative.
4) TAWS GS “CNCL”	C	1	1	0	May be inoperative.

1. PLACARD (P)

A. Put the applicable TAWS LIGHT FUNCTION INOPERATIVE placard on the TAWS control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative TAWS GEAR “INHIB” switchlight, do the steps that follow:

(1) On the TAWS control panel, push in the TAWS GEAR “INHIB” PBA.

(2) Make sure that TAWS GEAR INHIB (status) message is shown on the EICAS.

(3) On the TAWS control panel, push out the TWAS GEAR “INHIB” PBA.

(4) Make sure that TAWS GEAR INHIB (status) message is not shown on the EICAS.

B. For an inoperative TAWS TERR “INHIB” switchlight, do the steps that follow:

(1) On the TAWS control panel, push in the TAWS TERR “INHIB” PBA.

(2) Make sure that TAWS TERR INHIB (status) message is shown on the EICAS.

(3) On the TAWS control panel, push out the TAWS TERR “INHIB” PBA.

(4) Make sure that TAWS TERR INHIB (status) message is not shown on the EICAS.

C. For an inoperative TAWS FLAP “INHIB” switchlight, do the steps that follow:

(1) On the TAWS control panel, push in the TAWS FLAP “INHIB” PBA.

(2) Make sure that TAWS FLAP INHIB (status) message is shown on the EICAS.

(3) On the TAWS control panel, push out the TAWS FLAP “INHIB” PBA.

(4) Make sure that TAWS FLAP INHIB (status) message is not shown on the EICAS.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION				
43–01 Traffic Alert and Collision Avoidance System – TCAS II System	B	1	0	(O) May be inoperative provided the system is deactivated and secured.
1) RA Display System(s) (Overlays on MFW and HSI) (left and right sides)				
A) Inoperative on non–flying pilot side	C	2	1	One may be inoperative on non–flying pilot side.
B) One or both inoperative on any side	C	2	0	May be inoperative provided: (a) All Traffic alert display elements and voice command audio functions are operative, and (b) TA only mode is selected by the crew.
2) TA Display System(s) (Overlays on MFW and HSI) (left and right sides)	C	2	0	May be inoperative provided all installed RA display and audio functions are operative.
3) Audio Functions	B	1	0	May be inoperative provided enroute or approach procedures do not require use of TCAS.

1. PLACARD (P)

A. Put a TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM INOPERATIVE placard in the flight compartment.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Deactivate the TCAS per one of the following methods:

(1) METHOD 1

(a) From the Radio Tuning MFW Page, select the XPDR/TCAS Control Window.

(b) On the XPDR/TCAS Control Window, set the mode to ALT ON.

(2) METHOD 2

(a) From either Control Tuning Panel (CTP), push LSK R3 to select XPDR/TCAS mode.

(b) Use the inner TUNE/DATA knob, rotate to set the mode to ALT ON.

(3) METHOD 3

(a) From either Control Tuning Panel (CTP), push LSK R3 to select XPDR/TCAS CONTROL page.

(b) Push LSK R1 to select MODE page.

(c) Push LSK R2 to select the mode to ALT ON.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
44–00 Radio Altimeter					
1) Aircraft with two radio altimeters		C	2	1	(O) May be inoperative provided: (a) None of the following messages are posted: RAD ALT 1 FAIL (advisory) if RAD ALT 2 is failed RAD ALT 2 FAIL (advisory) if RAD ALT 1 is failed AT RETARD INHIBIT (caution) 32 WOW FAULT – R GEAR WOFFW REDUND LOSS 32 WOW FAULT – L GEAR WOFFW REDUND LOSS (b) Faulty Radio Altimeter is deactivated, (c) The other Radio Altimeter is verified operative, (d) Operations do not require its use, (e) Operations with Steep Approach are not conducted, (f) APPR 2 (CAT II) and Autoland operations are not conducted, and (g) RNP AR Approach Operations are not conducted.
2) Aircraft with third radio altimeter ***		C	3	2	(O) May be inoperative provided: (a) Faulty Radio Altimeter is deactivated, (b) Remaining two Radio Altimeter are verified operative, (c) Operations do not require its use, and (d) LAND 3 Operations (CAT III – fail operational) are not conducted.

1. PLACARD (P)

A. Put a RADIO ALTIMETER INOPERATIVE placard in the flight compartment.

2. MAINTENANCE (M)

A. Not required,

3. OPERATIONS (O)

A. To deactivate the faulty radio altimeter.

(1) For Radio Altimeter 1:

(a) On Circuit Breaker Panel 2, open the circuit breaker that follows:

CBP2–A3 (RAD ALT 1)

(b) Make sure that the message that follows is shown:

RAD ALT 1 FAIL (advisory)

(c) Make sure that RA2 is displayed in yellow text on both PFDs.

(d) Make sure that none of the following messages are displayed:

RAD ALT 2 FAIL (advisory)

AT RETARD INHIBIT (caution)

32 WOW FAULT – R GEAR WOFFW REDUND LOSS

32 WOW FAULT – L GEAR WOFFW REDUND LOSS

(2) For Radio Altimeter 2:

(a) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–10–11 (RAD ALT 2)

(b) Make sure that the message that follows is shown:

RAD ALT 2 FAIL (advisory)

(c) Make sure that RA1 is displayed in yellow text on both PFDs.

(d) Make sure that none of the following messages are displayed:

RAD ALT 1 FAIL (advisory)

AT RETARD INHIBIT (caution)

32 WOW FAULT – R GEAR WOFFW REDUND LOSS

32 WOW FAULT – L GEAR WOFFW REDUND LOSS

B. For airplane equipped with three radio altimeters:

(1) If Radio Altimeter 1 is inoperative, do the steps that follows:

(a) On Circuit Breaker Panel 2, open the circuit breaker that follows:

CBP2–A3 (RAD ALT 1)

(b) Make sure that the message that follows is shown:

RAD ALT 1 FAIL (advisory)

(c) Make sure that none of the following messages are shown:

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

(d) On the Left Primary Flight Display (PFD) make sure that RA3 is displayed in white text.

(2) If Radio Altimeter 2 is inoperative, do the steps that follows:

(a) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–10–11 (RAD ALT 2)

(b) Make sure that the message that follows is shown:

RAD ALT 2 FAIL (advisory)

(c) Make sure that none of the following messages are shown:

RAD ALT 1 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

(d) On the Right Primary Flight Display (PFD) make sure that RA3 is displayed in white text.

(3) If Radio Altimeter 3 is inoperative, do the steps that follows:

(a) On the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC1–09–16 (RAD ALT 3)

(b) Make sure that the message that follows is shown:

RAD ALT 3 FAIL (advisory)

(c) Make sure that none of the following messages are shown:

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
46–00 Surface Management System (SMS) ***					
1) Airport Moving Map (AMMA–6000) Databases –APT/RWY 1 –APT/MAP 1	C	2	0		One or both databases may be out of currency provided the SMS Airport Moving Map is not used.

1. PLACARD (P)

A. Put a SURFACE MANAGEMENT SYSTEM (SMS) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
50–91 ATC Transponders and Automatic Altitude Reporting Systems					
1) Elementary and Enhanced Downlink Aircraft Reportable Parameters not Required by regulations	A	–	0		May be inoperative provided: (a) Enroute operations do not require its use, and (b) Repairs are made prior to the completion of the next heavy maintenance visit.

1. PLACARD (P)

A. Put a ATC TRANSPONDER AND AUTOMATIC ALTITUDE REPORTING SYSTEM INOPERATIVE placard in the flight compartment.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION				
51–00 VHF Navigation System (VOR/ILS)	C	–	–	(O) May be inoperative provided: (a) The navigation systems required for each segment of the intended flight route are operative, (b) Alternate procedures are established and used, where applicable, (c) VHF NAV 1 is operative, and (d) APPR 2 (CAT II) and Autoland Operations to be conducted as per AFM Supplement 8 (Category II, Category III and Autoland Operations).
1) VHF #3 Navigation system (VOR/ILS) ***	D	1	0	(O) May be inoperative provided: (a) Procedures do not require its use, and (b) LAND 3 Operations (CAT III – fail operative) are not conducted.

1. PLACARD (P)

A. Put a VHF NAVIGATION SYSTEM 2 (3) INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative VHF NAV 2 system, do the steps that follow:

(1) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the following electronic circuit breaker:

CDC2–9–16 (NAV 2)

(2) Create and use alternative procedures in case existing operational procedures are affected.

B. For an inoperative VHF NAV 3 system, do the steps that follow:

(1) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the following electronic circuit breaker:

CDC3–6–10 (NAV 3)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
51–14	Marker Beacon (MB)				
1)	Not required for approach minimums	C	–	–	(O) May be inoperative provided approach minimums do not require its use.
2)	Not used for routine procedures	D	–	0	May be inoperative provided routine procedures do not require its use.

1. PLACARD (P)

A. Put a MARKER BEACON SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative marker beacon, establish procedures to use alternative navigation aids or authorized fixes as substitutes for the outer or middle markers.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
52–00 Automatic Direction Finder System (ADF) ***	D	–	–		One or more may be inoperative provided: (a) Navigation systems required for each segment of the intended flight route are operative, and (b) Alternate procedures are established and used, where applicable.

1. PLACARD (P)

A. Put a AUTOMATIC DIRECTION FINDER SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
53–00 Distance Measuring Equipment (DME)		D	–	–	Any in excess of those required by regulations may be inoperative.

1. PLACARD (P)

A. Put a DISTANCE MEASURING EQUIPMENT SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION				
54–00 ATC Transponder	D	2	1	(O) May be inoperative provided the other ATC Transponder is verified operative.

1. PLACARD (P)

A. Put the applicable ATC 1(2) TRANSPONDER INOPERATIVE placard in the flight compartment.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ATC 1 transponder.

(1) For dispatch with XPDR 1 FAIL (caution).

(a) On the Control Tuning Panel (CTP):

1 Select the XPDR/TCAS page.

2 Select XPDR 2.

(b) Make sure that XPDR 1 FAIL (caution) goes out of view.

(c) Make sure that the messages that follow are shown:

AVIONIC FAULT (advisory), and

34 AVIONIC FAULT – XPDR 1 INOP (info)

(d) Before each flight.

1 Make sure that the message that follows is not shown:

34 AVIONIC FAULT – XPDR 2 INOP (info)

2 Make sure that there are no other pilot reported ATC transponder failures.

(2) For dispatch without CAS indication (loss of aircraft tracking capability in controlled airspace as reported by the Air Traffic Control (ATC)).

(a) Before each flight.

1 Make sure that the message that follows is not shown:

34 AVIONIC FAULT – XPDR 2 INOP (info)

2 Make sure that there are no other pilot reported ATC transponder failures.

B. For an inoperative ATC 2 transponder.

(1) For dispatch with XPDR 2 FAIL (caution).

(a) On the Control Tuning Panel (CTP):

1 Select the XPDR/TCAS page.

2 Select XPDR 1.

(b) Make sure that XPDR 2 FAIL (caution) goes out of view.

(c) Make sure that the messages that follow are shown:

AVIONIC FAULT (advisory), and

34 AVIONIC FAULT – XPDR 2 INOP (info)

(d) Before each flight.

1 Make sure that the message that follows is not shown:

34 AVIONIC FAULT – XPDR 1 INOP (info)

2 Make sure that there are no other pilot reported ATC transponder failures.

(2) For dispatch without CAS indication (loss of aircraft tracking capability in controlled airspace as reported by the Air Traffic Control (ATC)).

(a) Before each flight.

1 Make sure that the message that follows is not shown:

34 AVIONIC FAULT – XPDR 1 INOP (info)

2 Make sure that there are no other pilot reported ATC transponder failures.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 – NAVIGATION					
61–09 Flight Management System (FMS) Navigation Databases					
1) Two databases out of currency		C	2	0	(O) May be out of currency provided: (a) Current Aeronautical Charts are used to verify Navigation Fixes prior to dispatch, (b) Procedures are established and used to verify status and suitability of Navigation Facilities used to define route of flight, (c) Approach Navigation Radios are manually tuned and identified, and (d) RNP AR Approach operations are not conducted.
2) One database out of currency		C	2	1	(O) May be out of currency provided: (a) Current Aeronautical Charts are used to verify Navigation Fixes prior to dispatch, (b) Procedures are established and used to verify status and suitability of Navigation Facilities used to define route of flight, (c) Approach Navigation Radios are manually tuned and identified, and (d) Approach are not conducted using associated system.

1. PLACARD (P)

A. Put a FMS NAVIGATION DATABASE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative FMS navigation database, create alternative procedures based on the use of current aeronautical information (e.g. charts) and/or conventional navigation aids (radio).

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
11–05 Oxygen Pressure Switch					
1) CREW OXY LO PRESS (caution) not displayed	C		1	0	(M)(O) May be inoperative provided: (a) Bottle control valve is verified open, (b) Oxygen bottle pressure gauge is operative, (c) Oxygen bottle pressure is checked before each flight, and (d) Crew oxygen masks are verified operative before each flight.
2) CREW OXY LO PRESS (caution) displayed and observer seat occupied	A		1	0	(M)(O) May be inoperative and observer seat occupied provided: (a) CREW OXY LO PRESS (C) is displayed, (b) Oxygen bottle pressure gauge is operative, (c) Oxygen pressure is checked to be above minimum required oxygen pressure before each flight, (d) Crew oxygen EICAS pressure readout is verified operative before each flight, (e) Crew oxygen EICAS pressure is monitored during flight, (f) Crew oxygen masks are verified operative before each flight, and (g) Repairs are made within 1 flight–day.
3) CREW OXY LO PRESS (caution) and observer seat not occupied	B		1	0	(M)(O) May be inoperative provided: (a) CREW OXY LO PRESS (C) is displayed, (b) Oxygen bottle pressure gauge is operative, (c) Oxygen pressure is checked to be above minimum required oxygen pressure before each flight, (Cont'd)

System & Sequence N° Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN 11–05 Oxygen Pressure Switch (Cont'd)			(d) Crew oxygen EICAS pressure readout is verified operative before each flight, (e) Crew oxygen EICAS pressure is monitored during flight, (f) Crew oxygen masks are verified operative before each flight, and (g) Observer seat is not occupied.

1. PLACARD (P)

A. Put an OXYGEN PRESSURE SWITCH INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Oxygen Pressure Switch:
(dispatch without CREW OXY LO PRESS (caution) shown).

(1) Once prior to first flight of relief period:

(a) Open the enclosure of the crew oxygen cylinder.

(b) Make sure that the control lever of the oxygen bottle is in the OPEN position.

(c) Close the enclosure of the oxygen bottle.

(2) Before each flight:

(a) Open the enclosure of the crew oxygen bottle.

(b) Record the pressure indicated on the oxygen gauge.

NOTE: Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

(c) Make sure that the pressure indication on the crew oxygen bottle gauge is above the minimum pressure required for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8-02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/ CONSUMPTION DATA

(d) Close the enclosure of the crew oxygen bottle.

NOTE: During the period granted for dispatch with the degraded system, each time maintenance is accomplished in the oxygen bottle compartment area, make sure that the control lever of oxygen bottle is in the OPEN position.

B. For an inoperative Oxygen Pressure Switch:
(dispatch with observer seat occupied and CREW OXY LO PRESS (caution) shown).

(1) Verify by two means of indication that the crew oxygen bottle shows the same pressure value.

The EICAS Readout may be used with either Ground Service Panel Pressure Gauge or Bottle Pressure Gauge.

(2) Verify the Bottle Pressure Gauge indication as follows:

(a) Open the enclosure of the crew oxygen bottle.

(b) Record the pressure indicated on the oxygen gauge.

NOTE: Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

(c) Make sure that the pressure indication on the crew oxygen bottle gauge is above the minimum pressure required for 3 crewmembers and for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8-02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/ CONSUMPTION DATA

(d) Close the enclosure of the crew oxygen bottle.

NOTE: During the period granted for dispatch with the degraded system, each time maintenance is accomplished in the oxygen cylinder compartment area, make sure that the control lever of oxygen cylinder is in the ON position.

C. For an inoperative Oxygen Pressure Switch:
(dispatch with observer seat unoccupied and CREW OXY LO PRESS (caution) shown).

(1) Verify by two means of indication that the crew oxygen bottle shows the same pressure value.

The EICAS Readout may be used with either Ground Service Panel Pressure Gauge or Bottle Pressure Gauge.

(2) Verify the Bottle Pressure Gauge indication as follows:

(a) Open the enclosure of the crew oxygen bottle.

(b) Record the pressure indicated on the oxygen gauge.

NOTE: Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

(c) Make sure that the pressure indication on the crew oxygen bottle gauge is above the minimum pressure required for 3 crewmembers and for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8-02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/ CONSUMPTION DATA

(d) Close the enclosure of the crew oxygen bottle.

NOTE: During the period granted for dispatch with the degraded system, each time maintenance is accomplished in the oxygen cylinder compartment area, make sure that the control lever of oxygen cylinder is in the ON position.

Table 1 — Gauge indication vs. EICAS indication for various ambient temperature (1 of 2)

COCKPIT AMBIENT TEMPERATURE		GAUGE INDICATION (in PSI)							
°C	°F	800	900	1000	1100	1200	1300	1400	
–40	–40	1050	1200	1350	1500	1650	1800	1950	EICAS INDICATION (TEMP COMPENSATED)
–29	–20	1000	1150	1250	1400	1550	1650	1800	
–18	0	N/D[1]	1050	1200	1300	1450	1550	1700	
–7	20	N/D[1]	1000	1150	1250	1350	1500	1600	
4	40	N/D[1]	N/D[1]	1100	1200	1300	1400	1500	
18	60	N/D[1]	N/D[1]	1000	1100	1250	1350	1450	
21	70	N/D[1]	N/D[1]	1000	1100	1200	1300	1400	
27	80	N/D[1]	N/D[1]	1000	1050	1150	1250	1350	
38	100	N/D[1]	N/D[1]	N/D[1]	1000	1100	1200	1300	

[1]N/D: No Dispatch

[2]ANV: Above Nominal Value

Table 1 — Gauge indication vs. EICAS indication for various ambient temperature (2 of 2)

COCKPIT AMBIENT TEMPERATURE		GAUGE INDICATION (in PSI)							
°C	°F	1500	1600	1700	1800	1850	1900	2000	
–40	–40	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	EICAS INDICATION (TEMP COMPENSATED)
–29	–20	1950	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
–18	–0	1800	1950	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
–7	20	1700	1850	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
4	40	1600	1750	1850	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
18	60	1550	1650	1750	1850	ANV[2]	ANV[2]	ANV[2]	
21	70	1500	1600	1700	1800	1850	ANV[2]	ANV[2]	
27	80	1450	1550	1650	1750	1800	1850	ANV[2]	
38	100	1400	1500	1550	1650	1750	1750	1850	

[1]N/D: No Dispatch

[2]ANV: Above Nominal Value

3. OPERATIONS (O)

A. For an inoperative Oxygen Pressure Switch:
(dispatch without CREW OXY LO PRESS (caution) shown)

(1) Before each flight:

(a) Make sure that EICAS oxygen pressure indication is above the minimum pressure required for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(b) Make sure that the crew oxygen masks have adequate oxygen flow.

B. For an inoperative Oxygen Pressure Switch:
(dispatch with CREW OXY LO PRESS (caution) shown and the observer's seat is occupied:

(1) Make sure that the oxygen pressure is above 1300 psi.

(2) Before each flight:

(a) Make sure that the oxygen pressure is more than the minimum limits for three crewmembers for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(b) Make sure that the oxygen masks of the flight crew have sufficient oxygen flow.

NOTE: If the observer seat is occupied for the intended flight, the observer seat mask must be verified.

(3) During flight:

(a) Monitor the flight crew oxygen pressure. If an oxygen leak is suspected, descend to a safe altitude.

C. For an inoperative Oxygen Pressure Switch:
(dispatch with CREW OXY LO PRESS (caution) shown and the observer's seat is not occupied:

(1) Before each flight:

(a) Make sure that the oxygen pressure is more than the minimum limits for two crewmembers for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(b) Make sure that the oxygen masks of the flight crew have sufficient oxygen flow.

(2) During flight:

(a) Monitor the flight crew oxygen pressure. If an oxygen leak is suspected, descend to a safe altitude.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
11–07 Flight Deck Oxygen System					
1) Ground Service Panel Pressure Indicator					
A) EICAS oxygen pressure indication operative		C	1	0	May be inoperative provided EICAS pressure indication is operative and checked before each flight.
B) EICAS oxygen pressure indication inoperative		C	1	0	(M) May be inoperative provided oxygen bottle pressure gauge is operative and checked before each flight.
2) Oxygen Bottle Pressure Gauge		C	1	0	
3) EICAS Oxygen Pressure Indication					
A) Oxygen pressure checked from ground service panel		C	1	0	(O) May be inoperative provided ground service panel pressure gauge is operative and checked before each flight.
B) Oxygen pressure checked from bottle pressure gauge		C	1	0	(M) May be inoperative provided oxygen bottle pressure gauge is operative and checked before each flight.

1. PLACARD (P)

A. For an inoperative Ground Service Panel pressure indicator, put a GROUND SERVICE PANEL PRESSURE INDICATOR INOPERATIVE placard in the oxygen ground service panel.

B. For an inoperative Oxygen Bottle Pressure Gauge, put a OXYGEN BOTTLE PRESSURE GAUGE INOPERATIVE placard near the viewing window on the gauge of the oxygen bottle.

C. For an inoperative EICAS oxygen pressure indication, put a EICAS OXYGEN PRESSURE INDICATION INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Ground Service Panel Pressure Indicator.

(1) Before each flight:

(a) Open the enclosure of the oxygen bottle.

(b) Record the pressure indicated on the oxygen gauge.

NOTE: Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

(c) Make sure that the pressure indication on the crew oxygen bottle gauge is above the minimum pressure required for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(d) Close the enclosure of the oxygen bottle.

NOTE: During the period granted for dispatch with the degraded system, make sure that the control valve of the oxygen bottle is in the OPEN position, each time maintenance is done in the oxygen compartment area.

B. For an inoperative EICAS Oxygen Pressure Indication, do the steps that follow before each flight:

(1) Before each flight:

(a) Open the enclosure of the oxygen bottle.

(b) Record the pressure indicated on the oxygen gauge.

NOTE: Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

(c) Make sure that the pressure indication, on the crew oxygen bottle, is above the minimum pressure required for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(d) Close the enclosure of the oxygen bottle.

NOTE: During the period granted for dispatch with the degraded system, make sure that the control valve of the oxygen bottle is in the OPEN position, each time maintenance is done in the oxygen compartment area.

3. OPERATIONS (O)

A. For an inoperative EICAS Oxygen Pressure Indication.

(1) Before each flight, make sure that crew oxygen pressure indication on the Ground Service Panel Pressure Gauge is within the acceptable range.

(2) Use Table 1 below to determine the equivalent EICAS temperature compensated pressure.

NOTE: If the indications on the pressure gauge of the oxygen bottle are not clearly visible to the flight crew through the sight glass, the oxygen bottle enclosure must be removed by qualified personnel per the (M) procedure.

Table 1 — Gauge indication vs. EICAS indication for various ambient temperature (1 of 2)

COCKPIT AMBIENT TEMPERATURE		GAUGE INDICATION (in PSI)							
°C	°F	800	900	1000	1100	1200	1300	1400	
–40	–40	1050	1200	1350	1500	1650	1800	1950	EICAS INDICATION (TEMP COMPENSATED)
–29	–20	1000	1150	1250	1400	1550	1650	1800	
–18	0	N/D[1]	1050	1200	1300	1450	1550	1700	
–7	20	N/D[1]	1000	1150	1250	1350	1500	1600	
4	40	N/D[1]	N/D[1]	1100	1200	1300	1400	1500	
18	60	N/D[1]	N/D[1]	1000	1100	1250	1350	1450	
21	70	N/D[1]	N/D[1]	1000	1100	1200	1300	1400	
27	80	N/D[1]	N/D[1]	1000	1050	1150	1250	1350	
38	100	N/D[1]	N/D[1]	N/D[1]	1000	1100	1200	1300	

[1]N/D: No Dispatch

[2]ANV: Above Nominal Value

Table 1 — Gauge indication vs. EICAS indication for various ambient temperature (2 of 2)

COCKPIT AMBIENT TEMPERATURE		GAUGE INDICATION (in PSI)							
°C	°F	1500	1600	1700	1800	1850	1900	2000	
–40	–40	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	EICAS INDICATION (TEMP COMPENSATED)
–29	–20	1950	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
–18	–0	1800	1950	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
–7	20	1700	1850	ANV[2]	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
4	40	1600	1750	1850	ANV[2]	ANV[2]	ANV[2]	ANV[2]	
18	60	1550	1650	1750	1850	ANV[2]	ANV[2]	ANV[2]	
21	70	1500	1600	1700	1800	1850	ANV[2]	ANV[2]	
27	80	1450	1550	1650	1750	1800	1850	ANV[2]	
38	100	1400	1500	1550	1650	1750	1750	1850	

[1]N/D: No Dispatch

[2]ANV: Above Nominal Value

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
11–08 Filler Valve (Ground Service Panel)		C	1	0	(M) May be inoperative provided: (a) There is no evidence of leakage, and (b) EICAS oxygen pressure indication is operative and checked before each flight.

1. PLACARD (P)

A. Put a GROUND SERVICE PANEL FILLER VALVE INOPERATIVE placard adjacent to the filler valve.

2. MAINTENANCE (M)

A. For an inoperative ground service panel filler valve, do the leak test of the high pressure fill line (refer to BD500–A–J35–11–00–02AAA–364B–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
13–03	Overboard Discharge Indicator (disc)	C	1	0	(M)(O) May be damaged or missing provided one of Ground Service Panel Pressure Indicator or Crew Oxygen Bottle Gauge is operative and checked before each flight.

1. PLACARD (P)

A. Put a OVERBOARD DISCHARGE INDICATOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative overboard discharge indicator, if you cannot read the pressure quantity on the oxygen bottle through the sight glass, do the steps that follow before each flight:

(1) Open the enclosure of the oxygen bottle.

(2) Make sure that the pressure indication on the oxygen bottle of the crew is above the minimum pressure necessary for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

(3) Close the enclosure of the oxygen bottle.

NOTE 1: The above procedure must be done if the sight glass on the pressure gauge of the oxygen bottle does not show adequate reading and the gauge of the service panel is inoperative and cannot be used to verify the pressure on the oxygen bottle of the crew.

NOTE 2: During the period granted for dispatch with the degraded system, the control valve of the oxygen bottle must be in the OPEN position each time maintenance is accomplished in the oxygen compartment area.

(4) Use the chart that follows to read the oxygen pressure quantity on the pressure gauge of the oxygen bottle.

FULL PRESS PSI vs AMBIENT TEMPERATURE

OXY CYC SERVICING: CHARGE CYL AT RATE NOT TO EXCEED 200 PSI/MIN TO ”FULL”PRESSURE										
COCKPIT* TEMP	**CELSIUS**	**–40**	**–29**	**–18**	**–7**	**5**	**16**	**21**	**27**	**38**
	FAHRENHEIT	**–40**	**–20**	**0**	**19**	**41**	**61**	**70**	**81**	**100**
FULL PRESSURE	**PSI**	**1340**	**1435**	**1530**	**1620**	**1710**	**1805**	**1850**	**1900**	**1990**
*COCKPIT TEMPERATURE IS USED AS AN APPROXIMATION FOR THE OXYGEN COMPARTMENT AMBIENT TEMPERATURE										

3. OPERATIONS (O)

A. For an inoperative overboard discharge indicator, before each flight, check ground service panel pressure gauge or oxygen bottle pressure gauge, and make sure that Crew Oxygen system pressure is above the minimum limits for the intended flight.

Refer to the Flight Crew Operating Manual Vol. 2 (FCOM2), Chapter 8–02, OPERATIONAL GUIDANCE – FLIGHT CREW OXYGEN SYSTEM DISPATCH/CONSUMPTION DATA

NOTE: If the indications on the pressures gauge of the bottle are not clearly visible to the flight crew through the sight glass, the enclosure of the oxygen bottle must be removed by qualified personnel per the (M) procedures.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
21–00	Passenger Cabin Oxygen System				
1)	Operations conducted at or below FL 250	B	1	0	(O) May be inoperative provided: (a) Minimum enroute altitude does not exceed 13000 ft above MSL, (b) Both air conditioning packs are operative, (c) Pressurization system is operative, (d) Operations are conducted at or below FL 250, (e) Portable oxygen units are provided for all crewmembers and 10% of passengers for half an hour (supplemental oxygen), and (f) Passengers are appropriately briefed.
2)	Operations conducted at or below 10000 ft	B	1	0	May be inoperative provided flight is conducted pressurized at or below 10000 ft.
3)	Automatic deployment function inoperative	B	1	0	May be inoperative provided: (a) Alternate flight deck deployment system is operative, and (b) Operations are conducted at or below FL300.

1. PLACARD (P)

A. For an inoperative passenger oxygen system, put a PASSENGER OXYGEN SYSTEM INOPERATIVE placard adjacent to the PAX OXY switch.

B. For an inoperative passenger oxygen system auto deployment function, put a PASSENGER OXYGEN SYSTEM AUTO DEPLOYMENT FUNCTION INOPERATIVE placard adjacent to the PAX OXY switch.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative passenger cabin oxygen system, do the steps that follow:

(1) Make sure that the cabin crew is briefed about the inoperative system and the requirement to brief the passengers accordingly.

(2) Put the portable oxygen units in locations that will permit even distribution throughout the cabin.

(3) Make sure that the locations where the portable oxygen units are installed are identified.

(4) Make sure that all flight crew members are briefed on the locations of the portable oxygen units.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
21–01 Individual Passenger Oxygen Box Units		D	–	–	(M)(O) May be inoperative with no flight altitude restriction provided: (a) Affected seats or banks of seats are blocked and placarded INOPERATIVE to prevent occupancy, (b) No more than two consecutive banks of seats and their adjacent banks of seats have an inoperative Individual Passenger Oxygen Box Units, and (c) Units at assigned flight attendant locations are operative.

1. PLACARD (P)

A. Put a PASSENGER OXYGEN BOX UNITS INOPERATIVE placard on the affected seat(s).

2. MAINTENANCE (M)

A. For an inoperative passenger oxygen box unit, create procedures to make sure that the affected seats or banks of seats are blocked and placarded INOPERATIVE, to prevent occupancy.

3. OPERATIONS (O)

A. For an inoperative passenger oxygen box unit, create procedures to make sure that no more than two consecutive banks of seats and their adjacent banks of seats have a PSU with an inoperative drop–down unit.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
21–04 Passenger Service Unit (PSU) Oxygen Release Tool		D	3	0	(O) May be inoperative or missing.

1. PLACARD (P)

A. Put a PSU OXYGEN RELEASE TOOL MISSING OR INOPERATIVE placard on the applicable flight attendant seat.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative PSU oxygen release tool, brief the cabin crew, in the applicable area(s), about the inoperative or missing PSU oxygen release tool.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
22–01 Forward Galley Oxygen System					
1) Galley Drop Down Oxygen Units					
A) Adjacent flight attendant oxygen units are operative for associated galley area occupants	B	–	–	(O)	May be inoperative and associated galley area may be occupied provided: (a) Adjacent flight attendant oxygen units are operative for associated galley area occupants, and (b) Procedures are established and used to alert crew members of inoperative oxygen units.
B) Flight attendant portable oxygen bottles are operative for associated galley	B	–	–	(O)	May be inoperative and associated galley area may be occupied provided: (a) Flight attendant portable oxygen bottles are operative for associated galley, and (b) Procedures are established and used to alert crew members of inoperative oxygen units.

1. PLACARD (P)

A. Put a GALLEY DROP DOWN OXYGEN UNITS INOPERATIVE placard in the forward galley.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative galley drop down oxygen unit when an adjacent drop down oxygen unit is available, do the steps that follow:

(1) Make sure that the number of galley area occupants is in accordance with the available adjacent flight attendant individual oxygen units.

(2) Create and use procedures to alert crew members of inoperative oxygen units.

B. For inoperative galley drop down oxygen units when an adjacent drop down oxygen unit may NOT be available, create and use procedures to make sure that sufficient oxygen bottles are available in the affected galley area(s) and affected cabin crew members are briefed.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
23–01	Lavatory Oxygen Dispensing Unit				
1)	Lavatory not used	C	–	–	(M) May be inoperative provided: (a) Associated lavatory is not used for any purpose, (b) Associated lavatory door is locked and placarded INOPERATIVE DO NOT ENTER, and (c) For extended operations with passengers there are at least two serviceable lavatories on the aircraft. NOTE: This does not preclude storage of inflight service waste bags in associated lavatory.
2)	Operations conducted at or below FL 250	C	–	0	May be inoperative provided operations are conducted at or below FL 250.

1. PLACARD (P)

A. Put a LAVATORY OXYGEN DISPENSING UNIT INOPERATIVE placard in the lavatory.

2. MAINTENANCE (M)

A. For an inoperative lavatory oxygen–dispensing unit, make sure that the associated lavatory door is locked closed and placarded INOPERATIVE – DO NOT ENTER.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
25–01 Overhead Control Panel PBA Switch Lights (light function only)					
1) PAX OXY " DPLY"		C	1	0	

1. PLACARD (P)

A. Put a PASS OXY DPLY PBA LIGHT INOPERATIVE placard adjacent to the PAX OXY switch.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN					
30–01 Protective Breathing Equipment (PBE)		D	–	–	(M)(O) Any in excess of those required by regulation may be inoperative or missing provided: (a) Required distribution of operative units is maintained throughout the aircraft, (b) Inoperative protective breathing equipment unit is removed from passenger cabin and its location is placarded INOPERATIVE, or it is removed from installed location, secured out of sight and protective breathing equipment unit and its installed location are placarded INOPERATIVE, and (c) Procedures are established and used to alert crew members of inoperative or missing equipment.

1. PLACARD (P)

A. Put a PROTECTIVE BREATHING EQUIPMENT INOPERATIVE placard at the PBE dedicated location or at the location where the PBE is relocated.

2. MAINTENANCE (M)

A. For an inoperative PBE, do the steps that follow:

(1) Make sure that the inoperative PBE is removed from the passenger cabin.

(2) Put a INOPERATIVE placard on the installed location of the removed inoperative PBE.

OR

(3) Remove and secure out of sight the inoperative PBE from its installed location.

(4) Put a INOPERATIVE placard on the inoperative PBE and its installed location.

3. OPERATIONS (O)

A. For an inoperative PBE, operator must create procedures to alert crew members of an inoperative or a missing PBE.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 – OXYGEN				
31–01 Portable Oxygen Dispensing Units (Bottle and Mask)	D	–	–	(M)(O) Any in excess of those required by regulation may be inoperative or missing provided: (a) Required distribution of operative units is maintained throughout the aircraft, (b) Inoperative portable oxygen dispensing unit is removed from passenger cabin and its location is placarded INOPERATIVE, or it is removed from installed location, secured out of sight and portable oxygen dispensing unit and its installed location is placarded INOPERATIVE, and (c) Procedures are established and used to alert crew members of inoperative or missing equipment.

1. PLACARD (P)

A. Put a PORTABLE OXYGEN DISPENSING UNIT(S) INOPERATIVE placard at the Portable Oxygen Dispensing Unit(s) dedicated location or at the location where the Portable Oxygen Dispensing Unit(s) is relocated.

2. MAINTENANCE (M)

A. For an inoperative portable oxygen dispensing unit, do one of the steps that follow:

(1) Make sure that the inoperative portable oxygen dispensing unit is removed from the passenger cabin and its installed location is placarded INOPERATIVE.

OR

(2) Remove and secure out of sight the inoperative portable oxygen dispensing unit from its installed location.

(3) Put a INOPERATIVE placard on the inoperative portable oxygen dispensing unit and its installed location.

3. OPERATIONS (O)

A. For an inoperative portable oxygen dispensing unit, operator must develop procedures to alert crewmembers of inoperative or missing portable oxygen dispensing unit(s).

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC					
00–01 Overhead Control Panel Pushbutton Annunciator (PBA) Switch Lights (light function only)					
1) L (R) BLEED “FAIL”		C	2	0	May be inoperative.
2) L (R) BLEED “OFF”		C	2	0	May be inoperative.
3) APU BLEED “FAIL”		C	1	0	May be inoperative.
4) APU BLEED “OFF”		C	1	0	May be inoperative.

1. PLACARD (P)

A. Put a PBA SWITCH LIGHT INOPERATIVE placard on the AIR control panel..

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC					
11–92	Fan Air Valve (FAV)				
1)	Associated bleed air off and both packs operative	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Associated FAV is secured CLOSED. (b) Associated Bleed System is selected OFF and not used, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) Both Avionics Bay Smoke Detectors are operative, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (g) Operations with Steep Approach are not conducted.
2)	Associated bleed air off and associated pack off	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Associated FAV is secured CLOSED. (b) Associated Bleed System is selected OFF and not used, (c) Flight is conducted in single pack configuration at or below FL310, (d) Both Avionics Bay Smoke Detectors are operative, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC					
11–92 Fan Air Valve (FAV) (Cont'd)					
3) Both FAV inoperative and unpressurized aircraft without passengers	B		2	0	(M)(O) Except for extended operations, both may be inoperative provided: (a) Both LH and RH Bleed Systems are selected OFF and not used, (b) Both FAVs are secured CLOSED, (c) Flight is conducted in an unpressurized configuration at or below 10000 ft MSL, (d) Airplane is not operated in known or forecast icing conditions, (e) Aircraft crews are the only occupants of the aircraft, and (f) Fuel Tank Inerting System is considered inoperative.

1. PLACARD (P)

A. Put a ONE and/or BOTH FAN AIR VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For dispatch with one FAV, before first flight, deactivate the LH or RH FAV in the CLOSED position (refer to BD500–A–J36–19–01–01AAA–560A–A).

B. For dispatch with both FAVs inoperative, before first flight, deactivate the LH and the RH FAV in the CLOSED position (refer to BD500–A–J36–19–01–01AAA–560A–A).

3. OPERATIONS (O)

A. For dispatch with one inoperative FAV and flight conducted in single bleed configuration.

(1) Before each flight, do as follows:

(a) On the AIR control panel, select L(R) BLEED to OFF.

(b) Make sure that L(R) BLEED OFF status message shows on the EICAS.

(c) Make sure that no other bleed–related message shows on the EICAS.

(d) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(e) Make sure that the XBLEED MAN OPEN status message is shown. This will confirm that the Cross Bleed Valve (CBV) is operative.

(f) On the AIR control panel, set the XBLEED switch to AUTO.

(g) Plan flight for operation in single bleed configuration at or below FL310 per AFM.

B. For dispatch with one inoperative FAV and flight conducted in single bleed and single pack configuration.

(1) Before each flight, do as follows:

(a) On the AIR control panel, select L(R) BLEED to OFF.

(b) Make sure that L(R) BLEED OFF status message shows on the EICAS.

(c) Make sure that no other bleed–related messages show on the EICAS.

(d) Plan flight for operation in single bleed configuration with one pack inoperative at or below FL310 per AFM.

C. For dispatch with two inoperative FAVs and flight conducted in unpressurized configuration.

(1) Before each flight, do as follows:

(a) On the AIR control panel, select L BLEED and R BLEED to OFF.

(b) Make sure that L BLEED OFF and R BLEED OFF status messages show on the EICAS.

(c) Make sure that no other bleed–related messages show on the EICAS.

(d) Plan flight for operation in unpressurized configuration under emergency ram air at or below 10000 ft MSL.

(e) Plan flight for operation in no known or forecast icing conditions.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC				
12–00 Bleed Air Systems				
1) Engine				
A) One engine bleed air system inoperative	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Associated Bleed System is selected OFF, (b) Associated High Pressure Shutoff Valve (HPV) is secured CLOSED, (c) Associated Pressure Regulating Shutoff Valve (PRSOV) is secured CLOSED, (d) Integrity of the associated engine bleed duct is verified, (e) Crossbleed Valve (CBV) is verified operative, (f) Flight is conducted in single bleed configuration at or below FL310, (g) Both Avionics Bay Smoke Detectors are operative, (h) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (i) Operations with Steep Approach are not conducted.
B) Both engine bleed air systems inoperative	B	2	0	(M)(O) Except for extended operations, both may be inoperative provided: (a) Both LH and RH Bleed Systems are selected OFF and not used, (b) Both LH and RH High Pressure Shutoff Valves (HPV) are secured CLOSED, (Cont'd)

System & Sequence N°	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC				
12–00 Bleed Air Systems (Cont'd)				(c) Both LH and RH Pressure Regulating Shutoff Valves (PRSOV) are secured CLOSED, (d) Flight is conducted in an unpressurized configuration at or below 10000 feet MSL, (e) Airplane is not operated in known or forecast icing conditions, (f) Aircraft crews are the only occupants of the aircraft, and (g) Fuel Tank Inerting System is considered inoperative.

1. PLACARD (P)

A. Put a LEFT and/or RIGHT ENGINE BLEED AIR SYSTEM INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For an inoperative Left or Right engine Bleed Air System, before first flight, do as follows:

(1) On the affected side deactivate the Pressure Regulating Shut–Off–Valve (PRSOV) in the CLOSED position (refer to BD500–A–J36–11–01–00AAA–560A–A)

(2) On the affected side deactivate the High Pressure Valve (HPV) in the CLOSED position (refer to BD500–A–J36–11–02–00AAA–560A–A).

(3) Visually inspect the engine bleed duct from the PRSOV to the pylon and make sure that there is no duct burst and/or disconnect.

B. For both inoperative engine Bleed Air System, before first flight, do as follows:

(1) Deactivate the Left and Right Pressure Regulating Shut–Off–Valve (PRSOV) in the CLOSED position (refer to BD500–A–J36–11–01–00AAA–560A–A)

(2) Deactivate the Left and Right High Pressure Valve (HPV) in the CLOSED position (refer to BD500–A–J36–11–02–00AAA–560A–A).

3. OPERATIONS (O)

A. For single bleed operation, before each flight, do as follows:

(1) On the AIR control panel, select affected L or R BLEED to OFF.

(2) Make sure that associated L(R) BLEED OFF status messages show on the EICAS.

(3) Make sure that no other bleed–related messages show on the EICAS.

(4) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(5) Make sure that the XBLEED MAN OPEN status message is shown. This will confirm that the Cross Bleed Valve (CBV) is operative.

(6) On the AIR control panel, set the XBLEED switch to AUTO.

(7) Do not operate the aircraft above FL310.

B. For both Bleed Air Systems inoperative (unpressurized flight), before each flight, do as follows:

(1) On the AIR control panel:

(a) Select L BLEED and R BLEED to OFF.

(b) Make sure that L BLEED OFF and R BLEED OFF status messages show on the EICAS.

(c) Select L PACK and R PACK to OFF.

(d) Select RAM AIR to OPEN.

(e) Select RECIRC AIR to OFF.

(2) Make sure that no other bleed–related messages show on the EICAS.

(3) On the PRESSURIZATION panel, select EMER DEPRESS to ON.

(4) Do not operate the aircraft above FL100.

(5) Operations are not conducted known or forecast icing conditions.

(6) Use alternative procedures to start the engines [APU or Ground Cart – High Pressure Ground Connection (HPGC)].

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC					
12–01	Engine Bleed Pressure Regulating Shutoff Valve (PRSOV)				
1)	Associated engine bleed air off and flight conducted at or below FL 310	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Affected valve is secured CLOSED, (b) Associated Engine Bleed System is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) Both Avionics Bay Smoke Detectors are operative, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (g) Operations with Steep Approach are not conducted.
2)	Associated engine bleed air and pack off and flight conducted at or below FL 310	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Affected valve is secured CLOSED, (b) Associated Engine Bleed System is selected OFF, (c) Flight is conducted in single pack configuration at or below FL310, (d) Both Avionics Bay Smoke Detectors are operative, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC					
12–01 Engine Bleed Pressure Regulating Shutoff Valve (PRSOV) (Cont'd)					
3) Unpressurized aircraft without passengers	B		2	0	(M)(O) Except for extended operations, both may be inoperative provided: (a) Both valves are secured CLOSED, (b) L BLEED and R BLEED are selected OFF, (c) Flight is conducted unpressurized at or below 10000 ft MSL, (d) Airplane is not operated in known or forecast icing conditions, (e) Aircraft crews are the only occupants of the aircraft, and (f) Fuel Tank Inerting System is considered inoperative.
4) APU bleed system continuously operated and both packs operative	C		2	0	(M)(O) Except for extended operations, both may be inoperative provided: (a) Both valves are secured CLOSED, (b) APU Bleed System is operated during flight, (c) Both Air Conditioning Packs are operative, (d) Flight is conducted per AFM, (e) Passenger load is limited per AFM, (f) Airplane is not operated in known or forecast icing conditions, and (g) Both Avionics Bay Smoke Detectors are operative.

1. PLACARD (P)

A. Put a L and/or R ENGINE BLEED PRSOV INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For dispatch with one inoperative engine bleed PRSOV, before first flight, deactivate the affected LH or RH PRSOV (refer to BD500–A–J36–11–01–00AAA–560A–A).

B. For dispatch with both engine bleed PRSOV inoperative, before first flight, deactivate the LH and the RH PRSOV (refer to BD500–A–J36–11–01–00AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative Engine Bleed PRSOV in single bleed operation with both PACKS operative, do the steps that follow before flight:

(1) On the AIR control panel, select the affected bleed to OFF.

(2) Plan flight for operation in single bleed configuration with two packs operative at or below FL310 per AFM.

B. For an inoperative Engine Bleed PRSOV in single bleed and single pack operation, do the steps that follow before flight:

(1) On the AIR control panel, select the affected L(R) BLEED to OFF.

(a) Make sure associated L(R) BLEED OFF (status) shows on EICAS.

(2) Make sure no other bleed–related messages shows on EICAS.

(3) Plan flight for operation in single bleed configuration with one pack operative at or below FL310 per AFM.

C. For two inoperative engine bleed PRSOV during unpressurized flight, do the steps that follow before flight:

(1) On the AIR control panel, select L BLEED or R BLEED to OFF.

(2) Obey unpressurized flight procedures.

(3) Conduct unpressurized flight at or below 10000 ft MSL.

(4) Avoid icing conditions.

D. For two inoperative engine bleed PRSOV during pressurized flight from APU Bleed, do the steps that follow before flight:

(1) Limit cabin occupants per AFM Limitation.

(2) On the AIR control panel, select L BLEED and R BLEED to OFF.

(3) On the ELECTRICAL control panel, select APU GEN to ON.

(4) On the AIR control panel, select APU BLEED to ON.

(5) On the AIR control panel, select L PACK and R PACK to ON.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC				
12–05 High Pressure Shut Off Valve (HPV)				
1) One HPV inoperative	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Affected valve is secured CLOSED, (b) Associated Engine Bleed System is considered inoperative. Refer to “Bleed Air Systems 1) Engine”, and (c) Operations with Steep Approach are not conducted.
2) Both HPV inoperative	B	2	0	(M)(O) Except for extended operations, may be inoperative provided: (a) Both valves are secured CLOSED, and (b) Both engine bleed systems are considered inoperative. Refer to “Bleed Air Systems 2) Engine”.

1. PLACARD (P)

A. Put a ONE and/or BOTH HIGH PRESSURE SHUTOFF VALVE INOPERATIVE placard on the AIR control panel.

2. MAINTENANCE (M)

A. For one inoperative HPV, before first flight, deactivate the HPV in the CLOSED position (refer to BD500–A–J36–11–02–00AAA–560A–A).

B. For two inoperative HPVs, before first flight, deactivate the LH HPV and the RH HPV in the CLOSED position (refer to BD500–A–J36–11–02–00AAA–560A–A).

3. OPERATIONS (O)

A. For one inoperative HPV failed open, do the steps that follow before flight:

(1) On the AIR control panel, select the associated L (R) BLEED to OFF.

(2) Make sure that L (R) BLEED OFF status message shows on EICAS.

(3) Make sure that no other bleed-related messages show on EICAS.

(4) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(5) Make sure that the XBLEED MAN OPEN status message is shown. This will confirm that the Cross Bleed Valve (CBV) is operative.

(6) Make sure that opposite BLEED is ON.

(7) On the AIR control panel, set the XBLEED switch to AUTO.

(8) If flight includes operation in icing conditions, wing anti-ice uses opposite bleed.

(9) Make sure that operations with Steep Approach are not conducted.

NOTE:

B. For two inoperative HPVs, do the steps that follow before flight:

(1) On the AIR control panel, select L BLEED and R BLEED to OFF,

(2) Make sure that L BLEED OFF and R BLEED OFF status messages show on EICAS.

(3) Make sure that no other bleed-related messages show on EICAS.

(4) Plan flight for operation in no known or forecast icing conditions.

(5) Obey unpressurized flight procedure.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 – PNEUMATIC				
17–01 High Pressure Ground Connection (HPGC) Valve	C	1	0	(O) May be inoperative closed provided: (a) HPGC is not used, (b) Auxiliary Power Unit (APU) is operative, and (c) APU Bleed is operative.

1. PLACARD (P)

A. Put a HIGH PRESSURE GROUND CONNECTION VALVE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative HPGC valve , because the high pressure ground air connection cannot be used, use the Auxiliary Power Unit (APU) as air source to start the engines.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 – WATER/WASTE					
10–01 Individual Components of Potable Water Systems	C	–	0	(M)(O)	Individual components may be inoperative provided: (a) Associated components are deactivated or isolated, and (b) Associated system components are verified not to have leaks. NOTE: Any portion of the system that operates normally may be used.
1) Water Pumps	D	2	1		
2) Water Heaters	D	–	0		
3) Potable Water Mixers	D	–	0	(M)	May be inoperative provided associated Water Heater is deactivated.

1. PLACARD (P)

A. Put the appropriate INOPERATIVE placard on the affected component.

2. MAINTENANCE (M)

A. For an inoperative individual component of the potable water system:

(1) Deactivate, or isolate electrical and pressurization components of the potable water system.

NOTE: Due to the various component failure possibilities, the operator is to establish appropriate procedure to deactivate and/or isolate applicable system component(s).

(2) Do a visual leak check of the associated system component(s).

B. For an inoperative potable water mixer:

(1) To prevent potential injuries due to the water being too hot, deactivate water heater in the affected lavatory (refer to BD500–A–J38–12–30–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative individual component of the potable water system, do the steps that follow:

(1) Cabin crew must be advise of inoperative system.

(2) Alternative procedures must be established for other means of water provision, for crew members/occupants, such as water bottles and moist towellettes.

(3) Bottled water could be used to assist in toilet rinsing.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 – WATER/WASTE				
10–02 Potable Water System	B	–	0	(M)(O) Except for extended operations. system may be inoperative provided: (a) Tank is drained and inspected to ensure no leakage, and (b) Procedures are established to deactivate applicable system components to prevent its use or servicing. NOTE 1: The (O) procedure addresses other means for water provision for crew members as well as the need to advise of system status during crew changes. NOTE 2: Aviation Occupational Health & Safety (AOH&S) requirements should be addressed.

1. PLACARD (P)

A. Put a POTABLE WATER SYSTEM INOPERATIVE / DO NOT SERVICE placard inside the water service panel.

Put a POTABLE WATER SYSTEM INOPERATIVE placard on the cabin Crew Terminal(s).

2. MAINTENANCE (M)

A. For an inoperative potable water system, do the steps that follow:

(1) Drain the Potable Water System (PWS) (refer to BD500–A–J12–10–38–01AAA–226A–A).

(2) Do a visual leak check of the water tank.

(3) Deactivate the electrical and the pressurization components of the potable water system as follows:

(a) On the Circuit Breaker (CB) synoptic page, set to OUT and LOCK the Circuit Breakers (CBs) that follow (refer to BD500–A–J24–00–00–06AAA–398D–A):

– CDC5–17–7 (WTR FILL HTR)

– CDC3–9–4 (WTR HTR LAV A)

– CDC5–18–4 (WTR HTR LAV C) ***

– CDC5–18–6 (WTR HTR LAV D) ***

– CDC5–18–5 (WTR HTR LAV E) ***

– CDC5–17–4 (WTR PUMP 1)

– CDC5–17–5 (WTR PUMP 2)

– CDC5–17–6 (WTR PUMP HTRS)

– CDC5–16–5 (WTR TANK HTR)

– CDC5–11–16 (WTR WASTE CTRL)

NOTE: *** Option not installed on all aircraft.

3. OPERATIONS (O)

A. For an inoperative potable water system, do the steps that follow:

(1) The cabin crew must be advised of the inoperative system.

(2) Alternative procedures for water provision for crew members/passengers, such as water bottles and moist wipes, must be established.

(3) If necessary, use bottled water to assist in toilet rinsing.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 – WATER/WASTE					
30–01 Individual Components of Lavatory Waste Systems		C	–	–	(M)(O) Individual components may be inoperative provided: (a) Associated components are deactivated or isolated, and (b) Associated system components are verified not to have leaks. NOTE: Any portion of system that operates normally may be used.

1. PLACARD (P)

A. Put a COMPONENT OF LAVATORY SYSTEM INOPERATIVE placard in the associated lavatory.

2. MAINTENANCE (M)

A. For an inoperative generic component of the lavatory waste system.

(1) Deactivate or isolate associated components.

(2) Make sure that the associated components are not leaking.

B. For a false wet indication of the waste tank ultrasonic point level sensor (100%).

NOTE: A false wet condition may occur when the waste tank is drained, the flush function of each toilet is inoperative and WASTE TANK FULL is indicated on the LAVATORY page of the Cabin Management System (CMS) display.

(1) Make sure that the waste tank was drained (refer to BD500–A–J12–10–38–02AAA–228A–A).

(2) Deactivate the ultrasonic point level sensor (100%) as follows:

(a) On the Circuit Breaker (CB) synoptic page set to OUT and LOCK the following circuit breaker (refer to BD500–A–J24–00–00–06AAA–398D–A).

CDC5–12–12 (WASTE TNK SNSR 100)

(3) Clear the residual memory of the waste system as follows:

(a) On the Circuit Breaker (CB) synoptic page set to OUT the following circuit breakers (refer to BD500–A–J24–00–00–05AAA–398D–A).

CDC5–11–16 (WTR WASTE CTLR)

CDC3–4–7 (TOILET LAV A)

CDC5–12–8 (TOILET LAV C)***

CDC5–12–9 (TOILET LAV D)***

CDC5–12–10 (TOILET LAV E)***

CDC5–12–11 (WASTE TNK SNSR 75)

NOTE: ***Option not installed on all aircraft.

(b) Wait at least 30 seconds.

(c) On the Circuit Breaker (CB) synoptic page set to IN the following circuit breakers (refer to BD500–A–J24–00–00–10AAA–398D–A).

CDC5–11–16 (WTR WASTE CTLR)

CDC3–4–7 (TOILET LAV A)

CDC5–12–8 (TOILET LAV C)***

CDC5–12–9 (TOILET LAV D)***

CDC5–12–10 (TOILET LAV E)***

CDC5–12–11 (WASTE TNK SNSR 75)

NOTE: ***Option not installed on all aircraft.

(4) Make sure that the following Onboard Maintenance System (OMS) fault messages are displayed:

LAVATORY/WATER SYSTEM FAULT

100% ULTRASONIC POINT LEVEL SENSOR (MT79) NO CAN BUS DATA TRANSMISSION / REPORTED BY WWSC

(5) On the Cabin Management System (CMS) display, make sure that the following message is displayed on the LAVATORY page:

LAVATORY/WATER SYSTEM FAULT

(6) Perform an operation test of the toilet flush system (refer to BD500–A–J38–30–01–02AAA–320A–A).

NOTE: With the waste tank ultrasonic point level sensor (100%) deactivated, the waste tank is reduced to 87% usable capacity. Waste tank servicing intervals to be planned accordingly.

3. OPERATIONS (O)

A. For an inoperative component of the lavatory waste system, do the steps that follow:

(1) Advise the cabin crew about the inoperative components.

(2) Do a periodical inspection of the lavatory.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 – WATER/WASTE					
30–02	Lavatory Waste Systems				
1)	Non–extended operations	C	–	1	(M)(O) Except for extended operations with passengers, may be inoperative provided: (a) Waste is drained and system is inspected for leakage, (b) Procedures are established to deactivate system components, (c) Lavatory door is locked closed and placarded INOPERATIVE – DO NOT ENTER, and (d) There is at least one serviceable lavatory on the aircraft.
2)	Extended operations	C	–	2	(M)(O) May be inoperative provided: (a) Waste is drained and system is inspected for leakage, (b) Procedures are established to deactivate system components, (c) Lavatory door is locked closed and placarded INOPERATIVE – DO NOT ENTER, and (d) There is at least two serviceable lavatories on the aircraft.
3)	Vacuum Generator				
A)	Non–extended operations	C	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) Vacuum Generator is deactivated, and (b) Lavatories are not used on the ground or at flight altitudes below 16000 feet. NOTE: The Pilot in Command will control lavatory access via fasten seat belts until aircraft is above 16000 feet. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 – WATER/WASTE					
30–02 Lavatory Waste Systems (Cont'd)					
B) Extended operations	B		1	0	(M)(O) May be inoperative provided: (a) Vacuum Generator is deactivated, and (b) Lavatories are not used on the ground or at flight altitudes below 16000 feet. NOTE: The Pilot in Command will control lavatory access via fasten seat belts until aircraft is above 16000 feet.

1. PLACARD (P)

A. For an inoperative lavatory waste system, put a INOPERATIVE – DO NOT ENTER placard on the affected lavatory door(s).

2. MAINTENANCE (M)

A. For an inoperative lavatory waste system, do as follows:

(1) Drain the waste tank (refer to BD500–A–J12–10–38–02AAA–228A–A).

(2) Deactivate the manual shutoff valve of the affected toilet (refer to BD500–A–J38–12–33–01AAA–560A–A).

(3) Deactivate the affected toilets(s), on the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the associated circuit breaker(s) that follow(s):

CDC3–4–7 (TOILET LAV A)

CDC5–12–8 (TOILET LAV C) ***

CDC5–12–9 (TOILET LAV D) ***

CDC5–12–10 (TOILET LAV E) ***

NOTE: *** Option not installed on all aircraft.

(4) Do a visual inspection for leaks.

(5) Put a INOPERATIVE – DO NOT ENTER placard on the affected lavatory door(s).

B. For an inoperative vacuum generator, on the ECB synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC1–15–1 (TOILET VAC GEN)

3. OPERATIONS (O)

A. For an inoperative lavatory waste system, do the steps that follow:

(1) Advise the cabin crew of the inoperative lavatory waste system.

(2) Make sure that associated lavatory door remains closed and locked.

B. For an inoperative vacuum generator, do as follows:

(1) On the ground or when the aircraft is flying below 16000 ft, keep lavatory doors locked.

NOTE: Differential pressure in cabin will facilitate flushing above 16000 ft.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
10–00 CMS Customer Service Displays ***					
1) Procedures require CMS	A	–	–	(O)	May be inoperative provided: (a) Alternate procedures are established and used, and (b) Repairs are made within 30 flight days.
2) Procedures do not require CMS	D	–	–		May be inoperative provided procedures do not require its use.

1. PLACARD (P)

A. Put a CMS CUSTOMER SERVICE DISPLAYS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative CMS customer service display, operator to develop alternate procedures to provide live passenger safety briefings/demonstrations relating to safety and emergency events, prior to each flight.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
11–05	Crew Terminal (CT) Screen				
1)	Screen Lock/Screensaver, Fasten Seat Belt, No PED, Wrench Icon Header Buttons	D	–	0	(M) May be inoperative provided alternate procedures are established and used.
2)	Cabin Ready Header Button	D	–	0	(O) May be inoperative provided alternate procedures are established and used.
3)	Back, MAINT, Status Footer Buttons	D	–	0	(M) May be inoperative provided alternate procedures are established and used.
4)	Home Footer Button	D	–	0	May be inoperative provided CMS footer button is operative.
5)	CMS Footer Button	D	–	0	May be inoperative provided Home footer button is operative.
6)	Customer Service Display (CSD) Page ***	D	–	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any part of the CSD page that is operative may be used.
7)	Pre Recorded Announcement Messages (PRAM) Page	D	–	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any part of the PRAM page that is operative may be used.
8)	Temperature Page	D	–	0	May be inoperative. NOTE: Any part of the Temperature page that is operative may be used. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
11–05 Crew Terminal (CT) Screen (Cont'd)					
9) Galley Page	D	–	0	(O)	May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Galley page that is operative may be used.
10) Doors Page	D	–	0	(O)	May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Doors page that is operative may be used.
11) Lavatory Page					
A) Water Level Indication	D	–	0	(M)	May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Lavatory page that is operative may be used.
B) Waste Status service Indication	D	–	0	(M)	May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Lavatory page that is operative may be used.
C) Purge command	D	–	0	(M)	May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Lavatory page that is operative may be used. (Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
11–05	Crew Terminal (CT) Screen (Cont'd)				
12)	Messages Page	D	–	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any part of the Messages page that is operative may be used.
13)	eLog Page ***	D	–	0	(M)(O) May be inoperative provided alternate procedures are established and used. NOTE: Any part of the eLog page that is operative may be used.

1. PLACARD (P)

A. Put a CREW TERMINAL (CT) SCREEN INOPERATIVE placard near the crew terminal.

2. MAINTENANCE (M)

A. For an inoperative CT screen Lock/Screensaver, Fasten Seat Belt, No PED, Wrench Icon Header Button, access the Onboard Maintenance System (OMS) and make sure that there are no Cabin Maintenance System (CMS) faults.

B. For an inoperative CT screen Back, MAINT, Status Footer Button, access the OMS to make sure that there are no CMS faults.

C. For an inoperative CT Lavatory page – Water Level Indication, do one of the steps that follow:

(1) Use the Onboard Maintenance System (OMS) to verify the water level as follows:

(2) Access to perform Line replaceable Unit (LRU)/system operation – System monitoring (refer to BD500–A–J45–45–00–03AAA–C21A–A).

(3) From the Multi–Function Windows (MFW), select MAINT MENU.

(4) From the MAINT MENU page, select Perform LRU/System Operations.

(5) From the Perform LRU/System Operations page, select View _> All ATAs.

(6) Select _> 38–00–00.

(7) Select DATA Tab > expand octal label(s) to read a required value of water quantity labels:

– Label 271 is Water level status in percentage

– Label 271 is Water level in gallons

– Label 271 is Water level in liters.

(8) If the OMS is not available, do the steps that follow:

(a) Fill the Potable water tank to 100% capacity.

(b) Make sure that LED adjacent to the FULL indication, on the Potable water servicing panel, comes ON.

D. For an inoperative CT Lavatory page – Waste Status Service Indication, use the waste tank service panel to make sure that the waste tank level is correct. Operator to select time interval for waste tank level check.

If necessary, service the waste tank during every station stop.

E. For an inoperative CT Lavatory page – Purge Command, drain the water tank and the supply lines during cold weather operations (refer to BD500–A–J12–10–38–01AAA–226A–A).

F. For an inoperative CT screen eLog page, operators to create alternative procedures record aircraft defects and rectification data.

3. OPERATIONS (O)

A. For an inoperative CT screen Cabin Ready Header Button, the cabin crew to use the interphone to contact the flight when the cabin crew is ready for takeoff or landing. Operator can use the chimes to communicate Cabin Ready.

B. For an inoperative CT screen Customer Service Display (CSD) page, the cabin crew must do live safety demonstrations with safety equipment (seat belt, oxygen mask, life vest, safety card etc.) and the PA system or megaphone.

C. For an inoperative CT screen Pre-Recorded Announcement Messages (PRAM) page, the cabin crew must make the appropriate announcements with the Passenger Address (PA) system or megaphone.

D. For an inoperative CT screen Galley page, the flight crew to advise the cabin crew that the cabin crew will not be able to remove power to the galley equipment from the CT galley page. If necessary, the cabin crew must advise the flight crew if galley equipment power must be removed from the Circuit Breaker (CB) page, in the flight compartment.

Alternatively, galley power can be removed by the CABIN PWR switch on the ELECTRICAL control panel, in the flight compartment.

E. For an inoperative CT screen Doors page, the cabin crew must verify the status of the mechanical flags of the doors to make sure that they are in the applicable condition for boarding, takeoff, landing, and deplaning.

F. For an inoperative CT screen Message page, the cabin crew to coordinate with the flight crew to communicate with ground stations using alternative procedures from the flight compartment.

G. For an inoperative CT screen eLog page, operators to create alternative procedures to record aircraft defects and rectification data.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
11–09 CMS Backup Functions					
1) Cabin Handset	D		–	–	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a CABIN HANDSET CMS BACKUP FUNCTION INOPERATIVE placard near the handset cradle.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative cabin handset CMS backup function, the cabin crew can access CMS backup functions on another cabin handset or on the crew terminal.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
11–13	CMS Passenger Service Unit Controllers	C	–	–	May be inoperative provided: (a) Associated ordinance signs are considered inoperative, (b) Associated cabin speakers are considered inoperative, (c) Associated lavatory speakers are considered inoperative, (d) Associated reading lights are considered inoperative, and (e) Associated attendant call lights are considered inoperative.

1. PLACARD (P)

A. Put a CMS PSU CONTROLLER INOPERATIVE placard near the crew terminal.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
20–01 In Seat Power System					
1) AMCU Relay	D		2	0	(M) One or both may be inoperative provided affected relay is isolated from the electrical power.

1. PLACARD (P)

A. Put a SEAT POWER OUTLET INOPERATIVE placard near the Crew Terminal Screen

2. MAINTENANCE (M)

A. For dispatch with the INFO message 24 ELECTRICAL FAULT - ISPS 1 RELAY FAIL CLSD:

(1) On the electronic circuit breaker synoptic page, set to OUT and LOCK the following circuit breaker (refer to BD500-A-J24-00-00-06AAA-398D-A):

CDC1-11-13 (ISPS RLY AMCU 1)

(2) On the Electrical Power Centre (EPC) 1 open and collar the following circuit breaker (refer to BD500-A-J24-00-00-04AAA-398D-A):

EPC1-C14 (ISPS AMCU 1)

B. For dispatch with the INFO message 24 ELECTRICAL FAULT - ISPS 2 RELAY FAIL CLSD:

(1) On the electronic circuit breaker synoptic page, set to OUT and LOCK the following circuit breaker (refer to BD500-A-J24-00-00-06AAA-398D-A)

CDC2-10-9 (ISPS RLY AMCU 2)

(2) On the Electrical Power Centre (EPC) 2 open and collar the following circuit breaker (refer to BD500-A-J24-00-00-04AAA-398D-A):

EPC2-D1 (ISPS AMCU 2)

3. OPERATIONS (O)

A. Not required.

NOTE: Cabin crew to be aware that associated electrical outlets to the inoperative AMCU relay(s) will be unavailable to the passengers.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 – CABIN SYSTEMS					
21–00 CMS Printer ***		D	1	0	May be inoperative.

1. PLACARD (P)

A. Put a CMS PRINTER INOPERATIVE placard near the CMS printer.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
45 – CENTRAL MAINTENANCE SYSTEM (CMS)					
01–01 Cockpit HMU Maintenance Panel					
1) Aircraft Maintenance Switch					
A) Inoperative in NORM or MAINT position		C	1	0	May be inoperative in NORM or MAINT positions. NOTE: If the switch fails stuck in MAINT position, status message A/C MAINTENANCE SW will be displayed on the EICAS.
B) Inoperative in UPLOAD position		C	1	0	(O) May be inoperative in UPLOAD position provided: (a) Channel switch is operative, and (b) Channel switch is verified selected OFF. NOTE: If the switch fails stuck in UPLOAD position, status message A/C MAINTENANCE SW will be displayed on the EICAS.
2) Channel Switch		C	1	0	May be inoperative.

1. PLACARD (P)

A. Put a COCKPIT HMU MAINTENANCE PANEL INOPERATIVE placard on the HMU maintenance panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative MAINT switch in the UPLOAD position, before each flight, make sure that the CHAN switch is set to OFF on the HMU maintenance panel.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
45 – CENTRAL MAINTENANCE SYSTEM (CMS)					
04–01 Onboard Data Loader (ODL)	C	1	1	0	May be inoperative provided maintenance procedure does not require its use.

1. PLACARD (P)

A. Put a ONBOARD DATA LOADER INOPERATIVE placard on the INFORMATION MANAGEMENT UNIT access door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
45 – CENTRAL MAINTENANCE SYSTEM (CMS)					
40–00 Cockpit Printer		C	1	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any portion of printer which operates normally may be used.

1. PLACARD (P)

A. Put a PRINTER INOPERATIVE placard on the cockpit printer.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS				
10–00 Information Management System (IMS)	C	1	0	May be inoperative provided repairs are made prior to database update requirements. NOTE 1: Any portion of system which operates normally may be used. NOTE 2: Printer will become unavailable. NOTE 3: ODL will become unavailable.

1. PLACARD (P)

A. Put a INFORMATION MANAGEMENT SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS					
10–01	Health Management Unit (HMU)	A	1	0	(M) May be inoperative or removed provided repairs are made before the completion of the next heavy maintenance visit.
1)	WiFi Antenna ***	D	1	0	May be inoperative.
2)	Battery Latch				
A)	Procedures require HMU battery power	C	1	0	(M) May be inoperative provided HMU battery power input is deactivated.
B)	Procedures do not require HMU battery power	D	1	0	(M) May be inoperative provided: (a) HMU battery power input is deactivated, and (b) Procedures do not require its use.
3)	GSM Antenna				
A)	Procedures require GSM antenna	C	1	0	May be inoperative.
B)	Procedures do not require GSM antenna	D	1	0	May be inoperative provided procedures do not require its use.

1. PLACARD (P)

A. Put a INOPERATIVE placard, related to the applicable inoperative component, below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Health Management Unit.

(1) For dispatch with HMU removed:

(a) Remove HMU (refer to BD500-A-J46-11-01-01AAA-520A-A).

(2) For dispatch with HMU installed:

(a) No (M) action is required.

B. For an inoperative HMU battery latch.

(1) On the Electronic Power Center (EPC) 1, open the circuit breaker that follows to deactivate battery power to the HMU (refer to BD500–A–J24–00–00–04AAA–398D–A):

EPC1–D7 (HMU CH A BATT)

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS					
11–01 Aircraft Network Switch (ANS)		D	1	0	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any portion of ANS which operates normally may be used.

1. PLACARD (P)

A. Put an AIRCRAFT NETWORK SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative ANS, create and use alternative procedures.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS				
20–00 Electronic Flight Bag (EFB) System ***				
1) Aircraft Information Server (AIS)				
A) Procedures require AIS	C	1	0	(O) May be inoperative provided alternate procedures are established and used.
B) Procedures do not require AIS	D	1	0	May be inoperative provided procedures do not require its use.
2) Expansion Module Units (EMUs)				
A) Procedures require EMU	C	2	0	(O) May be inoperative provided alternate procedures are established and used.
B) Procedures do not require EMU	D	2	0	May be inoperative provided procedures do not require its use.
3) EDU Mounting Brackets				
A) Procedures require EDU	C	2	0	(M)(O) May be inoperative provided: (a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, and (b) Alternate procedures are established and used.
B) Procedures do not require EDU	D	2	0	(M) May be inoperative provided: (a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, and (b) Procedures do not require its use.

(Cont'd)

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS					
20–00 Electronic Flight Bag (EFB) System *** (Cont'd)					
4) Keyboards		D	2	0	(O) May be inoperative provided alternate procedures are established and used.
5) Keyboard Sliding Trays		D	2	0	(M)(O) May be inoperative provided: (a) Associated tray/keyboard is secured by an alternate means acceptable to flight crew or removed from the aircraft, and (b) Alternate procedures are established and used.
6) Laptop Docking Stations (LDS)					
	A) Procedures require LDS	C	2	0	(M)(O) May be inoperative provided: (a) Associated laptop and hardware is secured by an alternate means or removed from the aircraft, and (b) Alternate procedures are established and used. NOTE: Any LDS function which operates normally may be used.
	B) Procedures do not require LDS	D	2	0	(M) May be inoperative provided: (a) Associated laptop and hardware is secured by an alternate means or removed from the aircraft, and (b) Procedures do not require its use.

(Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS					
20–00 Electronic Flight Bag (EFB) System *** (Cont'd)					
7) cTWLU (Cellular Wireless Terminal LAN Unit) (A220-100 only)					
A) Procedures require cTWLU	C	1	0	(O)	May be inoperative provided alternate procedures are established and used.
B) Procedures do not require cTWLU	D	1	0		May be inoperative provided operations do not require its use.
8) CWLU (Crew Wireless LAN Unit) (A220-100 only)					
A) Procedures require CWLU	C	1	0	(O)	May be inoperative provided alternate procedures are established and used.
B) Procedures do not require CWLU	D	1	0		May be inoperative provided operations do not require its use.
9) WLAN Antenna (A220-100 only)					
A) Procedures require WLAN	C	1	0	(O)	May be inoperative provided alternate procedures are established and used.
B) Procedures do not require WLAN	D	1	0		May be inoperative provided operations do not require its use.

1. PLACARD (P)

A. Put a INOPERATIVE placard, related to the applicable inoperative component, below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative EFB EDU mounting bracket, use alternative procedures to secure the applicable EFB and/or hardware, in accordance with portable EFB stowage criteria. Or, remove the applicable EFB and/or hardware.

B. For an inoperative EFB keyboard sliding tray, use alternative procedures, acceptable to the flight crew, to secure the applicable tray/keyboard and/or hardware. Or, remove the applicable tray/keyboard and/or hardware.

C. For an inoperative EFB Laptop Docking Station (LDS), use alternative procedures to secure the applicable laptop/EFB and/or hardware. Or, if necessary, remove the applicable laptop/EFB and/or hardware.

3. OPERATIONS (O)

A. For an inoperative EFB Aircraft Information Server (AIS), create and use alternative procedures.

B. For an inoperative EFB Expansion Module Unit (EMU), create and use alternative procedures.

C. For an inoperative EFB EDU mounting bracket, create and use alternative procedures if the EFB and the applicable mounting bracket are removed.

D. For an inoperative EFB keyboard, create and use alternative procedures.

E. For an inoperative EFB keyboard sliding tray, create and use alternative procedures.

F. For an inoperative EFB laptop docking station (LDS), create and use alternative procedures.

G. For an inoperative EFB cTWLU, create and use alternative procedures.

H. For an inoperative EFB CWLU, create and use alternative procedures.

I. For an inoperative EFB WLAN antenna, create and use alternative procedures.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
46 – INFORMATION SYSTEMS					
61–11 Integrated Flight Information System (IFIS) Enhanced Functions ***					
1) Procedures require IFIS enhanced functions.		C	–	0	Any or all functions may be inoperative provided alternate source(s) of current approved flight documentation and navigation charts are available. NOTE: Any current and operative functions may continue to be used.
2) Procedures do not require IFIS enhanced functions		D	–	0	Any or all functions may be inoperative provided routine operations do not require its use. NOTE: Any current and operative functions may continue to be used.
3) Document Reader Function		C	–	–	Any or all functions may be inoperative provided alternate source(s) of current approved flight documentation are available.
4) Database Applications (Charts, Enhanced Maps, Graphical Weather, Enroute Charts, etc.)		C	–	–	Any or all individual databases may be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a IFIS ENHANCED FUNCTIONS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
47 – INERT GAS SYSTEMS				
30–00 Fuel Tank Inerting System (FTIS)				
1) Dual Flow Shut–Off Valve (DFSOV) and Inlet Isolation Valve (IIV) closed	C	1	0	(M)(O) May be inoperative provided: (a) System is deactivated, (b) Dual Flow Shut–Off Valve (DFSOV) is verified closed, and (c) Inlet Isolation Valve (IIV) is verified closed.
2) Dual Flow Shut–Off Valve (DFSOV) and Temperature Isolation Valve (IIV) closed	C	1	0	(M)(O) May be inoperative provided: (a) System is deactivated, (b) Dual Flow Shut–Off Valve (DFSOV) is verified closed, and (c) Temperature Isolation Valve (TIV) is verified closed.

1. PLACARD (P)

A. Put a FUEL TANK INERTING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative FTIS:

(1) For dispatch using the Dual Flow Shut–Off Valve (DFSOV) and the Inlet Isolation Valve (IIV):

(a) On the ECB synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC1–11–7 (FUEL INERT CTLR)

(b) Make sure the DFSOV and IIV are closed as follows:

1 Open access door 193BB to get access to the DFSOV and the IIV) (refer to BD500–A–J52–47–03–01AAA–540A–A).

2 On the DFSOV, make sure that the position indicator pins are retracted for medium flow and low flow.

3 On the IIV, make sure that the visual indication shows CLOSED.

4 Remove the lanyard manual locking bolt from the housing assembly and insert it in the LOCK POSITION hole.

5 Close access door 193BB (refer to BD500–A–J52–47–03–01AAA–740A–A).

(2) For dispatch using the Dual Flow Shut–Off Valve (DFSOV) and the Temperature Isolation Valve (TIV) do as follows:

(a) On the ECB synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC1–11–7 (FUEL INERT CTLR)

(b) Open access door 193BB to get access to the Dual Flow Shut–Off Valve (DFSOV) (refer to BD500–A–J52–47–03–01AAA–540A–A).

(c) On the DFSOV, make sure the position indicator pins are retracted for medium flow and low flow.

(d) Close access door 193BB (refer to BD500–A–J52–47–03–01AAA–740A–A).

(e) Open access door 193CB to get access to the Temperature Isolation Valve (TIV) (refer to BD500–A–J52–47–03–01AAA–540A–A).

(f) Make sure the position indicator pin on the TIV is retracted.

(g) Close access door 193CB (refer to BD500–A–J52–47–03–01AAA–740A–A).

3. OPERATIONS (O)

A. For an inoperative FTIS, on the ECB synoptic page, make sure that the following circuit breaker is set to OUT and LOCK:

CDC1–11–7 (FUEL INERT CTLR)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER					
00–01 Overhead Control Panel – APU “FAIL” Light	C	1	1	0	May be inoperative.

1. PLACARD (P)

A. Put a APU FAIL PBA SWITCH LIGHT INOPERATIVE placard on the APU control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER					
00–03	Auxiliary Power Unit (APU) System	C	1	0	Except for extended operations, may be inoperative.

1. PLACARD (P)

A. Put a APU SYSTEM INOPERATIVE placard on the APU.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER				
14–19 APU Air Intake Door Actuator				
1) APU air intake door closed	C	1	0	(M)(O) Except for extended operations, may be inoperative in closed position provided APU is considered inoperative.
2) APU air intake door secured open and APU in use	C	1	0	(M) May be inoperative and APU used provided: (a) Door is secured in open position, and (b) APU is operated continuously during flight.
3) APU air intake door secured open and APU not in use	C	1	0	(M)(O) Except for extended operations, may be inoperative and APU is not used provided: (a) Door is secured in open position, and (b) Airspeed is limited to 250 KIAS.

1. PLACARD (P)

A. Put an APU AIR INTAKE DOOR ACTUATOR INOPERATIVE placard on the APU control panel.

B. If applicable, put an APU CONSIDERED INOPERATIVE placard on the APU control panel.

2. MAINTENANCE (M)

A. For an inoperative APU Air Intake Door Actuator in the CLOSED position, deactivate the APU Air Intake Door in the closed position (refer to BD500–A–J49–12–03–02AAA–560A–A).

B. For an inoperative APU Air Intake Door Actuator in the OPEN position, deactivate the APU air–inlet door in the open position (refer to refer to BD500–A–J49–12–03–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative APU air–intake door–actuator in the CLOSED position, on the APU control panel, set the APU switch to the OFF position.

NOTE: AC External Power and Ground High Pressure (HP) air will be required to start the engines. Refer to FCOM.

B. For an inoperative APU Air Intake Door Actuator in the OPEN position (dispatch with airspeed limitations), do as follows:

(1) APU is not used.

(2) Airspeed is limited to 250 KIAS.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER					
51–03 APU Bleed Air Valve	C	1	0	(M)(O)	May be inoperative provided: (a) Affected valve is secured closed, and (b) APU BLEED is selected OFF. NOTE: APU is still available as source of electrical power, if required.

1. PLACARD (P)

A. Put an APU BLEED AIR VALVE INOPERATIVE placard on the APU control panel.

2. MAINTENANCE (M)

A. For an inoperative APU bleed air valve, deactivate the APU bleed air valve in the CLOSED position (refer to BD500–A–J49–51–03–01AAA–560A–A).

3. OPERATIONS (O)

A. For an inoperative APU bleed air valve, on the AIR control panel, select the APU BLEED to OFF.

NOTE: Ground HP air will be required to start the engines. Refer to the FCOM 2, Chapter 3 Normal Procedures, Engine Start, External air engine start.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER					
62–05	APU Shutdown Switches				
1)	External Service Panel				
A)	Switch inoperative open	C	1	0	(O) May be inoperative open provided alternate procedures are established and used.
B)	Switch inoperative closed	C	1	0	Except for extended operations, may be inoperative closed provided APU is considered inoperative.
2)	APU compartment				
A)	Switch inoperative open	C	1	0	(O) May be inoperative open provided alternate procedures are established and used.
B)	Switch inoperative closed	C	1	0	Except for extended operations, may be inoperative closed provided APU is considered inoperative.

1. PLACARD (P)

A. Put a APU SHUTDOWN SWITCH INOPERATIVE placard on the APU and on the External Service Panel.

B. If applicable put a APU CONSIDERED INOPERATIVE placard on the APU panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative APU shutdown switch on the External Service Panel, if the APU is used, make sure that procedures are established to allow the APU to be shutdown from the cockpit in a timely manner.

B. For an inoperative APU shutdown switch in the APU compartment, if the APU is used, make sure that procedures are established to allow the APU to be shutdown from the cockpit or the External Service Panel in a timely manner.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 – AIRBORNE AUXILIARY POWER					
91–12 APU/Generator Oil System					
1) Filter Delta Pressure Switch (APU Generator, APU Lube)					
A) Non–extended operations	C		2	0	(M) Except for extended operations, may be inoperative and APU used provided: (a) Associated filter is verified to be free of contamination, and (b) APU operates normally.
B) Extended operations	C		2	0	(M) May be inoperative and APU used provided: (a) Associated filter is verified to be free of contamination prior to each flight, and (b) APU operates normally.

1. PLACARD (P)

A. Put a APU/GENERATOR OIL SYSTEM FILTER DELTA PRESSURE SWITCH INOPERATIVE placard on the APU control panel.

2. MAINTENANCE (M)

A. For an inoperative APU oil filter delta pressure switch (non–extended operations):

(1) The associated filter is to be checked for contamination once prior to first flight of relief period.

(2) For a failed Filter Delta Pressure Switch in the CLOSED position, deactivate the switch (refer to BD500–A–J49–91–04–01AAA–560A–A)

NOTE: A High Delta P signal from either of the oil system switches would prevent the APU from starting on the ground.

B. For an inoperative APU oil filter delta pressure switch (extended operations):

(1) The associated filter is to be checked for contamination prior to each flight.

(2) For a failed Filter Delta Pressure Switch in the CLOSED position, deactivate the switch (refer to BD500–A–J49–91–04–01AAA–560A–A)

NOTE: A High Delta P signal from either of the oil system switches would prevent the APU from starting on the ground.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
50 – CARGO EQUIPMENT					
11–01 Cargo Compartment Lining Panels					
1) Flat and Curved Floor Panel Assemblies		C	–	–	(M)(O) Liner panels may be damaged provided: (a) Damage is not through the lining panels, and (b) Cargo is not carried in the associated compartment. NOTE: For ballast purposes, use of bags (made of glass fiber or Kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.
2) Bulkhead, Ceiling, Sidewall Aft Cargo Compartment Lining Panel Assemblies		C	–	–	(M)(O) Liner panels may be damaged or missing provided: (a) Aft Cargo Compartment Fire Extinguisher system is de–activated, (b) Aft Cargo Compartment Smoke Detection system is de–activated, and (c) Cargo is not carried in the Aft Cargo Compartment. NOTE: For ballast purposes, use of bags (made of glass fiber or Kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.
3) Bulkhead, Ceiling, Sidewall Forward Cargo Compartment Lining Panel Assemblies		C	–	–	(M)(O) Liner panels may be damaged or missing provided: (a) Forward Cargo Compartment Fire Extinguisher system is de–activated, (b) Forward Cargo Compartment Smoke Detection system is de–activated, and (Cont'd)

System & Sequence N° Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
50 – CARGO EQUIPMENT 11–01 Cargo Compartment Lining Panels (Cont'd)			(c) Cargo is not carried in the Forward Cargo Compartment. NOTE: For ballast purposes, use of bags (made of glass fiber or Kevlar) of sand or ingots of nonmagnetic metals (such as lead) is acceptable.

1. PLACARD (P)

A. Put a CARGO COMPARTMENT LINING PANEL DAMAGED OR MISSING placard on the affected location.

B. For dispatch that requires THE deactivation of the cargo fire extinguishers and cargo smoke detectors, put the appropriate placard on the CARGO FIRE PANEL:

(1) AFT CARGO COMPARTMENT FIREX AND SMOKE DETECTOR DEACTIVATED.

(2) FWD CARGO COMPARTMENT FIREX AND SMOKE DETECTOR DEACTIVATED.

2. MAINTENANCE (M)

A. For damaged cargo compartment flat and curved floor panel assemblies, the aircraft can be dispatched if the lining panel(s) is/are one of the part numbers that follow and the damage is not through the lining panels (the damage can extend to the plies of the inboard facings of the lining panels and not to the plies of the outboard facings):

For the A220–100 aft cargo compartment:

D761140, D761141, D761142, D761143, D761144, D761145, D761146, D761147, D761157, D761158, D761159, D761160, D761161, D761164, D761168, D761169, and D761170.

For the A220–300 aft cargo compartment:

D761140, D761141, D761142, D761143, D761144, D761145, D761146, D761147, D761157, D761158, D761159, D761160, D761161, D761164, D761168, D761169, D761170, D765118, D765120, and D755122.

For the A220–100 forward cargo compartment:

D761106, D761107, D761108, D761109, D761110, D761111, D761123, D761124, D761125, and D761126.

For the A220–300 forward cargo compartment:

D761106, D761107, D761108, D761109, D761110, D761111, D761123, D761124, D761125, D761126, D765105, D765108, and D765110

(1) Once prior to the first flight of relief period, do a check of the cargo–compartment lining panels as follows:

(a) Get access to the associated cargo compartment.

(b) Make sure that the damage on the panel does not extend to the plies of the outboard facings.

B. For a damaged or missing bulkhead, ceiling, sidewall aft cargo–compartment lining–panel assemblies, the aircraft can be dispatched if the lining panel(s) is/are one of the part numbers that follow:

For the A220–100 aft cargo compartment:

D761120, D761121, D761133, D761134, D761135, D761136, D761137, D761138, D761139, D761148, D761149, D761150, D761151, D761152, D761153, D761154, D761155, D761156, D761162, D761163, D761166, and D761167.

For the A220–300 aft cargo compartment:

D761120, D761121, D761133, D761134, D761135, D761136, D761137, D761138, D761139, D761148, D761149, D761150, D761151, D761152, D761153, D761154, D761155, D761156, D761162, D761163, D761166, D761167.D765116, D765117, D765123, D765124, and D765132.

C. For damaged or missing bulkhead, ceiling, sidewall aft cargo–compartment lining–panel assemblies, cover the four smoke detectors with metallic tape to deactivate the aft cargo smoke–detection system.

D. For a damaged or missing bulkhead, ceiling, sidewall forward cargo–compartment lining–panel assemblies, the aircraft can be dispatched if the lining panel(s) is/are one of the part numbers that follow:

For the A220–100 forward cargo compartment:

D761101, D761102, D761103, D761104, D761105, D761112, D761113, D761114, D761115, D761116, D761117, D781118, D761119, D761120, D761121, and D761122.

For the A220–300 forward cargo compartment:

D761101, D761102, D761103, D761104, D761105, D761112, D761113, D761114, D761115, D761116, D761117, D781118, D761119, D761120, D761121, D761122, D765101, D765102, D765111, D765112, and D765114.

E. For a damaged or missing bulkhead, ceiling, sidewall forward cargo–compartment lining–panel assemblies, cover the four smoke detectors with metallic tape to deactivate the forward cargo smoke–detection system.

3. OPERATIONS (O)

A. For damaged flat and curved floor panel assemblies, create procedures for removal, installation and security of ballast, if necessary.

B. For damaged or missing bulkhead, ceiling, sidewall aft cargo–compartment lining–panel assemblies, do the steps that follow:

(1) On the Electronic Circuit Breaker (ECB) synoptic page set to OUT and LOCK the circuit breakers that follow:

CDC1–08–04 (AFT BTL A HRD) to deactivate the aft cargo–compartment High–Rate Discharge (HRD) fire extinguisher Bottle A

CDC1–08–05 (AFT BTL A LRD 1) to deactivate the aft cargo–compartment Low–Rate Discharge 1 (LRD 1) fire extinguisher Bottle A

CDC1–08–06 (AFT BTL A LRD 2) to deactivate the aft cargo–compartment Low–Rate Discharge 2 (LRD 2) fire extinguisher Bottle A (if installed)

CDC2–08–07 (AFT BTL B HRD) to deactivate the aft cargo–compartment High–Rate Discharge (HRD) fire extinguisher Bottle B

CDC2–08–08 (AFT BTL B LRD 1) to deactivate the aft cargo–compartment Low–Rate Discharge 1 (LRD 1) fire extinguisher Bottle B

CDC2–08–09 (AFT BTL B LRD 2) to deactivate the aft cargo–compartment Low–Rate Discharge 2 (LRD 2) fire extinguisher Bottle B (if installed)

(2) Make sure that the messages that follow are shown:

AFT CARGO BTL FAIL (Caution)

26 FIRE SYSTEM FAULT – AFT CARGO BTL SQUIB REDUND LOSS (Info)

(3) Create procedures for removal/installation of cargo and security of ballast, if necessary.

C. For damaged or missing bulkhead, ceiling, sidewall forward cargo–compartment lining–panel assemblies, do the steps that follow:

(1) On the Electronic Circuit Breaker (ECB) synoptic page set to OUT and LOCK the circuit breakers that follow:

CDC1–08–07 (FWD BTL A HRD) to deactivate the forward cargo–compartment High–Rate Discharge (HRD) fire extinguisher Bottle A

CDC1–08–08 (FWD BTL A LRD 1) to deactivate the forward cargo–compartment Low–Rate Discharge 1 (LRD 1) fire extinguisher Bottle A

CDC1–08–09 (FWD BTL A LRD 2) to deactivate the forward cargo–compartment Low–Rate Discharge 2 (LRD 2) fire extinguisher Bottle A (if installed)

CDC2–08–10 (FWD BTL B HRD) to deactivate the forward cargo–compartment High–Rate Discharge (HRD) fire extinguisher Bottle B

CDC2–08–11(FWD BTL B LRD 1) to deactivate the forward cargo–compartment Low–Rate Discharge 1 (LRD 1) fire extinguisher Bottle B

CDC2–08–12 (FWD BTL B LRD 2) to deactivate the forward cargo–compartment Low–Rate Discharge 2 (LRD 2) fire extinguisher Bottle B (if installed)

(2) Make sure that the messages that follow are shown:

FWD CARGO BTL FAIL (Caution)

26 FIRE SYSTEM FAULT – FWD CARGO BTL SQUIB REDUND LOSS (Info)

(3) Create procedures for removal/installation of cargo and security of ballast, if necessary.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
50 – CARGO EQUIPMENT					
22–01 Cargo Nets					
1) Door Net (including associated equipment)					
A) Cargo compartment empty	C	2	0		One or both may be inoperative or missing provided associated cargo compartment remains empty. NOTE: Associated equipment includes snap latches, restraint net brackets and floor pan fitting rings/posts.
B) Cargo compartment in use	C	2	0	(M)	One or both may be inoperative or missing provided cargo is secured in associated cargo compartment. NOTE: Associated equipment includes snap latches, restraint net brackets and floor pan fitting rings/posts.
2) Load Dividing Nets (including associated equipment)	D	–	–	(M)	May be inoperative or missing provided acceptable cargo loading limits from Aircraft Mass and Balance publication are observed. NOTE: Associated equipment includes quick release attachments, anchor plates, net posts, narrow hooks, floor pan fitting rings/post and cam buckles.

1. PLACARD (P)

A. Put a CARGO DOOR NET/CARGO LOAD DIVIDING NET INOPERATIVE/MISSING placard in the cargo compartment.

2. MAINTENANCE (M)

A. For a missing or inoperative cargo door net, operator must create procedures to make sure that cargo, in the cargo compartment, is properly attached in accordance with the Weight and Balance Manual (WBM).

B. For a missing or inoperative cargo load dividing net, operator must create procedures to make sure that acceptable cargo loading limits are obeyed in accordance with the Weight and Balance Manual (WBM).

3. OPERATIONS (O)

A. Not required.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS					
11–00 Emergency Exits (Aircraft Crew Only)	A	–	–	(M)(O)	One emergency exit may be inoperative for three flight days provided: (a) Only the aircraft crew are carried, (b) Affected emergency exit is verified closed, latched and locked prior to each flight, (c) Aircraft crew are advised of the nature (emergency exit and slide availability) and extent of the unserviceability and that evacuation procedures do not include affected exit, though opposite exit may be used, (d) A conspicuous sign or placard indicating that the exit is inoperative is attached to the exit, and (e) Emergency exit signs and lights associated only with the inoperative exit are obscured (NOTE 3). NOTE 1: For the purpose of this item, “aircraft crew” includes the operating crew members including the flight crew members, flight attendants, aircraft maintenance personnel and supervisory crew members. NOTE 2: The operator’s MEL must state the maximum number of aircraft crew permitted. NOTE 3: Exit locator signs and emergency aisle path markings which are shared between two exits must not be obscured.

1. PLACARD (P)

A. Put a EMERGENCY EXIT INOPERATIVE placard in clear view on the applicable exit.

NOTE: The placard must not obscure the emergency exit window.

2. MAINTENANCE (M)

A. For an inoperative emergency exit, do the steps that follow:

(1) Attach a visible EXIT INOPERATIVE sign or placard on the inoperative exit.

(2) Cover the exit signs and the lights associated with the inoperative exit.

(3) Do not cover exit locator signs and emergency aisle path markings that are shared between two exits.

3. OPERATIONS (O)

A. For an inoperative emergency exit, do the steps that follow:

(1) Before each flight, make sure that the inoperative exit is closed, latched, and locked.

(2) Advise the aircraft crew of the nature (emergency exit and slide availability) and extent of the unserviceability, and that evacuation procedures do not include affected exit, though opposite exit can be used.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS				
11–01 Passenger/Service Door Hold Open Mechanism	C	4	1	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a PASSENGER/SERVICE DOOR HOLD OPEN MECHANISM INOPERATIVE placard on the passenger/service door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative passenger/service door hold open mechanism, establish and use alternative procedures for ground and maintenance routine to keep the associated door open.

NOTE: Operative door is available for passenger boarding/deplaning.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS					
11–02 Emergency Opening Assist Means (EOAM)					
1) Pressure Bottle	A		4	3	(M)(O) May be inoperative for three flight days provided associated exit is considered inoperative.
2) Dampening Function	D		4	0	

1. PLACARD (P)

A. For an inoperative Emergency Opening Assist Mean (EOAM) pressure bottle:

(1) Put an EXIT INOPERATIVE placard on the affected door.

B. For an inoperative Dampening Function of the Emergency Opening Assist Mean (EOAM):

(1) Put a DOOR DAMPENING FUNCTION INOPERATIVE / OPERATE SLOWLY placard on the affected door.

2. MAINTENANCE (M)

A. For an inoperative EOAM pressure bottle, do the steps that follow:

(1) Attach a visible EXIT INOPERATIVE placard on the inoperative exit.

(2) Cover the exit signs and the lights associated with the inoperative exit.

(3) Do not cover exit locator signs and emergency aisle path markings that are shared between two exits.

3. OPERATIONS (O)

A. For an inoperative EOAM pressure bottle, do the steps that follow:

(1) Before each flight, make sure that the inoperative exit is closed, latched, and locked.

(2) Advise the aircraft crew of the nature (emergency exit and slide availability) and extent of the unserviceability, and that evacuation procedures do not include affected exit, though opposite exit can be used.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS					
21–01 Overwing Emergency Exit Door (OWEED) Hold Open Mechanism	C	–	0		May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a OVERWING EMERGENCY EXIT DOOR HOLD OPEN MECHANISM INOPERATIVE placard on the OWEED.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS					
30–01	Cargo Compartment Door Actuator (CCDA) – Electrical Actuator				
1)	Electrical Actuator (Manually Operated) (A/C With MODSUM #500T101352)	C	2	0	(M) May be inoperative provided: (a) Alternate procedures are established and used to operate associated cargo compartment door, (b) Associated cargo compartment door is verified CLOSED, LATCHED, and LOCKED prior to each flight, and (c) Placard is installed near to (or over) the associated cargo door handle to notify ground personnel about the door condition and the need to take special precaution when opening the door with the actuator inoperative. NOTE 1: Associated cargo compartment door must only be lifted through drive port of actuator. NOTE 2: The associated cargo door must only be operated by maintenance personnel.
2)	Electrical Actuator (Actuator Removed)	A	2	0	(M) May be inoperative provided: (a) Affected actuator is removed, (b) Alternate procedures are established and used to operate associated cargo compartment door, (c) Associated cargo compartment door is verified CLOSED, LATCHED, and LOCKED prior to each flight, (Cont'd)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS				
30–01 Cargo Compartment Door Actuator (CCDA) – Electrical Actuator (Cont'd)				(d) Placard is installed near to (or over) the associated cargo door handle to notify ground personnel about the door condition and the need to take special precaution when opening the door with the actuator removed, and (e) Repairs are made within three calendar days. NOTE 1: Associated cargo compartment door must only be lifted with the Ground Support Equipment (GSE) tool. NOTE 2: With the electrical actuator removed, cargo door will swing out under its own weight once unlatched. Special caution must be taken not to harm ground personnel. NOTE 3: The associated cargo door must only be operated by maintenance personnel.

1. PLACARD (P)

A. Put a CARGO COMPARTMENT DOOR ACTUATOR INOPERATIVE placard on the cargo compartment door.

2. MAINTENANCE (M)

A. For an inoperative cargo–compartment door actuator (manually operated), do the steps that follow:

(1) Open and close the cargo door, manually (refer to BD500–A–J52–30–00–02AAA–540A–A).

(2) Make sure the associated cargo compartment is closed, latched, and locked prior to each flight.

(3) Install placard near to (or over) the associated cargo door handle to notify ground personnel about the door condition and the need to take special precaution when opening the door with the actuator inoperative.

B. For an inoperative cargo–compartment door actuator (actuator removed), do the steps that follow:

(1) Remove the cargo–compartment door actuator (refer to BD500–A–J52–30–13–01AAA–520A–A)

(2) Use alternate procedures to open and close the cargo door as per AMP utilizing dedicated Ground Support Equipment (GSE) tool.

(3) Make sure the associated cargo compartment is closed, latched, and locked prior to each flight.

(4) Install placard near to (or over) the associated cargo door handle to notify ground personnel about the door condition and the need to take special precaution when opening the door with the actuator removed.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS				
30–02 Cargo Compartment Door Actuator (CCDA) System	C	2	0	(M) One or both may be inoperative provided affected door remains CLOSED, LATCHED, and LOCKED. NOTE: Affected door is not to be operated until system is repaired.

1. PLACARD (P)

A. Put a CARGO COMPARTMENT DOOR ACTUATOR SYSTEM INOPERATIVE / DO NOT OPERATE placard on the associated cargo door control–panel.

2. MAINTENANCE (M)

A. For an inoperative CCDA system, make sure that the affected door is closed, latched, and locked prior to first flight of relief period.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS					
51–01	Enhanced Flight Deck Security Door				
1)	Primary Locking System (FDRAS)	C	1	0	(O) May be inoperative provided: (a) Primary Locking System (FDRAS) is deactivated, (b) Secondary locking system operates normally and is used to lock the door, and (c) Alternate procedures are established and used for locking and unlocking the door using the secondary locking system.
2)	Secondary Locking System (Door Manual Latch)	C	1	0	May be inoperative provided Primary Locking System (FDRAS) operates normally.

1. PLACARD (P)

A. Put a FLIGHT DECK SECURITY DOOR INOPERATIVE placard on the flight deck door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative flight deck security door primary locking system FDRAS,:

(1) Deactivate the FDRAS, as follows:

(a) Get access to the Electronic Door Control Module (EDCM), in the flight compartment.

(b) Locate LOCK SYSTEM push button on the EDCM.

(c) Push the EDCM LOCK SYSTEM push button and hold it for 2 seconds.

(d) Verify if CKPT DOOR LOCK OFF (status) message is displayed.

(2) Make sure that the mechanical deadbolt operates normally.

(3) The flight crew and the cabin crew must agree to use alternative procedures to request access to the flight compartment, when necessary.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
52 – DOORS				
51–05 Flight Deck Remote Access System (FDRAS) Control Panels				
1) FDRAS Flight Deck Side Control Panel				
A) Command Buttons (UNLOCK/DENY)	C	2	0	May be inoperative provided Primary Locking System (FDRAS) is considered inoperative.
B) Maintenance Lock Function (external key)	D	–	0	
2) Flight Attendant Position Control Panel (Call Buttons, Lights)	C	–	0	(O) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put the applicable function of FDRAS CONTROL PANEL FLIGHT ATTENDANT POSITION INOPERATIVE placard on the FDRAS door.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative FDRAS control panel flight attendant position call buttons develop alternative procedures for cabin crew to request access to flight compartment.

B. For an inoperative FDRAS control panel flight attendant position lights, develop alternative procedures for cabin crew to request access to flight compartment.

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
71 – POWER PLANT					
10–01 Fan Cowl Hold Open Rods		D	8	–	(M) May be inoperative or missing provided: (a) If required, alternate maintenance procedures are established and used for maintenance purposes, and (b) Rods are able to be secured in normal flight position prior to closing fan cowl doors.

1. PLACARD (P)

A. Put a FAN COWL HOLD OPEN RODS INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative fan cowl hold open rod, do the steps that follow:

(1) If necessary, use alternative procedures to hold the fan cowl door(s) open.

(2) Make sure that the rods are properly attached or remove from the airplane, before the fan cowl door(s) is/are closed. If necessary, to remove the fan cowl hold open rod(s) refer to BD500–A–J71–11–06–00AAA–520A–A.

(3) Make sure that the fan cowl doors are properly closed and latched.

3. OPERATIONS (O)

A. Not required.

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System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
73 – ENGINE FUEL AND CONTROL				
21–03 Electronic Engine Control (EEC) – Aircraft 28 VDC Backup Power Supply to EEC Channels	C	4	3	(M)(O) One may be inoperative.

1. PLACARD (P)

A. Put a EEC AIRCRAFT 28 VDC BACKUP POWER INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative EEC aircraft 28 VDC backup power supply to EEC channel, do the steps that follow:

(1) Before engine start, on the OMS, make sure that 73 L(R) ENGINE FAULT – FADEC FAULT 1 is caused by aircraft 28 VDC backup power supply.

(2) After engine start and engine is running, make sure that 73 L(R) ENGINE FAULT – FADEC FAULT 1 is not shown when 73 L(R) ENGINE FAULT – EEC 28VDC REDUND LOSS is shown.

3. OPERATIONS (O)

A. For an inoperative EEC aircraft 28 VDC backup power supply to EEC channel, before each flight, make sure that 73 L(R) ENGINE FAULT – FADEC FAULT 1 is not shown, when 73 L(R) ENGINE FAULT – EEC 28VDC REDUND LOSS is shown, and associated engine is running.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
73 – ENGINE FUEL AND CONTROL					
34–01	L(R) Engine Fuel Filter Protective Functions Degradation (Impending Bypass)	C	2	1	(M)(O) Except for extended operations, may be degraded provided: (a) Opposite engine Fuel Filter Delta Pressure Sensor (FFDPS) is verified operative, (b) Opposite engine fuel filter is not degraded, and (c) Affected fuel filter is replaced once before each flight–day.

1. PLACARD (P)

A. Put a L(R) ENGINE FUEL FILTER PROTECTIVE FUNCTION(S) DEGRADED placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Replace the associated fuel filter once each flight day (refer to BD500–A–J73–11–06–00AAA–520A–A and BD500–A–J73–11–06–00AAA–720A–A).

3. OPERATIONS (O)

A. For an inoperative L Engine Fuel Filter Protective Functions Degradation as indicated by the INFO message: 73 L ENG FUEL FILTER – IMPENDING BYPASS

(1) Before each flight, do as follows:

(a) Make sure that none of the following INFO messages are displayed:

73 R ENGINE FAULT – FUEL FILTER PRESS SNSR INOP

73 R ENG FUEL FILTER – IMPENDING BYPASS

B. For an inoperative R Engine Fuel Filter Protective Functions Degradation as indicated by the INFO message: 73 R ENG FUEL FILTER – IMPENDING BYPASS

(1) Before each flight, do as follows:

(a) Make sure that none of the following INFO messages are displayed:

73 L ENGINE FAULT – FUEL FILTER PRESS SNSR INOP

73 L ENG FUEL FILTER – IMPENDING BYPASS

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
73 – ENGINE FUEL AND CONTROL					
34–02 Engine Fuel Filter Impending Bypass Indication – Delta Pressure Sensor	C	2	1	(M)	One may be inoperative (as annunciated by 73 L (R) ENGINE FAULT – FUEL FILTER PRESS SNSR INOP) provided associated fuel filter is replaced once each flight day.

1. PLACARD (P)

A. Put a ENGINE FUEL FILTER IMPENDING BYPASS INDICATION placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative engine fuel filter impending bypass indication, replace the associated fuel filter once each flight day (refer to BD500–A–J73–11–06–00AAA–520A–A and BD500–A–J73–11–06–00AAA–720A–A).

3. OPERATIONS (O)

A. Not required.

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System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
75 – AIR				
24–01 Active Clearance Control (ACC) Valve				
1) A/C equipped with PW1519G engines	C	2	0	(M)(O) One or both may be inoperative in closed position provided: (a) Associated engine must have at least 14°C of EGT margin, (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (c) Operations with Steep Approach are not conducted.
2) A/C equipped with PW1521G-3, PW1521GA, PW1524G-3, or PW1524G engines	C	2	0	(M)(O) One or both may be inoperative in closed position provided: (a) Associated engine must have at least 12°C of EGT margin, (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (c) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a ACTIVE CLEARANCE CONTROL VALVE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative ACC valve in the CLOSED position (A/C equipped with PW1519G engines):

(1) Make sure that associated engine has at least 14 °C of EGT margin. Use the engine health condition monitoring data or do the Power plant – Operation test (Power assurance test) (refer to BD500–A–J71–00–00–01AAA–320B–A).

B. For an inoperative ACC valve in the CLOSED position (A/C equipped with PW1521G-3, PW1521GA, PW1524G-3, or PW1524G engines):

(1) Make sure that associated engine has at least 12 °C of EGT margin. Use the engine health condition monitoring data or do the Power plant – Operation test (Power assurance test) (refer to BD500–A–J71–00–00–01AAA–320B–A).

3. OPERATIONS (O)

A. For an inoperative ACC valve in the CLOSED position:

(1) Conduct operations in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
76 – ENGINE CONTROLS				
11–03 Engine Run Switch Guards	C	3	0	May be damaged or missing.

1. PLACARD (P)

A. Put a ENGINE RUN SWITCH GUARDS INOPERATIVE (MISSING) placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
76 – ENGINE CONTROLS					
11–04 Throttle Quadrant Assembly – Thrust Reverser Finger Lift		C	2	1	(O) May be inoperative provided: (a) Affected thrust reverser is considered inoperative, (b) Associated throttle lever is verified not able to move into reverse thrust range, (c) Opposite Thrust Reverser is operative, and (d) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a THRUST REVERSER FINGER LIFT INOPERATIVE placard on the throttle quadrant assembly.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative throttle quadrant assembly Thrust Reverser Finger Lift:

(1) Make sure that the associated throttle lever cannot be selected into reverse thrust range

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
77 – ENGINE INDICATING				
11–01 NF (Fan) Speed Sensor	D	2	1	May be inoperative provided maintenance procedures do not require its use.

1. PLACARD (P)

A. Put a NF FAN SPEED SENSOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
77 – ENGINE INDICATING					
31–01	Prognostics Health Monitoring Unit (PHMU)	C	2	1	(O) One may be inoperative provided: (a) Associated engine oil filter bypass indication is operative, (b) Associated oil debris monitor is considered inoperative, (c) Associated engine vibration monitoring system is considered inoperative, and (d) Opposite engine auxiliary oil system monitoring is operative.

1. PLACARD (P)

A. Put a PROGNOSTIC HEALTH MONITORING UNIT INOPERATIVE placard on the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. For an inoperative left engine PHMU, as indicated by the INFO message 77 L ENGINE FAULT – PHMU INOP, make sure that none of the INFO messages that follow are shown:

79 L ENGINE FAULT – OIL FILTER SNSR INOP

79 R ENGINE FAULT – AUX OIL PRESS MON INOP

For an inoperative right engine PHMU, as indicated by the INFO message 77 R ENGINE FAULT – PHMU INOP, make sure that none of the INFO messages that follow are shown:

79 R ENGINE FAULT – OIL FILTER SNSR INOP

79 L ENGINE FAULT – AUX OIL PRESS MON INOP

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
77 – ENGINE INDICATING				
32–01 Engine Vibration Monitoring System – Forward (N1) Vibration Sensor	C	2	1	(M) One may be inoperative provided associated Aft (N2) vibration sensor is operative.

1. PLACARD (P)

A. Put a ENGINE FORWARD (N1) VIBRATION SENSOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative engine vibration monitoring of the forward (N1) vibration sensor, make sure that the recent history of related engine parameters shows no adverse trends.

NOTE: If same side monitoring of the N2 vibration sensor is also inoperative, as indicated by 77 L(R) ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED and 77 L(R) ENGINE FAULT – N2 VIBRATION MON DEGRADED, see item 77–32–03 for relief.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
77 – ENGINE INDICATING					
32–02	Engine Vibration Monitoring System – Aft (N2) Vibration Sensor	C	2	0	(M) One or both may be inoperative provided associated Forward (N1) vibration sensor is operative.

1. PLACARD (P)

A. Put a ENGINE AFT (N2) VIBRATION SENSOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative engine vibration monitoring of the aft (N2) vibration sensor, make sure that the recent history of related engine parameters show no adverse trends.

NOTE: If same side monitoring of the N1 vibration sensor is also inoperative, as indicated by 77 L(R) ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED and 77 L(R) ENGINE FAULT – N2 VIBRATION MON DEGRADED, see item 77–32–03 for relief.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
77 – ENGINE INDICATING					
32–03 Engine Vibration Monitoring System	C	2	0	(M)(O)	Except for extended operations, one or both may be inoperative provided: (a) An approved maintenance reliability program (which includes engine vibration monitoring) is in place, and (b) Aircraft is not operated in known or forecast icing conditions.

1. PLACARD (P)

A. Put a ENGINE VIBRATION MONITORING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative engine vibration monitoring system, make sure that the recent history of related engine parameters show no adverse trends.

3. OPERATIONS (O)

A. The Engine Vibration Monitoring System is considered inoperative if:

(1) For the LEFT engine side

(a) When both below INFO messages are displayed:

77 L ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED, and

77 L ENGINE FAULT – N2 VIBRATION MON DEGRADED

(2) For the RIGHT engine side

(a) When both below INFO messages are displayed:

77 R ENGINE FAULT – N1/FAN VIBRATION MON DEGRADED, and

77 R ENGINE FAULT – N2 VIBRATION MON DEGRADED

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
78 – EXHAUST					
30–02 Thrust Reverser System		C	2	1	(M)(O) One may be inoperative provided: (a) Inoperative thrust reverser is stowed and locked, (b) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (c) Operations with Steep Approach are not conducted.

1. PLACARD (P)

A. Put a L or R THRUST REVERSER INOPERATIVE placard on the throttle quadrant assembly.

2. MAINTENANCE (M)

A. For an inoperative thrust reverser, deactivate the inoperative thrust reverser (refer to:

BD500–A–J78–30–00–00AAA–563A–A

and

BD500–A–J78–30–00–01AAA–181A–A)

NOTE: When the Thrust Reverser Isolation Control Unit (ICU) Inhibit Lever is pushed to the lock out position, the associated L(R) REVERSER INHIBIT (status) message will be displayed and the related Thrust Reverser INFO message will go out of view.

3. OPERATIONS (O)

A. For an inoperative thrust reverser:

(1) Conduct operations in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative).

NOTE 1: Move only the throttle lever associated with the operative Thrust Reverser (TR) to reverse thrust range when the TR is used during landing.

NOTE 2: When the Thrust Reverser is stowed and locked, the associated L(R) REVERSER INHIBIT (status) message will be displayed and the related Thrust Reverser INFO message will go out of view.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
78 – EXHAUST					
32–01 Powered Door Opening System (PDOS)		D	2	0	(M) May be inoperative provided alternate procedures are established and used.

1. PLACARD (P)

A. Put a POWER DOOR OPENING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative powered door opening system, create and use alternative procedures.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
78 – EXHAUST					
36–04 Pre-Cooler Exit (PCE) Doors					
1) One or both inoperative in the open position		C	2	0	One or both may be inoperative in open position provided: (a) Operations are conducted in accordance with AFM supplement 5 (Operations with Airplane Systems Inoperative), and (b) Operations with Steep Approach are not conducted.
2) One or both inoperative in the closed position with both engine bleed system operating normally		C	2	0	Except for extended operations, one or both may be inoperative in closed position provided both Engine Bleed Systems operate normally.
3) Both may be inoperative in the closed position		C	2	0	Except for extended operations, both may be inoperative in closed position provided: (a) One engine bleed is operative, and (b) Aircraft is not operated in known or forecast icing conditions.
4) One may be inoperative in the closed position with opposite engine bleed system operating normally		C	2	1	Except for extended operations, one may be inoperative in closed position provided opposite engine bleed is operative.

1. PLACARD (P)

A. Put a PRE–COOLER EXIT DOOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
78 – EXHAUST				
38–00 Door Opening System (DOS)	D	2	0	May be inoperative.

1. PLACARD (P)

A. Put a DOOR OPENING SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

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System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
79 – OIL					
21–06	Engine Oil Filter Element	A	2	1	(M)(O) Except for extended operations, one may be partially contaminated with oil quality degraded provided: (a) Both engines are verified to operate normally before each flight, (b) Opposite engine Oil Debris Monitor (ODM) is verified operative before each flight, (c) Opposite engine oil filter element is verified not indicating contaminated before each flight, (d) Opposite engine Oil Filter Delta Pressure Sensor (OFDPS) is verified operative before each flight, (e) Opposite engine oil quality is verified not degraded before each flight, (f) Affected engine ODM is verified operative before each flight, (g) Affected engine magnetic chip collectors are verified within acceptable limits for fine surface contamination, (h) Affected oil filter contamination area is verified within acceptable limits, and (i) Repairs are made within 10 flight hours or 5 flight cycles whichever is less.

1. PLACARD (P)

A. Put a ENGINE OIL AND FILTER ELEMENT DEGRADED placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For dispatch with one engine oil filter element partially contaminated (as indicated by 79 L(R) ENGINE FAULT – OIL FILTER IMPENDING BYPASS), in conjunction with same side oil quality degraded (as indicated by 79 L(R) ENGINE FAULT – OIL DEBRIS ABOVE LIMIT), once prior to dispatch period, do as follows:

(1) On the affected engine, for each of the 6 magnetic chip collectors, remove the probe from the collector valve (refer to BD500-A-J79-22-01-00AAA-520A-A).

(a) Make sure that each chip collector is within acceptable limits for contamination.

NOTE: Dispatch is allowed if the quantity of fine particles covers less than 25% of each probe surface.

(2) For each of the 6 magnetic chip collectors, reinstall the probe in the collector valve (refer to BD500-AJ79-22-01-00AAA-720A-A).

(3) Remove the main oil filter element of the affected engine (refer to BD500-A-J79-21-06-00AAA-920A-A).

(a) Make sure it is within acceptable limits for oil contamination.

NOTE: Dispatch is allowed if the contamination area on the main oil filter element is less than a 0.50 in. (12.70 mm) diameter circle.

(4) Reinstall the main oil filter element of the affected engine (refer to BD500-A-J79-21-06-00AAA-920A-A).

3. OPERATIONS (O)

A. For dispatch with one engine oil filter element partially contaminated in conjunction with same side oil quality degraded do as follows:

(1) For the LEFT engine (as indicated by 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS in conjunction with 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT), before each flight,

(a) Make sure that none of the following messages are displayed:

ENG VIBRATION (caution)

79 R ENGINE FAULT – OIL DEBRIS MON INOP

79 R ENGINE FAULT – OIL FILTER SNSR INOP

79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS

79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT

79 L ENGINE FAULT – OIL DEBRIS MON INOP

(2) For the RIGHT engine (as indicated by 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS in conjunction with 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT), before each flight,

(a) Make sure that none of the following messages are displayed:

ENG VIBRATION (caution)

79 L ENGINE FAULT – OIL DEBRIS MON INOP

79 L ENGINE FAULT – OIL FILTER SNSR INOP

79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS

79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT

79 R ENGINE FAULT – OIL DEBRIS MON INOP

System & Sequence N°		Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
79 – OIL					
31–01	Oil Quantity Indication System	C	2	1	(M) One may be inoperative provided: (a) Associated oil quantity is verified via sight glass before each flight, and (b) There is no evidence of abnormal consumption or leakage.

1. PLACARD (P)

A. Put a OIL QUANTITY INDICATION SYSTEM INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative oil quantity indication system, before each flight, do a visual check of the oil quantity through the sight glass and make sure that there is no evidence of unusual oil consumption or leakage.

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
79 – OIL					
31–02 Oil Tank Sight Glass		D	2	1	One may be inoperative provided: (a) Associated EICAS oil level indication is operative, and (b) There is no evidence of physical damage to the sight glass.

1. PLACARD (P)

A. Put a OIL TANK SIGHT GLASS DAMAGED placard below the landing gear control panel and on the affect engine.

2. MAINTENANCE (M)

A. Not required.

3. OPERATIONS (O)

A. Not required.

System & Sequence N°	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
79 – OIL					
33–23	Engine Oil Filter Bypass Indication – Oil Filter Delta Pressure (OFDP) Sensor	C	2	1	(M) One may be inoperative provided associated oil filter is replaced once each flight–day.

1. PLACARD (P)

A. Put a L(R) ENGINE OIL FILTER DELTA PRESSURE SENSOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. Replace the associated oil filter element once each flight day (refer to BD500–A–J79–21–06–00AAA–920A–A).

3. OPERATIONS (O)

A. Not required.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
80 – STARTING					
10–01 Starter Air Valve		C	2	1	(M)(O) One may be inoperative CLOSED provided: (a) Alternate starting procedures are established and used, (b) Associated valve is manually closed after engine start, and (c) Associated engine Air Turbine Starter (ATS), for in flight relights, is considered inoperative.

1. PLACARD (P)

A. Put a STARTER AIR VALVE INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Starter Air Valve:

(1) Make sure the affected engine has been shut down (cold soaked) for at least 8 hours.

(2) Gain access to the Starter Air Valve (SAV) external manual override drive socket which is accessible from the left side of the engine without opening any engine nacelle doors.

(3) Ground coordinator to be in constant voice and visual contact with the cockpit.

(4) In coordination with the flight crew, manually drive the SAV open to initiate normal engine start.

(5) In coordination with the flight crew, the SAV to be manually closed following engine start.

NOTE: After three (3) start attempts, or after four (4) minutes of continuous cranking, a 30 minutes cool down period is required.

3. OPERATIONS (O)

WARNING: Unless alternative procedure are established and used (to protect maintenance crew from being located between two running engines), cross bleed to the Right Hand Engine (RHE) is prohibited. Use APU or Ground Cart as source of bleed.

A. For an inoperative Starter Air Valve, on ground do as follows:

(1) Monitor EGT for indication of a hot start (Max EGT during start = 1054°C).

(2) Monitor N2 for indication of a hung start.

(3) Make sure indicated speed does not exceed 20%.

(4) Make sure EGT is below 250°C.

(5) Make sure the associated engine RUN switch is selected to OFF.

(6) In coordination with a ground coordinator instruct maintenance to manually drive the Starter Air Valve (SAV) open to initiate normal engine start.

(7) Once N2 reaches 17%, set the Engine RUN switch to ON.

NOTE: The fuel system is turned on by FADEC.

(8) Verify on EICAS that N1, N2, EGT, oil pressure and fuel flow indications follow a normal start procedure.

(9) If a hot or hung start is indicated, immediately select the associated engine RUN switch to OFF.

(10) Following a hot or hung start, the affected engine to be cold soaked prior any subsequent engine re–starts attempts.

(11) In coordination with the ground coordinator, at 50–55% N2, instruct maintenance crew to manually close the SAV.

B. For a subsequent In Flight Shutdown (IFSD) of the affected engine, perform windmill relight procedures in accordance with AFM procedures.

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
80 – STARTING					
11–01 Starter Speed Sensor	C	2	1	(M)(O)	One may be inoperative provided: (a) Alternate starting procedures are established and used, (b) Associated valve is manually closed after engine start, and (c) Associated engine Air Turbine Starter (ATS), for in flight relights, is considered inoperative.

1. PLACARD (P)

A. Put a STARTER SPEED SENSOR INOPERATIVE placard below the landing gear control panel.

2. MAINTENANCE (M)

A. For an inoperative Starter Speed Sensor:

(1) Make sure the affected engine has been shut down (cold soaked) for at least 8 hours.

(2) Gain access to the Starter Air Valve (SAV) external manual override drive socket which is accessible from the left side of the engine without opening any engine nacelle doors.

(3) Ground coordinator to be in constant voice and visual contact with the cockpit.

(4) In coordination with the flight crew, manually drive the SAV open to initiate normal engine start.

(5) In coordination with the flight crew, the SAV to be manually closed following engine start.

NOTE: After three (3) start attempts, or after four (4) minutes of continuous cranking, a 30 minutes cool down period is required.

3. OPERATIONS (O)

WARNING: Unless alternative procedure are established and used (to protect maintenance crew from being located between two running engines), cross bleed to the Right Hand Engine (RHE) is prohibited. Use APU or Ground Cart as source of bleed.

A. For an inoperative Starter Speed Sensor, on ground do as follows:

(1) Monitor EGT for indication of a hot start (Max EGT during start = 1054°C).

(2) Monitor N2 for indication of a hung start.

(3) Make sure indicated speed does not exceed 20%.

(4) Make sure EGT is below 250°C.

(5) Make sure the associated engine RUN switch is selected to OFF.

(6) In coordination with a ground coordinator instruct maintenance to manually drive the Starter Air Valve (SAV) open to initiate normal engine start.

(7) Once N2 reaches 17%, set the Engine RUN switch to ON.

NOTE: The fuel system is turned on by FADEC.

(8) Verify on EICAS that N1, N2, EGT, oil pressure and fuel flow indications follow a normal start procedure.

(9) If a hot or hung start is indicated, immediately select the associated engine RUN switch to OFF.

(10) Following a hot or hung start, the affected engine to be cold soaked prior any subsequent engine re–starts attempts.

(11) In coordination with the ground coordinator, at 50–55% N2, instruct maintenance crew to manually close the SAV.

B. For a subsequent In Flight Shutdown (IFSD) of the affected engine, perform windmill relight procedures in accordance with AFM procedures.

SECTION 2

CAS MESSAGE ORIENTED MMEL RELIEF

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CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–001–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – AFT CARGO SOV INOP	C	(O) May be displayed provided: (a) Recirculation Fan (RFAN) is operative and selected ON, and (b) Cargo is not carried in the aft cargo compartment. NOTE: Unit Load Devices (ULDs) may be carried in the associated compartment provided no cargo is carried on or in their devices. For ballast purposes, use of bags (made of fiberglass or Kevlar) of sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. OPERATIONS (O)

A. Operator to establish and obey procedures to make sure that the associated compartment remains empty, or contains empty cargo handling equipment, ballast, and/or Fly Away kits.

B. Make sure that the recirculating fan is operative and selected ON.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–003–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – FWD CARGO SOV INOP	C	(O) May be displayed provided: (a) Recirculation Fan (RFAN) is operative and selected ON, and (b) Cargo is not carried in the forward cargo compartment. NOTE: Unit Load Devices (ULDs) may be carried in the associated compartment provided no cargo is carried on or in their devices. For ballast purposes, use of bags (made of fiberglass or Kevlar) of sand or ingots of non–magnetic metals (such as lead) is acceptable.

1. OPERATIONS (O)

A. Operator to establish and obey procedures to make sure that the associated compartment remains empty, or contains empty cargo handling equipment, ballast, and/or Fly Away kits.

B. Make sure that the recirculating fan is operative and selected ON.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–003–02 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – FWD CARGO TAV FAIL CLSD	C	(O) May be displayed provided: (a) FWD CARGO switch selected to VENT or OFF before each flight, and (b) Live animals or temperature sensitive cargo is not carried in the forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight do the steps that follow:

(1) On the AIR control panel, set the FWD CARGO switch to VENT or OFF.

(2) Make sure that live animals or temperature sensitive cargo are not carried in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–003–03 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – FWD CARGO TAV INOP	C	(O) May be displayed provided: (a) TRIM AIR is selected OFF before each flight, and (b) Live animals or temperature sensitive cargo is not carried in the forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight do the steps that follow:

(1) On the AIR control panel, select the TRIM AIR switch to OFF.

(2) Make sure that the messages that follow are not shown:

21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN

(3) Make sure that live animals or temperature sensitive cargo are not carried in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–003–04 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – TAV INOP	C	(O) May be displayed provided: (a) TRIM AIR is selected OFF before each flight, and (b) Live animals or temperature sensitive cargo is not carried in the forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight do the steps that follow:

(1) On the AIR control panel, select the TRIM AIR switch to OFF.

(2) Make sure that the messages that follow are not shown:

21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN

21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN

(3) Make sure that live animals or temperature sensitive cargo are not carried in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–017–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL CLSD	C	(O) May be displayed provided: (a) TRIM AIR system is selected OFF before each flight, (b) Both bleed air systems are operative, (c) Both Air Conditioning Packs are operative, and (d) Live animals or temperature sensitive cargo is not carried in forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the TRIM AIR pushbutton to OFF and make sure that TRIM AIR OFF status message is shown.

(2) Make sure the following messages are not displayed:

PACK FAULT (advisory)

L(R) PACK FAIL (caution)

L(R) PACK OVHT (caution)

L(R) BLEED FAIL (caution)

L(R) BLEED OVHT (caution)

ENG BLEED MISCONFIG (caution)

XBLEED FAIL (caution)

(3) Make sure that no live animals or temperature sensitive cargo are transported in the forward cargo compartment.

NOTE: The cabin may take longer to warm up.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–017–03 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL CLSD	C	(O) May be displayed provided: (a) Affected valve is deactivated, (b) None of the following messages are displayed: 21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL CLSD 21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN, and (c) Left pack is operative.

1. OPERATIONS (O)

A. Do the steps that follow before each flight:

(1) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

– CDC1–5–14 (TRIM AIR PRV)

(2) Make sure that no Trim Air Shutoff Valve (TASOV) info messages show on the INFO page.

(3) Make sure that Left Pack is selected ON.

NOTE 1: Cabin can take longer to warm up.

NOTE 2: Trim Air System may be noisy.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–021–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – ZONE TEMP SNSR INOP	C	(O) May be displayed provided: (a) TRIM AIR FAIL caution message is not displayed, (b) 21 AIR SYSTEM FAULT – DUCT TEMP SNSR INOP info message is not displayed, and (c) Associated COCKPIT/CABIN Temperature Control Knob is operative.

1. OPERATIONS (O)

A. Before each flight, make sure that:

(1) TRIM AIR FAIL (Caution) message is not shown.

(2) 21 AIR SYSTEM FAULT – DUCT TEMP SENSR INOP info message is not shown, and

(3) The related COCKPIT AIR or CABIN AIR temperature control knob, on the AIR control panel, is operative.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–025–01 **AUTO PRESS FAIL** (CAUTION)	C	(O) May be displayed provided: (a) Affected modes are deactivated, (b) Pressurization is operated in manual control mode, (c) Autopilot is operative, (d) Flight is conducted in dual bleed and dual pack, and (e) Minimum enroute altitude does not exceed 10000 ft above MSL.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the PRESSURIZATION control panel, make sure that the AUTO PRESS pushbutton is set to MAN.

(2) Make sure that CABIN PRESS MAN status message is shown on the EICAS.

(3) Deactivate the Outflow Valve automatic mode:

(a) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breakers that follows:

– CDC1–6–9 (OUTFLOW VLV AUTO 1)

– CDC2–5–9 (OUTFLOW VLV AUTO 2)

(4) Follow the AFM, NON–NORMAL PROCEDURES for AUTO PRESS FAIL (Caution) for manual control of the pressurization.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–027–01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT – AVIO TEMP SNSR REDUND LOSS	D	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–029–01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT – EFAN CAN BUS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–031–01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT – EFAN INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the following info messages are displayed: 21 EQUIP BAY COOL FAULT – FWD AVIO EXHAUST VLV INOP 21 EQUIP BAY COOL FAULT – MID AVIO EXHAUST VLV INOP, and (b) One or both Air Conditioning Packs are operative.

1. OPERATIONS (O)

A. Before each flight make sure that the info messages that follow are not shown:

21 EQUIP BAY COOL FAULT – FWD AVIO EXHAUST VLV INOP

21 EQUIP BAY COOL FAULT – MID AVIO EXHAUST VLV INOP

B. Pressurized flight is conducted with one or both air conditioning packs operative.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–035–01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT – IFAN INOP	C	(O) May be displayed provided INLET is selected OFF before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Select the INLET PBA on the EQUIP COOLING control panel to OFF.

(2) Make sure that INLET AIR OFF status message is shown on the EICAS.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–043–01 **FWD CARGO HEAT FAIL** (CAUTION)	C	(O) May be displayed provided: (a) FWD CARGO Air is selected to OFF or VENT before each flight, and (b) Live animals or temperature sensitive cargo are not carried in forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight make sure that:

(1) The FWD CARGO switch, on the AIR control panel, is set to OFF or VENT.

(2) FWD CARGO AIR OFF status message is shown when the FWD CARGO switch is set to OFF.

(3) There are no live animals or temperature sensitive cargo in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–045–01 **FWD CARGO LO TEMP** (CAUTION)	C	(O) May be displayed provided: (a) FWD CARGO Air is selected to OFF or VENT before each flight, and (b) Live animals or temperature sensitive cargo are not carried in forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight make sure that:

(1) The FWD CARGO switch, on the AIR control panel, is set to OFF or VENT.

(2) FWD CARGO AIR OFF status message is shown when the FWD CARGO switch is set to OFF.

(3) There are no live animals or temperature sensitive cargo in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–047–01 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Left Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(b) Set the L BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–047–02 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Do the single pack operations procedures.

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Flight altitude is limited to FL 310.

(3) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(4) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(5) Wing Anti Ice (WAI) System is selected OFF.

(6) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–047–03 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Do the single pack operations procedures.

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL 190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–051–01 **L PACK OVHT** (CAUTION) 21 L PACK OVHT – L PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Left Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(b) Set the L BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–051–02 **L PACK OVHT** (CAUTION) 21 L PACK OVHT – L PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–051–03 **L PACK OVHT** (CAUTION) 21 L PACK OVHT – L PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–061–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Left Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(b) Set the L BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–061–02 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–061–03 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–063–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L PACK TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–065–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – MIX MANF TEMP SNSR TOTAL LOSS	C	(O) May be displayed provided: (a) Both packs are operative, (b) RECIRC AIR is selected OFF, (c) Forward cargo compartment heating is selected to LO HEAT or HI HEAT when live animals or temperature sensitive cargo is carried in forward cargo compartment, and (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative).

1. OPERATIONS (O)

A. With the associated pack selected ON, make sure that no PACK FAULT info messages show on the info page other than 21 PACK FAULT – MIX MANF TEMP SNSR TOTAL LOSS.

B. Make sure that the RECIRC AIR pushbutton, on the AIR control panel, is set to OFF.

C. Make sure that forward cargo compartment heating is selected to LO HEAT or HI HEAT when live animals or temperature sensitive cargo is carried in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–067–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – MIX MANF TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–069–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Left Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(b) Set the L BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–069–02 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–069–03 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–073–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – L PACK PRESS SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–077–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Right Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(b) Set the R BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–077–02 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–077–03 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R BYPASS VLV INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–079–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R PACK TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–081–01 **PACK FAULT** (ADVISORY) 21 L PACK FAULT – L PACK TEMP SNSR INOP	C	Except for extended operations, may be displayed provided Left Air Conditioning Pack is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–083–01 **PACK FAULT** (ADVISORY) 21 R PACK FAULT – R PACK TEMP SNSR INOP	C	Except for extended operations, may be displayed provided Right Air Conditioning Pack is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–085–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Right Bleed is selected OFF, (c) Flight is conducted in single bleed at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(b) Set the R BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–085–02 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–085–03 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R PACK DISCH PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–089–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – R PACK PRESS SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–093–01 **PRESSURIZATION FAULT** (ADVISORY) 21 PRESSURIZATION FAULT – BACKUP ALT LIM INOP	C	(O) May be displayed provided: (a) 21 PRESSURIZATION FAULT – MANUAL MODE INOP info message is not displayed, (b) 21 PRESSURIZATION FAULT – PRIM ALT LIM INOP info message is not displayed, and (c) Aircraft is operated in AUTO pressurization mode.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that 21 PRESSURIZATION FAULT – MANUAL MODE INOP info message is not shown.

(2) If the PRESSURIZATION FAULT advisory message shows on the EICAS, make sure that 21 PRESSURIZATION FAULT – PRIM ALT LIM INOP info message is not shown.

(3) On the Electronic Circuit Breaker (ECB) synoptic page, make sure that the following breaker is IN.

– CDC2–6–12 (OUTFLOW VLV MAN)

(4) Make sure that the AUTO pressurization mode is enabled as follows:

(a) On the PRESSURIZATION control panel, make sure that the MAN PRESS pushbutton is out and MAN light is not illuminated.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–095–03 **PRESSURIZATION FAULT** (ADVISORY) 21 PRESSURIZATION FAULT – MANUAL MODE INOP	C	(O) May be displayed provided: (a) 21 PRESSURIZATION FAULT – CPCS AUTO MODE REDUND LOSS info message is not displayed, and (b) Auto pressurization mode is selected.

1. OPERATIONS (O)

A. Do the steps that follow before each flight:

(1) Make sure that 21 PRESSURIZATION FAULT – CPCS AUTO MODE REDUND LOSS info message is not shown.

(2) Make sure that the two AUTO pressurization modes are operative, by cycling the AUTO PRESS pushbutton and selecting the auto pressurization mode.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–097–01 **PRESSURIZATION FAULT** (ADVISORY) 21 PRESSURIZATION FAULT – CPCS AUTO MODE REDUND LOSS	C	(O) May be displayed provided: (a) 21 PRESSURIZATION FAULT – MANUAL MODE INOP is not displayed, and (b) Affected Outflow Valve (OFV) AUTO mode is deactivated.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the 21 PRESSURIZATION FAULT – MANUAL MODE INOP info message is not shown.

(2) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK following circuit breaker:

CDC1–6–9 (OUTFLOW VLV AUTO 1)

(3) Make sure that AUTO PRESS FAIL (caution) is not shown.

(4) If AUTO PRESS FAIL (caution) is shown:

(a) On the Electronic Circuit Breaker (ECB) synoptic page, set to CLOSE the circuit breaker that follows:

CDC1–6–9 (OUTFLOW VLV AUTO 1)

(b) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–5–9 (OUTFLOW VLV AUTO 2)

(c) Make sure that AUTO PRESS FAIL (caution) is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–099–01 **PRESSURIZATION FAULT** (ADVISORY) 21 PRESSURIZATION FAULT – PRIM ALT LIM INOP	C	(O) May be displayed provided: (a) 21 PRESSURIZATION FAULT – MANUAL MODE INOP is not displayed, (b) 21 PRESSURIZATION FAULT – BACKUP ALT LIM INOP is not displayed, and (c) Aircraft is operated in AUTO pressurization mode.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the 21 PRESSURIZATION FAULT – MANUAL MODE INOP info message is not shown.

(2) If the PRESSURIZATION FAULT advisory message is displayed, make sure that 21 PRESSURIZATION FAULT – BACKUP ALT LIM INOP info message is not shown.

(3) To make sure that the relay for the backup manual pressurization mode is selected, on the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

– CDC2–6–12 (OUTFLOW VLV MAN)

(4) Make sure that the AUTO pressurization mode is enabled as follows:

(a) On the PRESSURIZATION control panel, make sure that the MAN PRESS pushbutton is out and MAN light is not illuminated.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–103–01 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Right Bleed is selected OFF, (c) Flight is conducted in single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(b) Set the R BLEED pushbutton to OFF.

(2) Carry out operations procedures in single bleed configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–103–02 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, (f) Wing Anti Ice (WAI) System is selected OFF, and (g) Aircraft is not operated in known or forecast icing conditions.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations proceduresfor one air conditioning pack inoperative.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(6) Wing Anti Ice (WAI) System is selected OFF.

(7) Aircraft is not operated in known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–103–03 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R PACK INLET PRESS SNSR INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL190, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures for one air conditioning pack inoperative.

(3) Flight altitude is limited to FL190.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL21–00–107–01 **R PACK OVHT** (CAUTION) 21 R PACK OVHT – R PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	Relief moved to section 1 per TC MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL21–00–107–02 **R PACK OVHT** (CAUTION) 21 R PACK OVHT – R PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	Relief moved to section 1 per TC MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL21–00–107–03 **R PACK OVHT** (CAUTION) 21 R PACK OVHT – R PACK INOP (A/C without SB BD500–219001 or Production Modsum 500T101031)	Relief moved to section 1 per TC MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–111–01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT – DUCT TEMP SNSR INOP	C	Except for extended operations, may be displayed provided TRIM AIR FAIL caution message is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–117–01 **TRIM AIR FAIL** (CAUTION)	C	(O) May be displayed provided: (a) TRIM AIR is selected OFF before each flight, and (b) Live animals or temperature sensitive cargo are not carried in forward cargo compartment.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, make sure that the TRIM AIR pushbutton is set to OFF.

(2) Make sure that 21 AIR SYSTEM FAULT – TRIM AIR SOV FAIL OPEN and 21 AIR SYSTEM FAULT – TRIM AIR PRV FAIL OPEN info messages are not shown.

(3) Make sure that there are no live animals or temperature sensitive cargo in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–119–01 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L PACK INLET PRESS SNSR INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–121–01 **L PACK OVHT** (CAUTION) 21 L PACK OVHT – L PACK INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–123–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L BYPASS VLV INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–125–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – L PACK DISCH PRESS SNSR INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Left Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the L PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–127–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R BYPASS VLV INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single Pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–129–01 **PACK FAULT** (ADVISORY) 21 PACK FAULT – R PACK DISCH PRESS SNSR INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL21–00–131–01 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R PACK INLET PRESS SNSR INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	C	(O) Except for extended operations, may be displayed provided: (a) Right Air Conditioning Pack is selected OFF, (b) Flight is conducted in single pack configuration at or below FL310, (c) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do as follows:

(1) On the AIR control panel:

(a) Set the R PACK pushbutton to OFF.

(2) Carry out operations procedures in single pack configuration.

(3) Flight altitude is limited to FL310.

(4) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(5) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL21–00–133–01 **R PACK OVHT** (CAUTION) 21 R PACK OVHT – R PACK INOP (A/C with SB BD500–219001 or Production Modsum 500T101031)	Relief moved to section 1 per TC MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–001–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AT 1 INOP	C	May be displayed and autothrottle used provided: (a) None of the following messages are displayed: 22 AUTO FLIGHT FAULT – AT 2 INOP 22 AUTO FLIGHT FAULT – FCP B INOP DMC 2A FAIL (advisory) DMC 2B FAIL (advisory), and (b) Operations do not require dual autothrottle system.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–003–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AT 2 INOP	C	May be displayed and autothrottle used provided: (a) None of the following messages are displayed: 22 AUTO FLIGHT FAULT – AT 1 INOP 22 AUTO FLIGHT FAULT – FCP A INOP DMC 1A FAIL (advisory) DMC 1B FAIL (advisory), and (b) Operations do not require dual autothrottle systems.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–005–01 **AT RETARD INHIBIT** (CAUTION)	C	(O) May be displayed provided: (a) Autothrottle is not used for landing, (b) Alternate procedures are established and used, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Before landing at or prior to 800 feet AGL, do the steps that follow:

(1) Disengage the autothrottle.

(2) Operate the thrust levers manually.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–007–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 1 INOP	B	Except for extended operations, may be displayed provided: (a) No more than one of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 2 INOP, 22 AUTO FLIGHT FAULT – AP 3 INOP, PFCC 1 FAIL (advisory), PFCC 2 FAIL (advisory), PFCC 3 FAIL (advisory), (b) Operations do not require dual autopilot systems, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–008–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 1 INOP	C	May be displayed provided none of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 2 INOP 22 AUTO FLIGHT FAULT – AP 3 INOP PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–009–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 2 INOP	B	Except for extended operations, may be displayed provided: (a) No more than one of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 1 INOP 22 AUTO FLIGHT FAULT – AP 3 INOP PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory), (b) Operations do not require dual autopilot systems, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–010–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 2 INOP	C	May be displayed provided none of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 1 INOP 22 AUTO FLIGHT FAULT – AP 3 INOP PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–011–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 3 INOP	B	Except for extended operations, may be displayed provided: (a) No more than one of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 1 INOP 22 AUTO FLIGHT FAULT – AP 2 INOP PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory), (b) Operations do not require dual autopilot systems, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–012–01 **AUTO FLIGHT FAULT** (ADVISORY) 22 AUTO FLIGHT FAULT – AP 3 INOP	C	May be displayed provided none of the following messages are displayed: 22 AUTO FLIGHT FAULT – AP 1 INOP 22 AUTO FLIGHT FAULT – AP 2 INOP PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–025–01 **APPR1 NOT AVAIL** (ADVISORY)	C	May be displayed provided ILS APPR 1 (CAT I), APPR 2 (CAT II) and Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–027–01 **APPR2 NOT AVAIL** (ADVISORY)	C	May be displayed provided approach minima do not require use of ILS, APPR 2 (CAT II) and Autoland.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–029–01 **LAND2 NOT AVAIL** (ADVISORY)	C	May be displayed provided Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–031–01 **LAND3 NOT AVAIL ***** (ADVISORY)	C	May be displayed provided LAND 3 Operations (CAT III – fail operational) are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–033–01 **LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–035–01 **LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–037–01 **L LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–039–01 **R LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–041–01 **L LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL22–00–043–01 **R LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–015–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU CH 1A INOP	C	May be displayed provided none of the following messages are displayed: L CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2A INOP 23 AVIONIC FAULT – RIU CH 2B INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–017–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU CH 1B INOP	C	(O) May be displayed provided: (a) None of the following messages are displayed: R CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1A INOP 23 AVIONIC FAULT – RIU CH 2A INOP 23 AVIONIC FAULT – RIU CH 2B INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory) (b) Reversionary tuning is confirmed operative on right Control Tuning Panel (CTP), (c) Radio Tuning System Application (RTSA) is verified operative, and (d) VHF NAV 2 is verified operative.

1. OPERATIONS (O)

A. Turn off the left CTP as follows:

(1) On the CTP 1, turn the OFF/BRT knob fully counterclockwise.

– CTP 1 turns off.

B. Make sure that the reversionary tuning function is operative on the right Control Tuning Panel (CTP). Do the steps that follow:

(1) On the CTP 2, momentarily push the 1/2 pushbutton.

– On the CTP 2, Radio System 1 is shown.

(2) On the CTP 2, push the R1 Line Select Key.

– The tune window moves to the VHF 1 preselect frequency readout

(3) Turn the CTP 2 TUNE / DATA knob to a new preselectt frequency.

(4) On the CTP 2, push the R1 Line Select Key.

– On the CTP 2 VHF 1 Radio Tuning page, the new preselect frequency goes active.

– On the CTP 2, the VHF 1 active frequency is shown green and remains green after 3 seconds.

C. Make sure that the pilot Radio Tuning System Application (RTSA) is operative. Do the steps that follow:

(1) On the CCP 1 and AFD 2 MFW, select the TUNE tab from the Tune Format menu and select the VHF 1 button..

(2) On the CCP 1, select the VHF 1 preselect frequency control field.

(3) Turn the CCP 1 DSK selector knob to select a new preselect frequency.

(4) On the CCP 1, select the VHF 1 Frequency Swap button.

– On the AFD 2 tuning MFW, the VHF 1 active frequency is shown green and remains green after 3 seconds.

D. Make sure that the VHF NAV 2 is operative. Do the steps that follow:

(1) On the R CTP, push the R2 Line Select Key.

– The tune window moves to the NAV 2 preselect frequency readout

(2) Turn the R CTP TUNE / DATA knob until the preselect frequency shows 108.00 MHz.

(3) On the R CTP, push the R2 Line Select Key.

– On the R CTP, NAV 2 Radio Tuning page, the new preselect frequency goes active.

– On the R CTP, the NAV 2 active frequency 108.00 MHz is shown green and remains green after 3 seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remain locked in it's last range.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–019–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU CH 2A INOP	C	May be displayed provided none of the following messages are displayed: R CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1A INOP 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2B INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–021–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU CH 2B INOP	C	(O) May be displayed provided: (a) None of the following messages are displayed: L CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1A INOP 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2A INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory) (b) Reversionary tuning is confirmed operative on left Control Tuning Panel (CTP), (c) Radio Tuning System Application (RTSA) is verified operative, and (d) VHF NAV 1 is verified operative.

1. OPERATIONS (O)

A. Turn off the right CTP as follows:

(1) On the CTP 2, turn the OFF/BRT knob fully counterclockwise.

– CTP 2 turns off.

B. Make sure that the reversionary tuning function is operative on the left Control Tuning Panel (CTP). Do the steps that follow:

(1) On the CTP 1, momentarily push the 1/2 pushbutton.

– On the CTP 1, Radio System 2 is shown.

(2) On the CTP 1, push the R1 Line Select Key.

– The tune window moves to the VHF 2 preselect frequency readout

(3) Turn the CTP 1 TUNE / DATA knob to a new preselect frequency.

(4) On the CTP 1, push the R1 Line Select Key.

– On the CTP 1 VHF 2 Radio Tuning page, the new preselect frequency goes active.

– On the CTP 1, the VHF 2 active frequency is shown green and remains green after 3 seconds.

C. Make sure that the copilot Radio Tuning System Application (RTSA) is operative. Do the steps that follow:

(1) On the CCP 2 and AFD 3 MFW, select the TUNE tab from the Tune Format menu and select the VHF 2 button.

(2) On the CCP 2, select the VHF 2 preselect frequency control field.

(3) Turn the CCP 2 DSK selector knob to select a new preselect frequency.

(4) On the CCP 2, select the VHF 2 Frequency Swap button.

– On the AFD 3 tuning MFW, the VHF 2 active frequency is shown green and remains green after 3 seconds.

D. Make sure that the VHF NAV 1 is operative. Do the steps that follow:

(1) On the L CTP, push the R2 Line Select Key.

– The tune window moves to the NAV 1 preselect frequency readout

(2) Turn the L CTP TUNE / DATA knob until the preselect frequency shows 108.00 MHz.

(3) On the L CTP, push the R2 Line Select Key.

– On the L CTP, NAV 1 Radio Tuning page, the new preselect frequency goes active.

– On the L CTP, the NAV 1 active frequency 108.00 MHz is shown green and remains green after 3 seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remain locked in it's last range.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–023–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU 1B AURAL INOP	C	May be displayed provided none of the following messages are displayed: 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2B INOP 31 AVIONIC FAULT – RIU 2B AURAL INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–025–01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT – RIU 2B AURAL INOP	C	May be displayed provided none of the following messages are displayed: 23 AVIONIC FAULT – RIU 1B AURAL INOP 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2B INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–027–01 **L CTP TUNING FAIL** (CAUTION)	C	(O) May be displayed provided: (a) None of the following messages are displayed: R CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1A INOP 23 AVIONIC FAULT – RIU CH 2A INOP 23 AVIONIC FAULT – RIU CH 2B INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory) (b) Reversionary tuning is confirmed operative on right Control Tuning Panel (CTP), (c) Radio Tuning System Application (RTSA) is verified operative, and (d) VHF NAV 2 is verified operative.

1. OPERATIONS (O)

A. Turn off the left CTP as follows:

(1) On the CTP 1, turn the OFF/BRT knob fully counterclockwise.

– CTP 1 turns off.

B. Make sure that the reversionary tuning function is operative on the right Control Tuning Panel (CTP). Do the steps that follow:

(1) On the CTP 2, momentarily push the 1/2 pushbutton.

– On the CTP 2, Radio System 1 is shown.

(2) On the CTP 2, push the R1 Line Select Key.

– The tune window moves to the VHF 1 preselect frequency readout

(3) Turn the CTP 2 TUNE / DATA knob to a new preselectt frequency.

(4) On the CTP 2, push the R1 Line Select Key.

– On the CTP 2 VHF 1 Radio Tuning page, the new preselect frequency goes active.

– On the CTP 2, the VHF 1 active frequency is shown green and remains green after 3 seconds.

C. Make sure that the pilot Radio Tuning System Application (RTSA) is operative. Do the steps that follow:

(1) On the CCP 1 and AFD 2 MFW, select the TUNE tab from the Tune Format menu and select the VHF 1 button..

(2) On the CCP 1, select the VHF 1 preselect frequency control field.

(3) Turn the CCP 1 DSK selector knob to select a new preselect frequency.

(4) On the CCP 1, select the VHF 1 Frequency Swap button.

– On the AFD 2 tuning MFW, the VHF 1 active frequency is shown green and remains green after 3 seconds.

D. Make sure that the VHF NAV 2 is operative. Do the steps that follow:

(1) On the R CTP, push the R2 Line Select Key.

– The tune window moves to the NAV 2 preselect frequency readout

(2) Turn the R CTP TUNE / DATA knob until the preselect frequency shows 108.00 MHz.

(3) On the R CTP, push the R2 Line Select Key.

– On the R CTP, NAV 2 Radio Tuning page, the new preselect frequency goes active.

– On the R CTP, the NAV 2 active frequency 108.00 MHz is shown green and remains green after 3 seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remain locked in it's last range.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–029–01 **R CTP TUNING FAIL** (CAUTION)	C	(O) May be displayed provided: (a) None of the following messages are displayed: L CTP TUNING FAIL (caution) 23 AVIONIC FAULT – RIU CH 1A INOP 23 AVIONIC FAULT – RIU CH 1B INOP 23 AVIONIC FAULT – RIU CH 2A INOP DMC 1A FAIL (advisory) DMC 2A FAIL (advisory) (b) Reversionary tuning is confirmed operative on left Control Tuning Panel (CTP), (c) Radio Tuning System Application (RTSA) is verified operative, and (d) VHF NAV 1 is verified operative.

1. OPERATIONS (O)

A. Turn off the right CTP as follows:

(1) On the CTP 2, turn the OFF/BRT knob fully counterclockwise.

– CTP 2 turns off.

B. Make sure that the reversionary tuning function is operative on the left Control Tuning Panel (CTP). Do the steps that follow:

(1) On the CTP 1, momentarily push the 1/2 pushbutton.

– On the CTP 1, Radio System 2 is shown.

(2) On the CTP 1, push the R1 Line Select Key.

– The tune window moves to the VHF 2 preselect frequency readout

(3) Turn the CTP 1 TUNE / DATA knob to a new preselect frequency.

(4) On the CTP 1, push the R1 Line Select Key.

– On the CTP 1 VHF 2 Radio Tuning page, the new preselect frequency goes active.

– On the CTP 1, the VHF 2 active frequency is shown green and remains green after 3 seconds.

C. Make sure that the copilot Radio Tuning System Application (RTSA) is operative. Do the steps that follow:

(1) On the CCP 2 and AFD 3 MFW, select the TUNE tab from the Tune Format menu and select the VHF 2 button.

(2) On the CCP 2, select the VHF 2 preselect frequency control field.

(3) Turn the CCP 2 DSK selector knob to select a new preselect frequency.

(4) On the CCP 2, select the VHF 2 Frequency Swap button.

– On the AFD 3 tuning MFW, the VHF 2 active frequency is shown green and remains green after 3 seconds.

D. Make sure that the VHF NAV 1 is operative. Do the steps that follow:

(1) On the L CTP, push the R2 Line Select Key.

– The tune window moves to the NAV 1 preselect frequency readout

(2) Turn the L CTP TUNE / DATA knob until the preselect frequency shows 108.00 MHz.

(3) On the L CTP, push the R2 Line Select Key.

– On the L CTP, NAV 1 Radio Tuning page, the new preselect frequency goes active.

– On the L CTP, the NAV 1 active frequency 108.00 MHz is shown green and remains green after 3 seconds.

NOTE: Subsequent failure of the remaining CTP results in the Weather Radar Range to remain locked in it's last range.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–031–01 **DATALINK FAIL** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. Operator to provide an alternative procedure to the flight crew to manage communications, as applicable in the airspaces in which the aircraft is operated.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–031–03 **DATALINK FAIL** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE 1: Any portion of system that is operative may be used. NOTE 2: ADS–C function will be inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–031–05 **DATALINK STATUS** (ADVISORY)	C	May be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–031–07 **DATALINK STATUS** (ADVISORY)	D	May be displayed provided procedures do not require its use.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–01 **SATCOM FAIL ***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–03 **SATCOM FAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–05 **SATCOM NO SIGNAL***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–07 **SATCOM NO SIGNAL***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–09 **SATCOM DATA FAIL***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL23–00–033–11 **SATCOM DATA FAIL***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link systems will not be available.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL23–00–035–01 **SATCOM FAIL ***** (ADVISORY)	Item removed at Issue 007.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL23–00–037–01 **SATCOM VOICE FAIL ***** (ADVISORY)	Item removed at Issue 007.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL23–00–039–01 **SATCOM VOICE FAIL ***** (ADVISORY)	Item removed at Issue 007.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–009–01 **APU GEN FAIL** (CAUTION)	C	Except for extended operations, may be displayed provided: (a) L VFG and R VFG Systems are operative, and (b) APU GEN is selected OFF.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–011–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – APU GEN DEGRADED	C	Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–013–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – BPCU 1 DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–015–03 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – BPCU 2 DEGRADED	C	(O) Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Once prior to first flight of relief period, do the steps that follows to make sure that APU start is operative:

(1) If 24 ELECTRICAL FAULT – BPCU 2 DEGRADED info message is shown, it is possible that APU start cannot be accomplished using aircraft batteries.

(2) Attempt APU start using aircraft batteries.

(a) If successful, this means that the 24 ELECTRICAL FAULT – BPCU 2 DEGRADED message was not caused by a BATT2 HES power supply fault.

Aircraft dispatch is permitted.

No further action is required.

(b) If not successful, this means that the 24 ELECTRICAL FAULT – BPCU 2 DEGRADED message was caused by a BATT2 HES power supply fault and external power will be required to start the APU on ground.

APU is considered inoperative for dispatch.

APU operation on ground using external power is permitted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–015–04 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – BPCU 2 DEGRADED	C	(O) May be displayed provided APU start is verified operative once each flight day.

1. OPERATIONS (O)

A. Once each flight day, do the steps that follows to make sure that APU start is operative:

(1) If 24 ELECTRICAL FAULT – BPCU 2 DEGRADED info message is shown, it is possible that APU start cannot be accomplished using aircraft batteries.

(2) Attempt APU start using aircraft batteries.

(a) If successful, this means that the 24 ELECTRICAL FAULT – BPCU 2 DEGRADED message was not caused by a BATT2 HES power supply fault.

Aircraft dispatch is permitted.

No further action is required.

(b) If not successful, this means that the 24 ELECTRICAL FAULT – BPCU 2 DEGRADED message was caused by a BATT2 HES power supply fault and external power will be required to start the APU on ground.

APU is considered inoperative for dispatch.

APU operation on ground using external power is permitted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–035–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC PWR MODULE INOP	C	(O) May be displayed provided battery chargers are verified operative.

1. OPERATIONS (O)

A. Once the fault message is shown, and to make sure that the two battery chargers are operational, do the steps that follow:

(1) On the ELECTRICAL control panel, select the BATT 1 switch to the OFF position.

(2) Select the BATT 1 switch to the AUTO position.

(3) Make sure that the BATT CHARGER FAULT is not displayed.

(4) On the ELECTRICAL control panel, select the BATT 2 switch to the OFF position.

(5) Select the BATT 2 switch to the AUTO position.

(6) Make sure that the BATT CHARGER FAULT is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–039–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC SSPC FAIL OPEN	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–043–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC 1 MICRO 1 MODULE 1 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–045–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC 1 MICRO 2 MODULE 4 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–051–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC 2 MICRO 1 MODULE 1 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–053–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC 2 MICRO 2 MODULE 4 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–077–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – L FBW PC DEGRADED	C	May be displayed provided 24 ELECTRICAL FAULT – R FBW PC PMG INOP info message is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–079–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – R FBW PC DEGRADED	C	May be displayed provided 24 ELECTRICAL FAULT – L FBW PC PMG INOP info message is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–081–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – L FBW PC COM LOSS	C	May be displayed providing following message is not displayed: 24 ELECTRICAL FAULT – R FBW PC COM LOSS

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–083–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – R FBW PC COM LOSS	C	May be displayed providing following message is not displayed: 24 ELECTRICAL FAULT – L FBW PC COM LOSS

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–087–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – RAT HEATER A INOP	C	(O) May be displayed provided 24 ELECTRICAL FAULT – RAT HEATER B INOP info message is not displayed.

1. OPERATIONS (O)

A. Before each flight, make sure that 24 ELECTRICAL FAULT – RAT HEATER B INOP info message is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–089–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – RAT HEATER B INOP	C	(O) May be displayed provided 24 ELECTRICAL FAULT – RAT HEATER A INOP info message is not displayed.

1. OPERATIONS (O)

A. Before each flight, make sure that 24 ELECTRICAL FAULT – RAT HEATER A INOP info message is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–091–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – L CB PANEL DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–093–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – R CB PANEL DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–099–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – GND CART INOP	C	May be displayed provided: (a) APU generator operates normally, and (b) External Power is not used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–105–01 **L GEN FAIL** (CAUTION)	B	(O) Except for extended operations, may be displayed provided: (a) L VFG is selected OFF, (b) APU is started before departure and operated continuously throughout the flight, and (c) None of the following messages are displayed: R GEN FAIL (caution) R GEN OFF (caution) APU GEN FAIL (caution) APU GEN OFF (status) 24 ELECTRICAL FAULT – EPC1 DEGRADED 24 ELECTRICAL FAULT – EPC2 DEGRADED 24 ELECTRICAL FAULT – EPC3 DEGRADED 24 TRU FAULT – TRU 1 INOP 24 TRU FAULT – TRU 2 INOP 24 TRU FAULT – TRU 3 INOP

1. OPERATIONS (O)

A. Make sure that L VFG is selected OFF.

B. Make sure that none of the following messages is displayed:

R GEN FAIL (caution)

R GEN OFF (caution)

APU GEN FAIL (caution)

APU GEN OFF (status)

24 ELECTRICAL FAULT – EPC1 DEGRADED

24 ELECTRICAL FAULT – EPC2 DEGRADED

24 ELECTRICAL FAULT – EPC3 DEGRADED

24 TRU FAULT – TRU 1 INOP

24 TRU FAULT – TRU 2 INOP

24 TRU FAULT – TRU 3 INOP

C. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL24–00–107–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – L GEN DEGRADED	Item deleted at MMEL Issue 009.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–00–119–01 **R GEN FAIL** (CAUTION)	B	(O) Except for extended operations, may be displayed provided: (a) R VFG is selected OFF, (b) APU is started before departure and operated continuously throughout the flight, and (c) None of the following messages are displayed: L GEN FAIL (caution) L GEN OFF (caution) APU GEN FAIL (caution) APU GEN OFF (status) 24 ELECTRICAL FAULT – EPC1 DEGRADED 24 ELECTRICAL FAULT – EPC2 DEGRADED 24 ELECTRICAL FAULT – EPC3 DEGRADED 24 TRU FAULT – TRU 1 INOP 24 TRU FAULT – TRU 2 INOP 24 TRU FAULT – TRU 3 INOP

1. OPERATIONS (O)

A. Make sure that R VFG is selected OFF.

B. Make sure that none of the following messages is displayed:

L GEN FAIL (caution)

L GEN OFF (caution)

APU GEN FAIL (caution)

APU GEN OFF (status)

24 ELECTRICAL FAULT – EPC1 DEGRADED

24 ELECTRICAL FAULT – EPC2 DEGRADED

24 ELECTRICAL FAULT – EPC3 DEGRADED

24 TRU FAULT – TRU 1 INOP

24 TRU FAULT – TRU 2 INOP

24 TRU FAULT – TRU 3 INOP

C. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL24–00–121–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – R GEN DEGRADED	Item deleted at MMEL Issue 009.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CAN COM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–03 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – CDC A664 COM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–05 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPDS COM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–13 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPGS COM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–19 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPC 1 DEGRADED	C	May be displayed provided none of the following messages are displayed: TRU 1 FAIL (caution) TRU 2 FAIL (caution) TRU 3 FAIL (caution) 24 ELECTRICAL FAULT – EPC 2 DEGRADED 24 ELECTRICAL FAULT – EPC 3 DEGRADED

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–21 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPC 2 DEGRADED	C	Except for extended operations, may be displayed provided none of the following messages are displayed: TRU 1 FAIL (caution) TRU 2 FAIL (caution) TRU 3 FAIL (caution) 24 ELECTRICAL FAULT – EPC 1 DEGRADED 24 ELECTRICAL FAULT – EPC 3 DEGRADED

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–23 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPC 2 DEGRADED	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU 1 FAIL (caution) TRU 2 FAIL (caution) TRU 3 FAIL (caution) 24 ELECTRICAL FAULT – EPC 1 DEGRADED 24 ELECTRICAL FAULT – EPC 3 DEGRADED, and (b) APU is started before departure and operated continuously troughout the flight.

1. OPERATIONS (O)

A. APU is to be operated continuously during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL24–01–015–25 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT – EPC 3 DEGRADED	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU 1 FAIL (caution) TRU 2 FAIL (caution) TRU 3 FAIL (caution) 24 ELECTRICAL FAULT – EPC 1 DEGRADED 24 ELECTRICAL FAULT – EPC 2 DEGRADED (b) Ram Air Turbine (RAT) is verified not deployed, and (c) APU is started before departure and operated continuously troughout the flight.

1. OPERATIONS (O)

A. During walkaround, make sure that the Ram Air Turbine (RAT) is not deployed.

B. APU is to be operated continuously during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–071–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – FWD PAX DOOR SLIDE SNSR INOP	C	(O) May be displayed provided: (a) Forward passenger door slide is ARMED before each flight, and (b) Forward passenger door mechanical slide flag indicates ARMED. NOTE: If the forward passenger door mechanical slide flag does not indicate ARMED, the forward passenger door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the forward passenger door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the forward passenger door mechanical slide flag does not show an ARMED indication, then the forward passenger door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–073–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – FWD PAX DOOR SLIDE TRGT INOP	C	(O) May be displayed provided: (a) Forward passenger door slide is ARMED before each flight, and (b) Forward passenger door mechanical slide flag indicates ARMED. NOTE: If the forward passenger door mechanical slide flag does not indicate ARMED, the forward passenger door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the forward passenger door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the forward passenger door mechanical slide flag does not show an ARMED indication, then the forward passenger door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the precautions necessary to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–075–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – FWD SERV DOOR SLIDE SNSR INOP	C	(O) May be displayed provided: (a) Forward service door slide is ARMED before each flight, and (b) Forward service door mechanical slide flag indicates ARMED. NOTE: If the forward service door mechanical slide flag does not indicate ARMED, the forward service door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the forward service door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the forward service door mechanical slide flag does not show an ARMED indication, then the forward service door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the precautions necessary to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–077–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – FWD SERV DOOR SLIDE TRGT INOP	C	(O) May be displayed provided: (a) Forward service door slide is ARMED before each flight, and (b) Forward service door mechanical slide flag indicates ARMED. NOTE: If the forward service door mechanical slide flag does not indicate ARMED, the forward service door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the forward service door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the forward service door mechanical slide flag does not show an ARMED indication, then the forward service door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–079–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – AFT PAX DOOR SLIDE SNSR INOP	C	(O) May be displayed provided: (a) Aft passenger door slide is ARMED before each flight, and (b) Aft passenger door mechanical slide flag indicates ARMED. NOTE: If the aft passenger door mechanical slide flag does not indicate ARMED, the aft passenger door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the aft passenger door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the aft passenger door mechanical slide flag does not show an ARMED indication, then the aft passenger door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–081–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – AFT PAX DOOR SLIDE TRGT INOP	C	(O) May be displayed provided: (a) Aft passenger door slide is ARMED before each flight, and (b) Aft passenger door mechanical slide flag indicates ARMED. NOTE: If the aft passenger door mechanical slide flag does not indicate ARMED, the aft passenger door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the aft passenger door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the aft passenger door mechanical slide flag does not show an ARMED indication, then the aft passenger door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–083–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – AFT SERV DOOR SLIDE SNSR INOP	C	(O) May be displayed provided: (a) Aft service door slide is ARMED before each flight, and (b) Aft service door mechanical slide flag indicates ARMED. NOTE: If the aft service door mechanical slide flag does not indicate ARMED, the aft service door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the aft service door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the aft service door mechanical slide flag does not show an ARMED indication, then the aft service door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–085–01 **DOOR SLIDE FAULT** (ADVISORY) 52 DOOR SLIDE FAULT – AFT SERV DOOR SLIDE TRGT INOP	C	(O) May be displayed provided: (a) Aft service door slide is ARMED before each flight, and (b) Aft service door mechanical slide flag indicates ARMED. NOTE: If the aft service door mechanical slide flag does not indicate ARMED, the aft service door is considered to be inoperative. Apply the Emergency exits MMEL item.

1. OPERATIONS (O)

A. Before each flight, with the aft service door slide in the ARMED position, do the steps that follow:

(1) Make sure that the slide mode select handle is in the ARMED position.

(2) Make sure that the mechanical slide flag shows the ARMED indication.

NOTE: If the aft service door mechanical slide flag does not show an ARMED indication, then the aft service door could be inoperative. If this occurs, refer to the Emergency Exits MMEL item.

B. Take the necessary precautions to make sure that an ARMED door is not accidentally opened.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL25–00–087–01 **KU BAND ON** (CAUTION)	C	(O) May be displayed provided aircraft de–icing operations are not conducted.

1. OPERATIONS (O)

A. Make sure aircraft de–icing operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–001–01 **AFT CARGO BTL FAIL** (CAUTION)	C	(O) May be displayed provided procedures are established and used to ensure that loading of combustible materials is prohibited in the aft cargo compartment.

1. OPERATIONS (O)

A. Operator to establish and use procedures to prohibit loading of combustible material in the aft cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–003–03 **AFT CARGO SMOKE FAIL** (CAUTION)	C	(O) May be displayed provided procedures are established and used to prohibit loading of combustible material in the aft cargo compartment.

1. OPERATIONS (O)

A. Operator to establish and use procedures to prohibit loading of combustible material in the aft cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–005–01 **APU BTL FAIL** (CAUTION)	C	May be displayed provided Auxiliary Power Unit (APU) is considered inoperative and not used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–007–01 **APU BTL LO** (ADVISORY)	C	May be displayed provided Auxiliary Power Unit (APU) is considered inoperative and is not used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–009–01 **APU FIRE DET FAIL** (CAUTION)	C	Except for extended operations, may be displayed provided Auxiliary Power Unit (APU) is considered inoperative and is not used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–013–01 **CARGO BTL FAIL** (CAUTION)	C	(O) May be displayed provided procedures are established and used to ensure that loading of combustible material is prohibited in the forward and aft cargo compartments.

1. OPERATIONS (O)

A. Operator to establish and use procedures to prohibit loading of combustible material in the forward and aft cargo compartments.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–015–01 **CARGO BTL LO** (ADVISORY)	C	(O) May be displayed provided procedures are established and used to ensure that loading of combustible material is prohibited in the forward and aft cargo compartments.

1. OPERATIONS (O)

A. Operator to establish and use procedures to prohibit loading of combustible material in the forward and aft cargo compartments.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–023–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – AFT CARGO BTL SQUIB REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–025–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – AFT CARGO SMOKE DET REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–029–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – APU BTL SQUIB REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–031–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – APU FIRE DET REDUND LOSS	C	Except for extended operations beyond 120 minutes, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–032–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A A429 INPUT LOSS	C	(O) May be displayed provided 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B A429 INPUT LOSS info message is not displayed.

1. OPERATIONS (O)

A. Before each flight, make sure that the info message that follows is not shown:

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B A429 INPUT LOSS

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–033–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–036–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B A429 INPUT LOSS	C	(O) May be displayed provided 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A A429 INPUT LOSS info message is not displayed.

1. OPERATIONS (O)

A. Before each flight, make sure that the info message that follows is not shown:

26 FIRE SYSTEM FAULT – CTRL UNIT CHAN A A429 INPUT LOSS

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–037–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – CTRL UNIT CHAN B DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–043–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS	C	(O) Except for extended operations, may be displayed provided: (a) Both engine bleed systems are operative, (b) Both air conditioning packs are operative, (c) Cross bleed valve is operative, and (d) Both Fire System Control Unit channels are operative.

1. OPERATIONS (O)

A. Before each flight make sure that the components that follow are operative:

(1) The two engine bleed systems.

(2) The two air conditioning packs.

(3) The cross bleed valve.

(4) The two channels of the Fire System Control Unit.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–045–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – FWD CARGO BTL SQUIB REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–047–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – FWD CARGO SMOKE DET REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–049–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – L ENG BTL SQUIB REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–051–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – L ENG FIRE DET REDUND LOSS	C	Except for extended operations beyond 120 minutes, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–053–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – MLG OVHT DET REDUND LOSS	C	Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–053–03 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – MLG OVHT DET REDUND LOSS	C	May be displayed provided 32 BRAKE FAULT – BRAKE TEMP SENSOR INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–055–01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – R ENG BTL SQUIB REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–057–03 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – R ENG FIRE DET REDUND LOSS	C	Except for extended operations beyond 120 minutes, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–059–01 **FWD CARGO BTL FAIL** (CAUTION)	C	(O) May be displayed provided procedures are established and used to ensure that loading of combustible material is prohibited in the forward cargo compartment.

1. OPERATIONS (O)

A. Operator to establish and use procedures to ensure that loading of combustible material is prohibited in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL26–00–061–03 **FWD CARGO SMOKE FAIL** (CAUTION)	C	(O) May be displayed provided procedures are established and used to ensure loading of combustible material is prohibited in the forward cargo compartment.

1. OPERATIONS (O)

A. Operator to establish and use procedures to ensure that loading of combustible material is prohibited in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–000–01 **STEEP NOT AVAIL ***** (CAUTION)	D	(O) May be displayed provided operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight:

(1) Deselect the STEEP APPR checkbox to remove the STEEP NOT AVAIL message.

(2) Make sure operations with steep approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–007–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 TEST SW INOP	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 TEST SW INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–007–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 TEST SW INOP	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL – PFCC 1 DEGRADED 27 FLT CTRL – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 TEST SW INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–007–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 TEST SW INOP	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL – PFCC 1 DEGRADED 27 FLT CTRL – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 TEST SW INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–009–01 **PFCC 1 FAIL** (ADVISORY)	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The PFCC 1 FAIL (Advisory) message will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–009–03 **PFCC 2 FAIL** (ADVISORY)	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The PFCC 2 FAIL (Advisory) message will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–009–05 **PFCC 3 FAIL** (ADVISORY)	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The PFCC 3 FAIL (Advisory) message will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–011–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 ADS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 ADS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–011–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 ADS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 ADS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–011–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 ADS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 ADS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–012–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 ADS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED.

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 ADS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–012–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 ADS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 ADS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–012–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 ADS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 ADS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–013–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AHRS INOP	C	(O) May be displayed provided none of the following messages are displayed: 27 FLT CTRL FAULT – ISI INPUT INOP 27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS IRS 1 FAIL (advisory) IRS 2 FAIL (advisory) IRS 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, make sure that none of the following messages are shown:

27 FLT CTRL FAULT – ISI INPUT INOP

27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS

IRS 1 FAIL (advisory)

IRS 2 FAIL (advisory)

IRS 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–014–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 BDCU INPUT INOP	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 BDCU INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–014–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT INOP	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–014–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT INOP	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–015–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 BDCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 BDCU INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–015–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–015–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–016–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 CUTOUT SW INOP	C	(O) May be displayed provided: (a) PFCC 3 is deactivated, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On Circuit Breaker panel 1, open the circuit breaker that follows:

L–CBP–B5 (PFCC 3)

NOTE: The PFCC 3 FAIL (Advisory) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 CUTOUT SW INOP and FLT CTRL FAULT (Advisory) messages will clear.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–017–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–017–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–017–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative before flight.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–018–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 DMC COM DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 DMC COM DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–018–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 DMC COM DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 DMC COM DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–018–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DMC COM DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 DMC COM DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–019–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 DMC COM REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 DMC COM REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–019–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 DMC COM REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 DMC COM REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–019–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DMC COM REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 DMC COM DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–020–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 IRS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 IRS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–020–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 IRS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 IRS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–020–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 IRS INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 IRS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–021–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–021–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–021–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 IRS INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–022–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – ISI INPUT INOP	C	(O) May be displayed provided none of the following messages are displayed: 27 FLT CTRL FAULT – AHRS INOP 27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS 27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS IRS 1 FAIL (advisory) IRS 2 FAIL (advisory) IRS 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, make sure that none of the following messages are shown:

27 FLT CTRL FAULT – AHRS INOP

27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS

IRS 1 FAIL (advisory)

IRS 2 FAIL (advisory)

IRS 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–023–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–023–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–023–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–024–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–024–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–024–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–025–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–025–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 2 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 2 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–025–07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–025–09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–025–13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP ***	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 2 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 2 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–026–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–026–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 2 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 2 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–026–07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–026–09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–026–13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP ****	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 2 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 2 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–027–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–027–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 2 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 2 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–027–07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP (two RAD ALT Installation)	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–027–09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP (three RAD ALT Installation)	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 3 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 3 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 3 FAIL (advisory).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–027–13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP ***	C	(O) May be displayed provided: (a) LAND 3 Operations (CAT III – fail operational) are not conducted, and (b) None of the following messages are displayed: 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP RAD ALT 1 FAIL (advisory) RAD ALT 2 FAIL (advisory)

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure that the RAD ALT 1 and 2 inputs are operative and none of the following messages are shown:

27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP

27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP

27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–028–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–028–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–028–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–029–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–029–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–029–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–030–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–030–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–030–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–031–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED.

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–031–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–031–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–032–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 WAI INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 WAI INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–032–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 WAI INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 WAI INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–032–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 WAI INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 WAI INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–033–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 WAI INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 WAI INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–033–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 WAI INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 WAI INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–033–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 WAI INPUT DEGRADED	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 WAI INPUT DEGRADED and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–034–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FMS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 FMS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–034–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FMS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 FMS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–034–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FMS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 FMS INPUT REDUND LOSS and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–035–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FMS INPUT INOP	C	(O) May be displayed provided: (a) PFCC 1 is selected OFF, and (b) None of the following messages are displayed: PFCC 2 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 2 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 2 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 1 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 2 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 2 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 2 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 1 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 1 FMS INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–035–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FMS INPUT INOP	C	(O) May be displayed provided: (a) PFCC 2 is selected OFF, and (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 3 FAIL (advisory) PFCC 1 OFF (status) PFCC 3 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 3 DEGRADED

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 2 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 3 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 3 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 3 DEGRADED

NOTE: The PFCC 2 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 2 FMS INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–035–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FMS INPUT INOP	C	(O) May be displayed provided: (a) PFCC 3 is selected OFF, (b) None of the following messages are displayed: PFCC 1 FAIL (advisory) PFCC 2 FAIL (advisory) PFCC 1 OFF (status) PFCC 2 OFF (status) 27 FLT CTRL FAULT – PFCC 1 DEGRADED 27 FLT CTRL FAULT – PFCC 2 DEGRADED, and (c) APU is operated continuously during flight and APU generator is verified operative.

1. OPERATIONS (O)

A. On the PRIM FLT CTRL panel, select the PFCC 3 switch to OFF.

B. Make sure that none of the messages that follow are shown:

PFCC 1 FAIL (Advisory)

PFCC 2 FAIL (Advisory)

PFCC 1 OFF (Status)

PFCC 2 OFF (Status)

27 FLT CTRL FAULT – PFCC 1 DEGRADED

27 FLT CTRL FAULT – PFCC 2 DEGRADED

NOTE: The PFCC 3 OFF (Status) message will be shown as a result. The 27 FLT CTRL FAULT – PFCC 3 FMS INPUT INOP and FLT CTRL FAULT (Advisory) messages will clear.

C. Before each flight, start the APU and make sure that APU generator is operative.

D. APU is to be operated continuously during flight.

NOTE: Use CIFP to compute the additional fuel required for continuous operation of the APU during flight.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–052–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 DMC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–052–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 DMC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–052–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 DMC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–052–07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–054–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 IRS INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–054–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 IRS INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–054–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 IRS INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–060–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–060–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–060–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–062–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 FADEC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–062–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 FADEC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–062–05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 FADEC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–064–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DMC IIM INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–072–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DIRECT MODE COM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–073–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – INPUT POWER REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–091–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – SPOILER LEVER SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–092–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – SPOILER REU CCDL REDUND LOSS	A	May be displayed provided: (a) Aircraft is not powered down, (b) Electronic FCS Test (PBIT) is not performed, and (c) May be inoperative for one calendar day.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–110–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L SIDESTICK SHAKER INOP	B	May be displayed provided: (a) The following message 27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP is not displayed, and (b) Pilot flying has operative sidestick shaker.

1. OPERATIONS (O)

A. To confirm that the right sidestick shaker is operative, before each flight, make sure that the info message that follows is not shown:

27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP

B. Pilot flying is using the right sidestick.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–110–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP	B	May be displayed provided: (a) The following message 27 FLT CTRL FAULT – L SIDESTICK SHAKER INOP is not displayed, and (b) Pilot flying has operative sidestick shaker.

1. OPERATIONS (O)

A. To confirm that the right sidestick shaker is operative, before each flight, make sure that the info message that follows is not shown:

27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP

B. Pilot Flying is using the left sidestick.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–114–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L AUTOPILOT SIDESTICK DETENT INOP	C	(O) May be displayed provided Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Use of Autoland CAT III is prohibited. Autopilot must be disconnected above 80 feet and a manual landing performed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–114–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R AUTOPILOT SIDESTICK DETENT INOP	C	(O) May be displayed provided Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Use of Autoland CAT III is prohibited. Autopilot must be disconnected above 80 feet and a manual landing performed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–115–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L SIDESTICK SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–115–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R SIDESTICK SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–131–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – RUDDER PEDAL SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–134–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AILERON TRIM SW REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–135–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L PITCH TRIM SW DEGRADED	C	May be displayed provided: (a) The following message 27 FLT CTRL FAULT – R PITCH TRIM SW DEGRADED is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–135–03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R PITCH TRIM SW DEGRADED	C	May be displayed provided: (a) The following message 27 FLT CTRL FAULT – L PITCH TRIM SW DEGRADED is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–136–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L TOGA SW INOP	B	(O) May be displayed provided: (a) 27 FLT CTRL FAULT – R TOGA SW INOP is not displayed. (b) Alternate procedures are established and used, and (c) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that 27 FLT CTRL FAULT – R TOGA SW INOP is not displayed.

B. Alternate procedures are established and used.

For a subsequent in–flight failure of the remaining Thrust Lever TOGA switch during a Go–Around, do as follows:

(1) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

C. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–137–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L TOGA SW INOP	C	(O) May be displayed provided: (a) 27 FLT CTRL FAULT – R TOGA SW INOP is not displayed, (b) Alternate procedures are established and used, (c) Autopilot and Flight Director are not used below: 1 2,000 feet AGL on ILS approaches; or 2 500 feet AGL or MDA whichever is higher on all other approaches, and (d) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that the following message is not displayed:

27 FLT CTRL FAULT – R TOGA SW INOP

B. Alternate procedures are established and used.

For a subsequent in–flight failure of the remaining Thrust Lever TOGA switch during a Go–Around, do as follows:

(1) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

C. Make sure that Autopilot and Flight Director are not used below:

(1) 2,000 feet AGL on ILS approaches: or

(2) 500 feet AGL or MDA whichever is higher on all other approaches.

D. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–138–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R TOGA SW INOP	B	(O) May be displayed provided: (a) 27 FLT CTRL FAULT – L TOGA SW INOP is not displayed, (b) Alternate procedures are established and used, and (c) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that the following message is not displayed:

– 27 FLT CTRL FAULT – L TOGA SW INOP

B. Alternate procedures are established and used.

For a subsequent in–flight failure of the remaining Thrust Lever TOGA switch during a Go–Around, do as follows:

(1) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

C. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–139–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R TOGA SW INOP	C	(O) May be displayed provided: (a) 27 FLT CTRL FAULT – L TOGA SW INOP is not displayed, (b) Alternate procedures are established and used, (c) Autopilot and Flight Director are not used below: 1 2,000 feet AGL on ILS approaches; or 2 500 feet AGL or MDA whichever is higher on all other approaches, and (d) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that the following message is not displayed:

– 27 FLT CTRL FAULT – L TOGA SW INOP

B. Alternate procedures are established and used.

For a subsequent in–flight failure of the remaining Thrust Lever TOGA switch during a Go–Around, do as follows:

(1) Fly the aircraft manually to applicable pitch attitude (See AFM Supplement for Operations with Airplane Systems Inoperative).

NOTE 1: Refer to the FCOM for Windshear Escape Procedures that is not based on the use of TOGA switches.

NOTE 2: After a manual Go–Around, the FMS will not automatically sequence waypoints and flightcrew must sequence the waypoint manually.

NOTE 3: After a manual Go–Around, the AT will not automatically be selected ON and commanding GA thrust.

NOTE 4: After a manual Go–Around, flightcrew will have to manually change from ILS to FMS navigation if in ILS.

C. Make sure that Autopilot and Flight Director are not used below:

(1) 2,000 feet AGL on ILS approaches: or

(2) 500 feet AGL or MDA whichever is higher on all other approaches.

D. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–151–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AFCU DMC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–152–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DMC AFCU INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–153–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–154–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT – ISI INPUT INOP 27 FLT CTRL FAULT – AHRS INPUT INOP IRS 1 FAIL (advisory) IRS 2 FAIL (advisory) IRS 3 FAIL (advisory) (b) Autoland Operations are not conducted, and (c) Steep Approach is not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that the following messages are not displayed:

27 FLT CTRL FAULT – ISI INPUT INOP

27 FLT CTRL FAULT – AHRS INOP

IRS 1 FAIL (advisory)

IRS 2 FAIL (advisory)

IRS 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–155–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC RAD ALT INPUT REDUND LOSS (Three RAD ALT installation) ***	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT – RAD ALT INPUT DEGRADED RAD ALT 1 FAIL (advisory) RAD ALT 2 FAIL (advisory) RAD ALT 3 FAIL (advisory), and (b) LAND 3 Operations (CAT III – fail operational) are not conducted.

1. OPERATIONS (O)

A. Before each flight, make sure that RAD ALT inputs are operative by confirming that none of the following messages are displayed:

27 FLT CTRL FAULT – RAD ALT INPUT DEGRADED

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–157–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC FADEC INPUT REDUND LOSS	C	(O) May be displayed provided none of the following messages are displayed: AUTO BRAKE FAIL (caution) NORMAL BRAKE FAIL (caution) 32 BRAKE FAULT – BDCU 1 NORM INOP 32 BRAKE FAULT – BDCU 2 NORM INOP

1. OPERATIONS (O)

A. Before each flight, make sure that none of the following messages are displayed.

AUTO BRAKE FAIL (caution)

NORMAL BRAKE FAIL (caution)

32 BRAKE FAULT – BDCU 1 NORM INOP (info)

32 BRAKE FAULT – BDCU 2 NORM INOP (info)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–159–01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AFCU SFECU INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–201–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – ALTN SWITCH REDUND LOSS	C	(O) May be displayed provided Slat/Flap Alternate Switch is verified operative before the first flight of each flight day.

1. OPERATIONS (O)

A. Before the first flight of each day, do the steps that follow:

(1) Make sure that hydraulic systems 1, 2 and 3 are pressurized.

(2) On the center pedestal, set the ALTN FLAP switch to the DPLY position.

(a) Make sure the high lift system achieved its commanded position (position 3 as indicated on the EICAS SLAT / FLAP position indicator).

(b) Make sure that the ALTN FLAP DPLY (status) message is shown on EICAS.

(3) Move the SLAT/FLAP lever to position 3.

(a) Make sure there is no slats and flaps movement.

(4) On the center pedestal, set the ALTN FLAP switch to the NORM position.

(a) Make sure there is no slats and flaps movement.

(b) Make sure that the ALTN FLAP DPLY (status) message is not shown.

(5) Move the SLAT/FLAP lever to position 0.

(a) Make sure the slats and flaps are fully retracted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–203–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL27–00–205–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – LEVER SNSR REDUND LOSS	Item deleted at Issue 003.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–207–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – OUTBD BRAKE PROX SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–209–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – PDU FAULT	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–211–01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT – SKEW SNSR REDUND LOSS	B	(O) May be displayed provided Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–213–01 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW – CHAN 1 INOP (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW – CHAN 2 INOP 27 SLAT SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Flap Channel 1 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC1–11–4 (FLAP CH 1)

(1) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(2) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 1 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)*

FLAP SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP SLOW – CHAN 1 INOP**

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(3) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–213–02 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW – CHAN 1 INOP (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW – CHAN 2 INOP 27 SLAT SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Flap Channel 1 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC1–11–4 (FLAP CH 1)

(1) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 1 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)*

FLAP SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP SLOW – CHAN 1 INOP**

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(2) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(3) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–213–03 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW – CHAN 2 INOP (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Flap Channel 2 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.

1. OPERATIONS (O)

A. On Circuit Breaker Panel 1 (CBP 1), open the circuit breaker that follows:

L–CBP–C2 (FLAP CH 2)

(1) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(2) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 2 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)*

FLAP SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP SLOW – CHAN 2 INOP**

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(3) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–213–04 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW – CHAN 2 INOP (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 1 INOP 27 SLAT SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Flap Channel 2 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Flap will operate at half speed.

1. OPERATIONS (O)

A. On the Circuit Breaker Panel (CBP) 1, open the Circuit Breaker (CB) that follows:

L–CBP–C2 (FLAP CH 2)

(1) The following CAS or INFO messages may all be displayed as a result of SFECU Flap Channel 2 deactivation:

SLAT FAULT (advisory)

FLAP FAULT (advisory)*

FLAP SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP SLOW – CHAN 2 INOP**

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(2) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(3) Make sure that the following message is not displayed after flap selection:

SLAT SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–215–01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–217–01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT – OUTBD BRAKE PROX SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–219–01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT – PDU FAULT	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–221–01 **SLAT SLOW** (ADVISORY) 27 SLAT FAULT – SKEW SNSR REDUND LOSS	B	(O) May be displayed provided Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–223–01 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW – CHAN 1 INOP (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW – CHAN 2 INOP 27 FLAP SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Slat Channel 1 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.

1. OPERATIONS (O)

A. On Circuit Breaker Panel 1 (CBP 1), open the circuit breaker that follows:

L–CBP–C1 (SLAT CH 1)

(1) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(2) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 1 deactivation:

SLAT FAULT (advisory)*

FLAP FAULT (advisory)

SLAT SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 1 INOP**

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(3) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–223–02 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW – CHAN 1 INOP (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW – CHAN 2 INOP 27 FLAP SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 2 INOP (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Slat Channel 1 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.

1. OPERATIONS (O)

A. On Circuit Breaker Panel 1 (CBP 1), open the circuit breaker that follows:

L–CBP–C1 (SLAT CH 1)

(1) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(2) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 1 deactivation:

SLAT FAULT (advisory)*

FLAP FAULT (advisory)

SLAT SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 1 INOP**

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(3) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–223–03 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW – CHAN 2 INOP (A/C without SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 2 INOP, (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Slat Channel 2 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC2–9–5 (SLAT CH 2)

(1) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

FLT CTRL FAULT (advisory)

27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS

(2) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 2 deactivation:

SLAT FAULT (advisory)*

FLAP FAULT (advisory)

SLAT SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 2 INOP**

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(3) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL27–00–223–04 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW – CHAN 2 INOP (A/C with SB BD500–314002 or Production Modsum RC500T101030)	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 1 INOP 27 FLAP SLOW – CHAN 2 INOP, (b) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (c) SFECU Slat Channel 2 is deactivated, and (d) Operations with Steep Approach are not conducted. NOTE: Slat will operate at half speed.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC2–9–5 (SLAT CH 2)

(1) The following CAS or INFO messages may all be displayed as a result of SFECU Slat Channel 2 deactivation:

SLAT FAULT (advisory)*

FLAP FAULT (advisory)

SLAT SLOW (advisory)**

27 SLAT FAULT – DATA CONFIG INPUT REDUND LOSS*

27 FLAP FAULT – DATA CONFIG INPUT REDUND LOSS

27 SLAT SLOW – CHAN 2 INOP**

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

NOTE: * This message will be inhibited once the aircraft is Weight off Wheels (WoffW).

** This message will appear after at least one engine is started.

(2) Before each flight, make sure that none of the following CAS or INFO messages is displayed after an engine start:

27 FLT CTRL FAULT – PFCC INPUT REDUND LOSS

27 FLT CTRL FAULT – IIM INPUT REDUND LOSS

(3) Make sure that the following message is not displayed after flap selection:

FLAP SLOW (advisory)

(4) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–009–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – COMPUTER REDUND LOSS	C	Except for extended operations, may be displayed provided: (a) All fuel tank quantity indications on EICAS are operative, and (b) FUEL USED readout on FUEL synoptic page is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–011–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – CONFIG STRAPPING INOP	C	Except for extended operations, may be displayed provided all fuel tank quantity and total fuel quantity indications on EICAS are operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–015–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – CTR WING RDC REDUND LOSS	C	May be displayed provided: (a) All fuel tank quantity indications on EICAS are operative, (b) None of the following messages are displayed: 28 FUEL FAULT – L WING RDC REDUND LOSS 28 FUEL FAULT – R WING RDC REDUND LOSS 28 FUEL FAULT – COMPUTER REDUND LOSS, and (c) FMS FUEL USED is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–019–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – ENG INLET PRESS SW INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: L BOOST PUMP FAIL (advisory) R BOOST PUMP FAIL (advisory) FUEL GRAV XFR FAIL (advisory), and (b) L BOOST PUMP and R BOOST PUMP are selected ON during entire flight.

1. OPERATIONS (O)

A. Before each flight, on the FUEL panel, select the L BOOST PUMP and R BOOST PUMP switches to ON.

B. After each flight, on the FUEL panel, select the L BOOST PUMP and R BOOST PUMP switches to OFF.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–021–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – FUEL GAUGING SNSR DEFECT	C	(O) Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: 28 FUEL FAULT – GAUGING SNSR SHORT CIRCUIT L FUEL FLOW DEGRADED R FUEL FLOW DEGRADED (b) All fuel tank quantity indications on EICAS are operative, and (c) FUEL USED readout on FUEL synoptic page is operative.

1. OPERATIONS (O)

A. Before each flight, make sure that the fuel quantity indications are not dashed on EICAS.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–023–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – FUEL KG–LB MISCOMPARE	C	(O) Except for extended operations, may be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. After refueling, make sure that the fuel quantity indications at the Refueling Panel agree with the flight deck indications when converted.

NOTE: The quantity of fuel and units displayed on EICAS are correct when the 28 FUEL FAULT – FUEL KG–LB MISCOMPARE info message is displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–025–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – FUEL TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Fuel temperature is displayed on fuel synoptic page for one wing tank, and (b) Total Air Temperature (TAT) is operative.

1. OPERATIONS (O)

A. On the FUEL Synoptic page, make sure that one wing tank has a fuel temperature indication that is not dashed or amber.

NOTE: If the operative wing tank temperature indication fails during flight, and the TAT is below –10 °C, apply the FUEL TANK LO TEMP (Caution) Non–Normal Procedures.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–027–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – FUELING DOOR OPEN	C	(O) May be displayed provided fueling door is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, make sure that the fueling door is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–031–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – L WING RDC REDUND LOSS	C	Except for extended operations, may be displayed provided: (a) All fuel tank quantity indications on EICAS are operative, (b) None of the following messages are displayed: 28 FUEL FAULT – R WING RDC REDUND LOSS 28 FUEL FAULT – CTR WING RDC REDUND LOSS 28 FUEL FAULT – COMPUTER REDUND LOSS, and (c) FMS FUEL USED is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–035–01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT – R WING RDC REDUND LOSS	C	Except for extended operations, may be displayed provided: (a) All fuel tank quantity indications on EICAS are operative, (b) None of the following messages are displayed: 28 FUEL FAULT – L WING RDC REDUND LOSS 28 FUEL FAULT – CTR WING RDC REDUND LOSS 28 FUEL FAULT – COMPUTER REDUND LOSS, and (c) FMS FUEL USED is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL28–00–053–01 **R BOOST PUMP FAIL** (ADVISORY)	C	(O) Except for extended operations, may be displayed provided: (a) Right AC Boost Pump is selected to AUTO before each flight, (b) Right AC Boost Pump is deactivated, (c) Left AC Boost Pump is selected to AUTO before each flight, (d) Left and Right Engine Feed primary Ejector Pumps are verified operative before each flight, (e) None of the following messages is displayed: L BOOST PUMP FAIL (advisory) FUEL GRAV XFR FAIL (advisory) 28 FUEL FAULT – DEFUEL/XFR SOV INOP (info), (f) Procedures are established and used to correct aircraft lateral fuel imbalance when required, (g) Both wing tanks fuel quantity of at least 5400 lbs is maintained throughout the flight, and (h) Flight is conducted at or below 22 000 ft. MSL and bulk fuel temperature at takeoff to be below 25 deg C. NOTE: As long as there is fuel in the center tank throughout the flight, 5400 lbs wing tanks fuel quantity is achieved automatically.

1. OPERATIONS (O)

A. Before each flight, set the R BOOST PUMP switch, on the FUEL control panel, to AUTO.

B. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows, to deactivate the right AC boost pump:

CDC2–16–1 (R FUEL PUMP)

C. Before each flight, set the L BOOST PUMP switch, on the FUEL control panel, to AUTO.

D. After engine start, do the operational test of each engine–feed primary ejector as follows:

(1) On the FUEL synoptic page, make sure that the icon of the engine–feed primary ejector–pump, on each side, becomes green and stays green while the applicable engine is running.

(2) On the EICAS, make sure that the advisory messages that follow are not shown:

L FUEL EJECTOR FAIL

R FUEL EJECTOR FAIL

E. Before each flight, make sure that the messages that follow are not shown:

L BOOST PUMP FAIL (advisory)

FUEL GRAV XFR FAIL (advisory)

28 FUEL FAULT – DEFUEL/XFR SOV INOP (info)

F. Establish and use procedures to correct aircraft lateral fuel imbalance, when required.

G. Make sure that the fuel quantity of both wing tanks is maintained at 5400 lbs throughout the flight.

H. Make sure that flight is conducted at or below 22 000 ft. MSL and bulk fuel temperature is below 25 deg C during take–off.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL29–00–031–01 **HYD PUMP 3A FAIL** (CAUTION)	C	(O) May be displayed provided: (a) ACMP 3A is deactivated, (b) None of the following messages are displayed: HYD PUMP 3A FAIL HYD PUMP 3B FAIL 29 HYDRAULIC FAULT – HYD PUMP 3B INOP HYD PTU FAIL 29 HYDRAULIC FAULT – HYD PTU INOP HYD PUMP 2B FAIL 29 HYDRAULIC FAULT – HYD PUMP 2B INOP, and (c) ACMP 3B is operated continuously during flight and remains ON during landing.

1. OPERATIONS (O)

A. After the failure was detected:

(1) On the HYDRAULIC control panel, set the HYD 3 3A switch to the OFF position.

(2) On a Multi Function Window (MFW), access the CB page and set to OUT and LOCK the applicable EPC contactor ACMP 3A (EPC2–AC–3A) to deactivate PUMP 3A.

(3) Make sure that HYD PUMP 3A FAIL (caution) goes out.

B. Before each flight, on the HYDRAULIC control panel, set the HYD 3 3B switch to the ON position, prior to taxi out, and operate ACMP 3B continuously during flight, including landing and taxi to the gate/parking.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL29–00–031–02 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD PUMP 3A INOP	C	(O) May be displayed provided: (a) ACMP 3A is deactivated, (b) None of the following messages are displayed: HYD PUMP 3B FAIL 29 HYDRAULIC FAULT – HYD PUMP 3B INOP HYD PTU FAIL 29 HYDRAULIC FAULT – HYD PTU INOP HYD PUMP 2B FAIL 29 HYDRAULIC FAULT – HYD PUMP 2B INOP, and (c) ACMP 3B is operated continuously during flight and remains ON during landing.

1. OPERATIONS (O)

A. After the failure was detected:

(1) On the HYDRAULIC control panel, set the HYD 3 3A switch to the OFF position.

(2) On a Multi Function Window (MFW), access the CB page and set to OUT and LOCK the applicable EPC contactor ACMP 3A (EPC2–AC–3A) to deactivate PUMP 3A.

B. Before each flight, on the HYDRAULIC control panel, set the HYD 3 3B switch to the ON position, prior to taxi out, and operate ACMP 3B continuously during flight, including landing and taxi to the gate/parking.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL29–00–033–01 **HYD PUMP 3B FAIL** (CAUTION)	C	(O) May be displayed provided: (a) ACMP 3B is deactivated, (b) None of the following messages are displayed: HYD PUMP 3A FAIL HYD PUMP 3B FAIL 29 HYDRAULIC FAULT – HYD PUMP 3A INOP HYD PTU FAIL 29 HYDRAULIC FAULT – HYD PTU INOP HYD PUMP 2B FAIL 29 HYDRAULIC FAULT – HYD PUMP 2B INOP, and (c) ACMP 3A is operated continuously during flight and remains ON during landing.

1. OPERATIONS (O)

A. After the failure occurred.

(1) On the HYDRAULIC control panel, set the HYD 3 3B switch to the OFF position.

(2) On a Multi Function Window (MFW), access the CB page and set to OUT and LOCK the EPC contactor ACMP 3B (EPC2–AC–3B) to deactivate PUMP 3B.

(3) Make sure that HYD PUMP 3B FAIL (caution) goes out.

B. Before each flight, on the HYDRAULIC control panel, set the HYD 3 3A switch to the ON position, prior to taxi out, and operate ACMP 3A continuously during flight, including landing and taxi to the gate/parking.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL29–00–033–02 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD PUMP 3B INOP	C	(O) May be displayed provided: (a) ACMP 3B is deactivated, (b) None of the following messages are displayed: HYD PUMP 3A FAIL 29 HYDRAULIC FAULT – HYD PUMP 3A INOP HYD PTU FAIL 29 HYDRAULIC FAULT – HYD PTU INOP HYD PUMP 2B FAIL 29 HYDRAULIC FAULT – HYD PUMP 2B INOP, and (c) ACMP 3A is operated continuously during flight and remains ON during landing.

1. OPERATIONS (O)

A. After the failure occurred:

(1) On the HYDRAULIC control panel, set the HYD 3 3A switch to the OFF position.

(2) On a Multi Function Window (MFW), access the CB page and set to OUT and LOCK the EPC contactor ACMP 3B (EPC2–AC–3B) to deactivate PUMP 3B.

B. Before each flight, on the HYDRAULIC control panel, set the HYD 3 3A switch to the ON position, prior to taxi out, and operate ACMP 3A continuously during flight, including landing and taxi to the gate/parking.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL29–00–043–01 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD CDC EDP 1A PRESS SW INOP	Item removed at MMEL Issue 007.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL29–00–047–01 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD CDC EDP 2A PRESS SW INOP	Item removed at MMEL Issue 007.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL29–00–055–01 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD CDC ACMP 3A PRESS SW INOP	Item removed at MMEL Issue 007.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL29–00–059–01 **HYDRAULIC FAULT** (ADVISORY) 29 HYDRAULIC FAULT – HYD CDC ACMP 3B PRESS SW INOP	Item removed at MMEL Issue 007.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–001–01 **L ICE DET FAIL** (CAUTION)	C	(O) May be displayed provided wing and cowl anti-ice systems are operative.

1. OPERATIONS (O)

A. Make sure that the Anti–Ice systems are operative.

B. During icing conditions, operate the anti-ice system manually, as follows:

(1) On the ANTI-ICE panel, select the L COWL switch to ON.

(2) On the ANTI-ICE panel, select the WING switch to ON.

(3) On the ANTI-ICE panel, select the R COWL switch to ON.

(4) Make sure that the L-R COWL A/ICE ON and WING A/ICE ON status messages are displayed on the EICAS page.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–003–01 **L WING A/ICE LO HEAT** (CAUTION) 30 L WING A/ICE LO HEAT – CTRL TEMP INOP	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (g) Operations with steep approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, for operation in single bleed configuration, do the steps that follow:

(1) On the AIR control panel, set the L BLEED switch to OFF.

(2) Make sure that L BLEED OFF status message shows on the EICAS.

(3) Make sure that no other bleed-related messages show on the EICAS.

(4) Make sure that no other pack failure related messages show on the EICAS.

(5) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR control panel, set the XBLEED rotary switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

I (c) On the AIR control panel, set the XBLEED rotary switch to AUTO.

(6) Plan flight for operation in single bleed configuration at or below FL310.

(7) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

(8) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–005–01 **L WING A/ICE LO HEAT** (CAUTION) 30 L WING A/ICE LO HEAT – L HPV FAIL CLSD	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, for operation in single bleed configuration, do the steps that follow:

(1) On the AIR control panel, set the L BLEED switch to OFF.

(2) Make sure that L BLEED OFF status message shows on the EICAS.

(3) Make sure that no other bleed-related messages show on the EICAS.

(4) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR control panel, set the XBLEED rotary switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

(c) On the AIR control panel, set the XBLEED rotary switch to AUTO.

(5) Plan flight for operation in single bleed configuration at or below FL310.

(6) No extended operations are permitted.

(7) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(8) Make sure that operations are done in accordance with the AFM Supplement 5 (Operations with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–007–01 **L WING A/ICE LO HEAT** (CAUTION) 30 L WING A/ICE LO HEAT – L WING A/ICE TEMP SNSR INOP	A	(O) Except for extended operations beyond 120 minutes, may be displayed provided: (a) WING ANTI-ICE is selected OFF, (b) Airplane is not operated into known or forecast icing conditions, (c) L ICE DET FAIL caution message is not displayed, (d) R ICE DET FAIL caution message is not displayed, and (e) Repairs are made within one flight.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the ANTI-ICE panel, set the WING ANTI-ICE switch to OFF.

(2) Make sure that WING A/ICE OFF status message shows on the EICAS.

(3) Make sure that L ICE DET FAIL and R ICE DETECT FAIL caution messages are not shown.

(4) Avoid flights into known or forecast icing conditions, aircraft not to be operated into known or forecast icing conditions..

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–011–01 **L WING A/ICE OVHT** (CAUTION) 30 L WING A/ICE OVHT – L WING A/ICE TEMP SNSR INOP	A	(O) Except for extended operations beyond 120 minutes, may be displayed provided: (a) WING ANTI-ICE is selected OFF, (b) Airplane is not operated into known or forecast icing conditions, (c) L ICE DET FAIL caution message is not displayed, (d) R ICE DET FAIL caution message is not displayed, and (e) Repairs are made within one flight.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the ANTI-ICE panel, set the WING ANTI-ICE switch to OFF.

(2) Make sure that the WING A/ICE OFF status message shows on the EICAS.

(3) Make sure that the L ICE DET FAIL and R ICE DETECT FAIL caution messages are not shown.

(4) Avoid flights into known or forecast icing conditions. The aircraft is not to be operated into known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–013–01 **L WING A/ICE OVHT** (CAUTION)	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (g) Operations with Steep Approach are not conducted. NOTE: Left Wing Anti–Ice System is available from cross–bleed.

1. OPERATIONS (O)

A. Before each flight, for operation in single bleed configuration, do the steps that follow:

(1) On the AIR control panel, set the L BLEED switch to OFF.

(2) Make sure that L BLEED OFF status message shows on the EICAS.

(3) Make sure that no pack related messages show on the EICAS.

(4) Make sure that no other bleed or WAI related messages show on the EICAS.

(5) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR control panel, set the XBLEED rotary switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

(c) On the AIR control panel, set the XBLEED rotary switch to AUTO.

(6) Plan flight for operation in single bleed configuration at or below FL310.

(7) Make sure that operations are done in accordance with the AFM Supplement 5 (Operation with Airplane Systems Inoperative).

(8) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–015–01 **R ICE DET FAIL** (CAUTION)	C	(O) May be displayed provided wing and engine anti–ice systems are operative.

1. OPERATIONS (O)

A. Make sure that the Anti–Ice systems are operative.

B. When in icing conditions, operate the anti-ice system manually, as follows:

(1) On the ANTI-ICE panel, select the L COWL switch to ON.

(2) On the ANTI-ICE panel, select the WING switch to ON.

(3) On the ANTI-ICE panel, select the R COWL switch to ON.

(4) Make sure that the L-R COWL A/ICE ON and WING A/ICE ON status messages are displayed on the EICAS page.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–017–01 **R WING A/ICE LO HEAT** (CAUTION) 30 R WING A/ICE LO HEAT – CTRL TEMP INOP	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (g) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, for operation in single bleed configuration, do the steps that follow:

(1) On the AIR control panel, set the R BLEED switch to OFF.

(2) Make sure that R BLEED OFF status message shows on the EICAS.

(3) Make sure that no other bleed or WAI-related messages show on the EICAS.

(4) Make sure that no pack related messages show on the EICAS.

(5) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR control panel, set the XBLEED rotary switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

I (c) On the AIR control panel, set the XBLEED rotary switch to AUTO.

(6) Plan flight for operation in single bleed configuration at or below FL310.

(7) Make sure that operations are done in accordance with the AFM Supplement 5 (Operation with Airplane Systems Inoperative).

(8) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–019–01 **R WING A/ICE LO HEAT** (CAUTION) 30 R WING A/ICE LO HEAT – R HPV FAIL CLSD	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, for operation in single bleed configuration, do the steps that follow:

(1) On the AIR control panel, set the R BLEED switch to OFF.

(2) Make sure that R BLEED OFF status message shows on the EICAS.

(3) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR control panel, set the XBLEED rotary switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

(c) On the AIR control panel, set the XBLEED rotary switch to AUTO.

(4) Plan flight for operation in single bleed configuration at or below FL310.

(5) No extended operations are permitted.

(6) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

(7) Make sure that operations are done in accordance with the AFM Supplement 5 (Operation with Airplane Systems Inoperative).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–021–01 **R WING A/ICE LO HEAT** (CAUTION) 30 R WING A/ICE LO HEAT – R WING A/ICE TEMP SNSR INOP	A	(O) Except for extended operations beyond 120 minutes, may be displayed provided: (a) WING ANTI–ICE is selected OFF, (b) Airplane is not operated into known or forecast icing conditions, (c) L ICE DET FAIL caution message is not displayed, (d) R ICE DET FAIL caution message is not displayed, and (e) Repairs are made within one flight.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the ANTI-ICE panel, set the WING ANTI-ICE switch to OFF.

(2) Make sure that WING A/ICE OFF status message shows on the EICAS.

(3) Make sure that L ICE DET FAIL and R ICE DETECT FAIL caution messages are not shown.

(4) Avoid flights into known or forecast icing conditions, aircraft not to be operated into known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–025–01 **R WING A/ICE OVHT** (CAUTION) 30 R WING A/ICE OVHT – R WING A/ICE TEMP SNSR INOP	A	(O) Except for extended operations beyond 120 minutes, may be displayed provided: (a) WING ANTI–ICE is selected OFF, (b) Airplane is not operated into known or forecast icing conditions, (c) L ICE DET FAIL caution message is not displayed, (d) R ICE DET FAIL caution message is not displayed, and (e) Repairs are made within one flight.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the ANTI-ICE panel, set the WING ANTI-ICE switch to OFF.

(2) Make sure that WING A/ICE OFF status message shows on the EICAS.

(3) Make sure that L ICE DET FAIL and R ICE DETECT FAIL caution messages are not shown.

(4) Avoid flights into icing conditions. The aircraft is not to be operated into known or forecast icing conditions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–027–01 **R WING A/ICE OVHT** (CAUTION)	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted in single bleed configuration at or below FL310, (d) Both Air Conditioning Packs are operative, (e) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (g) Operations with steep approach are not conducted. NOTE: Right Wing Anti-Ice System is available from cross-bleed.

1. OPERATIONS (O)

A. Before each flight, for operation in a single bleed configuration, do the steps that follow:

(1) On the AIR panel, set the R BLEED switch to OFF.

(2) Make sure that R BLEED OFF status message shows on the EICAS.

(3) Make sure that no other bleed or WAI related messages show on the EICAS.

(4) Make sure that no pack related messages show on the EICAS.

(5) Make sure that the Cross Bleed Valve (CBV) is operative as follows:

(a) On the AIR panel, set the XBLEED switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is shown.

(c) On the AIR panel, set the XBLEED switch to AUTO.

(6) Plan the flight for operation in a single bleed configuration at, or below FL310.

(7) Make sure that operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative).

(8) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–037–01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT – WING A/ICE AUTO MODE INOP	C	(O) May be displayed provided Wing Anti-Ice System is operated manually.

1. OPERATIONS (O)

A. When encountering icing conditions, as defined in the AFM, the flight crew must manually select the wing anti-ice system to ON.

B. Use of the wing anti-ice AUTO mode is prohibited.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL30–00–039–01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT – WING A/ICE TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL30–12–001–01 **WING A/ICE FAIL** (CAUTION) 30 WING A/ICE FAIL – L WING A/ICE PRESS SNSR INOP	Item deleted at MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL30–12–003–01 **WING A/ICE FAIL** (CAUTION) 30 WING A/ICE FAIL – R WING A/ICE PRESS SNSR INOP	Item deleted at MMEL Issue 010.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–001–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – DMC 1A FAN INOP	C	May be displayed provided: (a) None of the following messages are displayed: 31 AVIONIC FAN FAULT – DMC 1B FAN INOP 31 AVIONIC FAN FAULT – DMC 2A FAN INOP 31 AVIONIC FAN FAULT – DMC 2B FAN INOP, and (b) Ground ambient temperature is less than ISA + 10 deg C.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–003–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – DMC 1B FAN INOP	C	May be displayed provided: (a) None of the following messages are displayed: 31 AVIONIC FAN FAULT – DMC 1A FAN INOP 31 AVIONIC FAN FAULT – DMC 2A FAN INOP 31 AVIONIC FAN FAULT – DMC 2B FAN INOP, and (b) Ground ambient temperature is less than ISA + 10 deg C.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–005–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – DMC 2A FAN INOP	C	May be displayed provided: (a) None of the following messages are displayed: 31 AVIONIC FAN FAULT – DMC 1A FAN INOP 31 AVIONIC FAN FAULT – DMC 1B FAN INOP 31 AVIONIC FAN FAULT – DMC 2B FAN INOP, and (a) Ground ambient temperature is less than ISA + 10 deg C.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–007–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – DMC 2B FAN INOP	C	May be displayed provided: (a) None of the following messages are displayed: 31 AVIONIC FAN FAULT – DMC 1A FAN INOP 31 AVIONIC FAN FAULT – DMC 1B FAN INOP 31 AVIONIC FAN FAULT – DMC 2A FAN INOP, and (b) Ground ambient temperature is less than ISA + 10 deg C.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–009–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – IPC 1 FAN INOP	C	May be displayed provided none of the following messages are displayed: 31 AVIONIC FAN FAULT – IPC 2 FAN INOP 31 AVIONIC FAN FAULT – IPC 3 FAN INOP 31 AVIONIC FAN FAULT – IPC 4 FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–011–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – IPC 2 FAN INOP	C	May be displayed provided none of the following messages are displayed: 31 AVIONIC FAN FAULT – IPC 1 FAN INOP 31 AVIONIC FAN FAULT – IPC 3 FAN INOP 31 AVIONIC FAN FAULT – IPC 4 FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–013–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – IPC 3 FAN INOP	C	May be displayed provided none of the following messages are displayed: 31 AVIONIC FAN FAULT – IPC 1 FAN INOP 31 AVIONIC FAN FAULT – IPC 2 FAN INOP 31 AVIONIC FAN FAULT – IPC 4 FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–015–01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT – IPC 4 FAN INOP	C	May be displayed provided none of the following messages are displayed: 31 AVIONIC FAN FAULT – IPC 1 FAN INOP 31 AVIONIC FAN FAULT – IPC 2 FAN INOP 31 AVIONIC FAN FAULT – IPC 3 FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–017–01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT – APM 1 INOP	A	(O) May be displayed provided: (a) 31 AVIONIC FAULT – APM 2 INOP is not displayed, (b) Aircraft electrical power is not interrupted, (c) Repairs are made after one flight day, and (d) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Make sure that the aircraft remains electrically powered at all times.

B. Make sure that operations with Steep Approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–019–01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT – APM 2 INOP	C	May be displayed provided 31 AVIONIC FAULT – APM 1 INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–049–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – OVRHD PIM 1 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – OVRHD PIM 2 INOP 31 CTRL PANEL FAULT – OVRHD PIM 3 INOP 31 CTRL PANEL FAULT – OVRHD L OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD L INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD EYEBROW 2 OF 3 CHAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–051–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – OVRHD PIM 2 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – OVRHD PIM 1 INOP 31 CTRL PANEL FAULT – OVRHD PIM 3 INOP 31 CTRL PANEL FAULT – OVRHD L OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD L INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD EYEBROW 2 OF 3 CHAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–053–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – OVRHD PIM 3 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – OVRHD PIM 1 INOP 31 CTRL PANEL FAULT – OVRHD PIM 2 INOP 31 CTRL PANEL FAULT – OVRHD L OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R OUTBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD L INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD R INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT – OVRHD EYEBROW 2 OF 3 CHAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–055–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – LIGHTING PANEL PIM INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – TRIM PANEL PIM INOP 31 CTRL PANEL FAULT – ENGINE PANEL PIM INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–057–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – TRIM PANEL PIM INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – LIGHTING PANEL PIM INOP 31 CTRL PANEL FAULT – ENGINE PANEL PIM INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–059–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – ENGINE PANEL PIM INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – LIGHTING PANEL PIM INOP 31 CTRL PANEL FAULT – TRIM PANEL PIM INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–061–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – OVRHD EYEBROW 2 OF 3 CHAN INOP	C	May be displayed provided: (a) Operations are not conducted at night, and (b) Passenger Address system is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–065–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – RDC 1 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – RDC 2 INOP 31 CTRL PANEL FAULT – RDC 3 INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–067–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – RDC 2 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – RDC 1 INOP 31 CTRL PANEL FAULT – RDC 3 INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL31–00–069–01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT – RDC 3 INOP	C	May be displayed provided none of the following messages are displayed: 31 CTRL PANEL FAULT – RDC 1 INOP 31 CTRL PANEL FAULT – RDC 2 INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–001–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – LGCL REDUND LOSS	C	(O) Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. During the takeoff phase, Pilot Not Flying (PNF) to make sure that landing gear is in the retracted position (Gear Boxes symbology on EICAS page) after Landing Gear Control Lever (LGCL) selection to UP (retracted) position.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–003–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – L GEAR DNLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–005–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – L GEAR UPLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–007–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – R GEAR DNLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–009–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – R GEAR UPLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–011–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – NOSE GEAR DNLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–013–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – NOSE GEAR UPLK REDUND LOSS (A/C without SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

NOTE: This is for a redundancy loss of one sensor only.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–015–01 **WOW FAULT** (ADVISORY) 32 WOW FAULT – L GEAR WOFFW REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–017–01 **WOW FAULT** (ADVISORY) 32 WOW FAULT – R GEAR WOFFW REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–019–01 **WOW FAULT** (ADVISORY) 32 WOW FAULT – NOSE GEAR WOFFW REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–021–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – 28V ESS REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–023–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – 28V NORM REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–025–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – LGCV REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL32–00–027–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – GEAR REDUND LOSS	Item deleted at Issue 003.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–029–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – TPMU INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–029–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – TPMU INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–031–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L NOSE TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–031–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L NOSE TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–033–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R NOSE TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–033–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R NOSE TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–035–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L MLG INBD TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–035–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L MLG INBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–037–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R MLG INBD TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–037–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R MLG INBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–039–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L MLG OUTBD TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–039–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – L MLG OUTBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–041–01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R MLG OUTBD TPIS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–041–03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT – R MLG OUTBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

1. OPERATIONS (O)

A. On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

CDC3–4–11 (TPMU)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–043–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – BDCU 1 ALTN INOP	C	(O) May be displayed provided the following info messages are not displayed: 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–045–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – BDCU 2 ALTN INOP	C	(O) May be displayed provided the following info messages are not displayed: 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–053–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – BRAKE TEMP SENSOR INOP	C	(O) May be displayed provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Operations are conducted in accordance with AFM Supplement 5 (Observe AFM Maximum Permissible Quick Turn-Around Landing Weight).

NOTE: At crew change, inbound crew should leave details of landing weight and V_{app} used for next crew to calculate brake cooling times. If no data forwarded, next operating crew should assume maximum landing weight for their calculations.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–057–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – IFT INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–059–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS	C	(O) May be displayed provided: (a) None of the following messages are displayed: 32 BRAKE FAULT – BDCU 1 ALTN INOP 32 BRAKE FAULT – BDCU 2 ALTN INOP 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS, and (b) RH pilot is in command for takeoff and landing.

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

B. RH pilot is in command for takeoff and landing.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–061–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS	C	(O) May be displayed provided: (a) None of the following messages are displayed: 32 BRAKE FAULT – BDCU 1 ALTN INOP 32 BRAKE FAULT – BDCU 2 ALTN INOP 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS, and (b) RH pilot is in command for takeoff and landing.

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

B. RH pilot is in command for takeoff and landing.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–063–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS	C	(O) May be displayed provided: (a) None of the following messages are displayed: 32 BRAKE FAULT – BDCU 1 ALTN INOP 32 BRAKE FAULT – BDCU 2 ALTN INOP 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS, and (b) LH pilot is in command for takeoff and landing.

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

B. LH pilot is in command for takeoff and landing.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–065–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS	C	(O) May be displayed provided: (a) None of the following messages are displayed: 32 BRAKE FAULT – BDCU 1 ALTN INOP 32 BRAKE FAULT – BDCU 2 ALTN INOP 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS, and (b) LH pilot is in command for takeoff and landing.

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

B. LH pilot is in command for takeoff and landing.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–067–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – BRAKE CODE 2 INOP	C	(O) May be displayed provided none of the following info messages are displayed: 32 BRAKE FAULT – BDCU 1 ALTN INOP 32 BRAKE FAULT – BDCU 2 ALTN INOP 32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS 32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS NOTE: Main battery may deplete when aircraft is de–powered for more than 10 hours.

1. OPERATIONS (O)

A. Before each flight, make sure that both the alternate and normal functions of the Brake Data Concentrator Unit are available to the Pilot and Copilot through the LH & RH brake pedal inputs:

(1) Set the PARK BRAKE switch to the OFF position.

(2) On the landing gear control panel, select the ALTN BRAKE switch to the ON position.

(3) Press and release the Pilot and Copilot LH & RH brake pedals.

(4) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

(5) On the landing gear control panel, select the ALTN BRAKE switch to the off position (Normal Braking Mode).

(6) Press and release the Pilot and Copilot LH & RH brake pedals.

(7) Make sure that the following INFO messages are not displayed:

32 BRAKE FAULT – BDCU 1 ALTN INOP

32 BRAKE FAULT – BDCU 2 ALTN INOP

32 BRAKE FAULT – R PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – R CO–PILOT PEDAL SENSOR REDUND LOSS

32 BRAKE FAULT – L CO–PILOT PEDAL SENSOR REDUND LOSS

(8) Set the PARK BRAKE switch to the ON position.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–069–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – GEAR RETRACT INOP	D	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–071–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – WOW DISAGREE	C	(O) May be displayed provided: (a) Autobrake system is considered inoperative, and (b) Braking is not applied until touchdown.

1. OPERATIONS (O)

A. Braking cannot be applied until touchdown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–073–01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT – THROTTLE RVDT INOP	C	May be displayed provided Autobrake system is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–075–01 **AUTOBRAKE FAIL** (CAUTION)	C	(O) May be displayed provided AUTOBRAKE selector switch is selected OFF.

1. OPERATIONS (O)

A. Do the steps that follow:

(1) On the landing gear control panel, make sure that the AUTOBRAKE switch is selected to the OFF position.

(2) Press and release the pilot and copilot LH & RH brake pedals to make sure that they are operational.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–081–01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT – R TILLER INOP ***	C	May be displayed provided left Tiller is operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–082–01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT – L TILLER INOP	C	May be displayed provided right Tiller is installed and operative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL32–00–083–01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT – TILLER REDUND LOSS	Item deleted at Issue 006.

1. OPERATIONS (O)

A. Not applicable

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–084–01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT – TILLER DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–00–085–01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT – STEER REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–61–005–01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – GEAR DNLK REDUND LOSS (A/C with SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL32–61–005–03 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT – GEAR UPLK REDUND LOSS (A/C with SB BD500–314002 or Production Modsum RC500T101030)	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–001–01 **ADS 1 FAIL** (ADVISORY)	B	(O) May be displayed provided: (a) Main channel of ADS 1 is deactivated, (b) L PFD is reverted to ADS 4, (c) None of the following messages are displayed: ADS 2 FAIL (advisory) ADS 2 SLIPCOMP FAIL (caution), (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, and (f) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. After the failure has occurred, deactivate the main channel of ADS 1:

WARNING: WHEN THE ADS PROBE CIRCUIT BREAKER IS OPENED, THE PROBE WILL GET VERY HOT. BURNS TO YOUR HANDS AND DAMAGE TO THE PROTECTIVE COVERS CAN OCCUR.

(1) On the Electronic Circuit Breaker (ECB) synoptic page , set to OUT and LOCK the circuit breaker that follows:

CDC3–06–08 (ADS PROBE 1)

(2) Make sure that ADS4 is shown in white text on the L PFD.

B. Before each flight, make sure that ADS4 is shown in white text on the L PFD.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–003–01 **ADS 2 FAIL** (ADVISORY)	B	(O) May be displayed provided: (a) Main channel of ADS 2 is deactivated, (b) R PFD is reverted to ADS 4, (c) None of the following messages are displayed: ADS 1 FAIL (advisory) ADS 1 SLIPCOMP FAIL (caution), (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (e) Operations with Steep Approach are not conducted, and (f) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. After the failure has occurred, do the steps that follow to deactivate the main channel of ADS 2:

WARNING: WHEN THE ADS PROBE CIRCUIT BREAKER IS OPENED, THE PROBE WILL GET VERY HOT. BURNS TO YOUR HANDS AND DAMAGE TO THE PROTECTIVE COVERS CAN OCCUR.

(1) On the Electronic Circuit Breaker (ECB) synoptic page , set to OUT and LOCK the circuit breaker that follows:

CDC4–04–16 (ADS PROBE 2)

(2) Make sure that ADS4 is shown in white text on the R PFD.

B. Before each flight, make sure that ADS4 is shown in white text on the R PFD.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–009–01 **ADS 1 DEGRADED** (ADVISORY)	C	May be displayed provided: (a) None of the following messages are displayed: ADS 2 DEGRADED (advisory) ADS 3 DEGRADED (advisory) ADS 4 DEGRADED (advisory) ADS 1 FAIL (advisory) ADS 2 FAIL (advisory) ADS 1 SLIPCOMP FAIL (caution) ADS 2 SLIPCOMP FAIL (caution), and (b) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–011–01 **ADS 2 DEGRADED** (ADVISORY)	C	May be displayed provided: (a) None of the following messages are displayed: ADS 1 DEGRADED (advisory) ADS 3 DEGRADED (advisory) ADS 4 DEGRADED (advisory) ADS 1 FAIL (advisory) ADS 2 FAIL (advisory), and (b) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–013–01 **ADS 3 DEGRADED** (ADVISORY)	C	(O) May be displayed provided: (a) Integrated Standby Instrument (ISI) is manually reverted to ADS 4, (b) None of the following messages are displayed: ADS 1 DEGRADED (advisory) ADS 2 DEGRADED (advisory) ADS 4 DEGRADED (advisory) ADS 1 FAIL (advisory) ADS 2 FAIL (advisory), and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. On the Reversion Switch Panel, push the ISI ADS button until the ISI input source is set to ADS4.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–015–01 **ADS 4 DEGRADED** (ADVISORY)	C	May be displayed provided: (a) None of the following messages are displayed: ADS 1 DEGRADED (advisory) ADS 2 DEGRADED (advisory) ADS 3 DEGRADED (advisory) ADS 1 FAIL (advisory) ADS 2 FAIL (advisory), and (b) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–019–01 **ADS 1 SLIPCOMP FAIL** (CAUTION)	B	(O) May be displayed provided: (a) ADS 1 is deactivated, (b) ADS 1 is considered inoperative, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. After the failure has occurred, do the steps that follow to deactivate the main channel of ADS 1:

WARNING: WHEN THE ADS PROBE CIRCUIT BREAKER IS OPENED, THE PROBE WILL GET VERY HOT. BURNS TO YOUR HANDS AND DAMAGE TO THE PROTECTIVE COVERS CAN OCCUR.

(1) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT and LOCK the circuit breaker that follows:

– CDC3–06–08 (ADS PROBE 1)

(2) Make sure that ADS 1 FAIL (Advisory) message is shown on the EICAS page.

(3) Make sure that ADS 2 SLIPCOMP FAIL (Caution) message is not shown on the EICAS page.

(4) On the Reversion Switch panel, push the L PFD ADS button until the L PFD input source is set to ADS4.

(5) Make sure that ADS4 is shown in white text on the L PFD.

B. Before each flight, make sure that ADS4 is displayed in white text on the L PFD.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–021–01 **ADS 2 SLIPCOMP FAIL** (CAUTION)	B	(O) May be displayed provided: (a) ADS 2 is deactivated, (b) ADS 2 is considered inoperative, and (c) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. After the failure has occurred, do the steps that follow to deactivate the main channel of ADS 2:

WARNING: WHEN THE ADS PROBE CIRCUIT BREAKER IS OPENED, THE PROBE WILL GET VERY HOT. BURNS TO YOUR HANDS AND DAMAGE TO THE PROTECTIVE COVERS CAN OCCUR.

(1) On the Electronic Circuit Breaker (ECB) synoptic page, set to OUT an LOCK the circuit breaker that follows:

– CDC4–04–16 (ADS PROBE 2)

(2) Make sure that ADS 2 FAIL (Advisory) message is shown on the EICAS page.

(3) Make sure that ADS 1 SLIPCOMP FAIL (Caution) message is no shown on the EICAS page.

(4) On the Reversion Switch panel, push the R PFD ADS button until the R PFD input source is set to ADS4.

(5) Make sure that ADS4 is shown in white text on the R PFD.

B. Before each flight, make sure that ADS4 is shown in white text on the R PFD.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–035–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 1 TAT ELEMENT INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – ADS 2 TAT ELEMENT INOP 34 ADS FAULT – R TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–037–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 1 TAT ELEMENT INOP	C	May be displayed in combination with 34 ADS FAULT – ADS 2 TAT ELEMENT INOP provided none of the following messages are displayed: 34 ADS FAULT – ADS 3 TAT ELEMENT INOP 34 ADS FAULT – ADS 4 TAT ELEMENT INOP 34 ADS FAULT – L TAT HEATER INOP 34 ADS FAULT – R TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–039–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 2 TAT ELEMENT INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – ADS 1 TAT ELEMENT INOP 34 ADS FAULT – L TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–040–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 2 TAT ELEMENT INOP	C	May be displayed in combination with 34 ADS FAULT – ADS 1 TAT ELEMENT INOP provided none of the following messages are displayed: 34 ADS FAULT – ADS 3 TAT ELEMENT INOP 34 ADS FAULT – ADS 4 TAT ELEMENT INOP 34 ADS FAULT – L TAT HEATER INOP 34 ADS FAULT – R TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–041–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 3 TAT ELEMENT INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – ADS 4 TAT ELEMENT INOP 34 ADS FAULT – R TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–042–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS 4 TAT ELEMENT INOP	C	May be displayed provided None of the following messages are displayed: 34 ADS FAULT – ADS 3 TAT ELEMENT INOP 34 ADS FAULT – L TAT HEATER INOP 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 1 73 R ENGINE FAULT – FADEC FAULT 1 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–043–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – L TAT HEATER INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – R TAT HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–044–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – R TAT HEATER INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – L TAT HEATER INOP 73 L ENGINE FAULT – FADEC FAULT 2 73 R ENGINE FAULT – FADEC FAULT 2 73 L ENGINE FAULT – P2/T2 HEATER INOP 73 R ENGINE FAULT – P2/T2 HEATER INOP.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–045–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS HEATER 1 REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–046–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS HEATER 2 REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–047–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS HEATER 3 REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–048–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS HEATER 4 REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–049–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS SENSE LINE HEATER 1 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–050–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS SENSE LINE HEATER 2 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–051–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS SENSE LINE HEATER 3 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–053–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – ADS SENSE LINE HEATER 4 INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–01 **ADS FAULT** (ADVISORY) 34 ADS FAULT – L AOA VANE INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – R AOA VANE INOP ADS 1 FAIL (advisory) ADS 2 FAIL (advisory) ADS 1 SLIPCOMP FAIL (caution) ADS 2 SLIPCOMP FAIL (caution)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–02 **ADS FAULT** (ADVISORY) 34 ADS FAULT – R AOA VANE INOP	C	May be displayed provided none of the following messages are displayed: 34 ADS FAULT – L AOA VANE INOP ADS 1 FAIL (advisory) ADS 2 FAIL (advisory) ADS 1 SLIPCOMP FAIL (caution) ADS 2 SLIPCOMP FAIL (caution)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–03 **ADS FAULT** (ADVISORY) 34 ADS FAULT – L AOA VANE HEATER INOP	C	May be displayed provided left Angle of Attack (AOA) Vane is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–05 **ADS FAULT** (ADVISORY) 34 ADS FAULT – L AOA CASE HEATER INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–06 **ADS FAULT** (ADVISORY) 34 ADS FAULT – R AOA VANE HEATER INOP	C	May be displayed provided right Angle of Attack (AOA) Vane is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–054–07 **ADS FAULT** (ADVISORY) 34 ADS FAULT – R AOA CASE HEATER INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–055–01 **AVIONIC FAULT** (ADVISORY)	D	(O) May be displayed provided the following message is not displayed: 34 AVIONIC FAULT – XPDR 2 INOP
34 AVIONIC FAULT – XPDR 1 INOP	C	(O) May be displayed in combination with 34 AVIONIC FAULT – XPDR 2 INOP provided: (a) Regulations do not require its use, (b) Automatic Dependent Surveillance Broadcast (ADS–B Out) is considered inoperative, (c) Traffic Alert and Collision Avoidance System (TCAS)/ACAS) is considered inoperative, and (d) Alternate procedures are established and used.

1. OPERATIONS (O)

A. For dispatch without the INFO message 34 AVIONIC FAULT – XPDR 2 INOP:

(1) On any CTP, push ATC1/ATC2 line key to set ATC2.

(2) Make sure that ATC2 is shown in cyan.

B. For dispatch in combination with the INFO message 34 AVIONIC FAULT – XPDR 2 INOP:

(1) Operators must establish alternate procedures to advise Air Traffic Control (ATC) before dispatch and before entering any specific airspace.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–057–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – XPDR 2 INOP	D	(O) May be displayed provided the following message is not displayed: 34 AVIONIC FAULT – XPDR 1 INOP

1. OPERATIONS (O)

A. On any Control Tuning Panel (CTP), push the ATC1/ATC2 line key to set ATC1.

B. Make sure that ATC1 is shown in Cyan.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–058–01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT –TSS FAN INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–061–02 **ADS–B OUT FAIL** (CAUTION)	A	May be displayed provided: (a) Operations do not require its use, and (b) Repairs are made prior to completion of the next heavy maintenance visit.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–061–03 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – ADS–B 1 OUT INOP	D	May be displayed provided ADS–B 2 OUT FAIL (caution) is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–061–04 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – ADS–B 2 OUT INOP	D	May be displayed provided ADS–B 1 OUT FAIL (caution) is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–063–01 **RAD ALT 1 FAIL (AIRCRAFT WITH 2 RADIO ALTIMETERS)** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 1 is deactivated, (b) None of the following messages are displayed: RAD ALT 2 FAIL (advisory) AT RETARD INHIBIT (caution) 32 WOW FAULT – R GEAR WOFFW REDUND LOSS 32 WOW FAULT – L GEAR WOFFW REDUND LOSS (c) Operations do not require its use, (d) Operations with Steep Approach are not conducted, (e) APPR 2 (CAT II) and Autoland Operations are not conducted, and (f) RNP AR Approach Operations are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 1, on Circuit Breaker Panel 2, open the circuit breaker that follows:

CBP2–A3 (RAD ALT 1)

(1) Make sure that the message that follows is shown:

RAD ALT 1 FAIL (advisory)

B. Make sure that the message that follows is not shown:

RAD ALT FAIL (caution)

C. Make sure that RA2 is displayed in yellow text on both PFDs.

D. Make sure that none of the following messages are displayed:

RAD ALT 2 FAIL (advisory)

AT RETARD INHIBIT (caution)

32 WOW FAULT – R GEAR WOFFW REDUND LOSS

32 WOW FAULT – L GEAR WOFFW REDUND LOSS

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–064–01 **RAD ALT 1 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER)***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 1 is deactivated, (b) None of the following message is displayed: RAD ALT 2 FAIL (advisory), RAD ALT 3 FAIL (advisory), (c) Operations do not require its use, and (d) LAND 3 Operations (CAT III – fail operational) are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 1, on Circuit Breaker Panel 2, open the circuit breaker that follows:

CBP2–A3 (RAD ALT 1)

B. Make sure that the message that follows is shown:

RAD ALT 1 FAIL (advisory)

C. Make sure that the messages that follow are not shown:

RAD ALT 2 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

D. On the Left Primary Flight Display (PFD), make sure that RA3 is displayed in white text.

NOTE: For a subsequent in–flight failure of the Radar Altimeter 2, TAWS WINDSHEAR FAIL (advisory) and TAWS GPWS FAIL (advisory) will be displayed indicating that Reactive Windshear and GPWS, including DH altitude callouts, are considered inoperative.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL34–00–065–01 **RAD ALT 1 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	Item deleted at MMEL Issue 008.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–067–01 **RAD ALT 2 FAIL (AIRCRAFT WITH 2 RADIO ALTIMETERS)** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 2 is deactivated, (b) None of the following messages are displayed: RAD ALT 1 FAIL (advisory) AT RETARD INHIBIT (caution) 32 WOW FAULT – R GEAR WOFFW REDUND LOSS 32 WOW FAULT – L GEAR WOFFW REDUND LOSS (c) Operations do not require its use, (d) Operations with Steep Approach are not conducted, (e) APPR 2 (CAT II) and Autoland Operations are not conducted, and (f) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 2, on the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–10–11 (RAD ALT 2)

(1) Make sure that the message that follows is shown:

RAD ALT 2 FAIL (advisory)

B. Make sure that the message that follows is not shown:

RAD ALT FAIL (caution)

C. Make sure that RA1 is displayed in yellow text on both Primary Flight Displays (PFDs).

D. Make sure that none of the following messages are displayed:

RAD ALT 1 FAIL (advisory)

AT RETARD INHIBIT (caution)

32 WOW FAULT – R GEAR WOFFW REDUND LOSS

32 WOW FAULT – L GEAR WOFFW REDUND LOSS

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–068–01 **RAD ALT 2 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER)***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 2 is deactivated, (b) None of the following messages is displayed: RAD ALT 1 FAIL (advisory), RAD ALT 3 FAIL (advisory), (c) Operations do not require its use, and (d) LAND 3 Operations (CAT III – fail operational) are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 2, on the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC2–10–11 (RAD ALT 2)

B. Make sure that the message that follows is shown:

RAD ALT 2 FAIL (advisory)

C. Make sure that the messages that follow are not shown:

RAD ALT 1 FAIL (advisory)

RAD ALT 3 FAIL (advisory)

D. Make sure that RA3 is displayed in white text on the Right Primary Flight Display (PFD).

NOTE: For a subsequent in–flight failure of the Radio Altimeter 1, TAWS WINDSHEAR FAIL (advisory) and TAWS GPWS FAIL (advisory) will be displayed indicating that Reactive Windshear and GPWS, including DH altitude callouts, are considered inoperative.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL34–00–069–01 **RAD ALT 2 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	Item deleted at MMEL Issue 008.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–070–01 **RAD ALT 3 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 3 is deactivated, (b) None of the following messages is displayed: RAD ALT 1 FAIL (advisory), RAD ALT 2 FAIL (advisory), (c) Operations do not require its use, and (d) LAND 3 Operations (CAT III – fail operational) are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 3, on the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC1–09–16 (RAD ALT 3)

B. Make sure that the message that follows is shown:

RAD ALT 3 FAIL (advisory)

C. Make sure that the messages that follow are not shown:

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–071–01 **RAD ALT 3 FAIL (AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 3 is deactivated, (b) No more than one of the following messages is displayed: RAD ALT 1 FAIL (advisory), RAD ALT 2 FAIL (advisory), (c) None of the following messages are displayed: AT RETARD INHIBIT (caution) 32 WOW FAULT – R GEAR WOFFW REDUND LOSS 32 WOW FAULT – L GEAR WOFFW REDUND LOSS (d) Operations do not require its use, (e) Operations with Steep Approach are not conducted, (f) APPR 2 (CAT II) and Autoland Operations are not conducted, and (g) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. To deactivate RAD ALT 3, on the ECB synoptic page, set to OUT and LOCK the following circuit breaker:

CDC1–09–16 (RAD ALT 3)

(1) Make sure that the message that follows is shown:

RAD ALT 3 FAIL (advisory)

(2) Make sure that no more than one of the following message is displayed:

RAD ALT 1 FAIL (advisory)

RAD ALT 2 FAIL (advisory)

B. Make sure that the messages that follow are not shown:

AT RETARD INHIBIT (caution)

32 WOW FAULT – R GEAR WOFFW REDUND LOSS

32 WOW FAULT – L GEAR WOFFW REDUND LOSS

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–073–01 **IRS 2 FAIL** (ADVISORY)	C	(O) May be displayed provided: (a) R PFD is manually reverted to IRS 3, (b) None of the following messages are displayed: IRS 1 FAIL (advisory) IRS 3 FAIL (advisory) 27 FLT CTRL FAULT – AHRS INOP 27 FLT CTRL FAULT – ISI INPUT INOP (c) Integrated Standby Instrument (ISI) attitude indications are operative, (d) Operations do not require its use, (e) Operations with Steep Approach are not conducted, and (f) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. After the failure has occurred, do the steps that follow:

(1) On the Reversion Switch panel, push the IRS R PFD button until the R PFD input source is set to IRS 3.

(2) Make sure that IRS 3 is displayed in white text on the Right Primary Flight Display (PFD).

B. Before each flight, make sure that IRS 3 is displayed in white text on the Right Primary Flight Display (PFD).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–075–01 **IRS 3 FAIL** (ADVISORY)	C	May be displayed provided: (a) None of the following messages are displayed: IRS 1 FAIL (advisory) IRS 2 FAIL (advisory) 27 FLT CTRL FAULT – AHRS INOP 27 FLT CTRL FAULT – ISI INPUT INOP (b) Integrated Standby Instrument (ISI) attitude indications are operative, (c) Operations do not require its use, (d) Operations with Steep Approach are not conducted, and (e) Autoland Operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–077–01 **SMS FAIL ***** (ADVISORY)	D	May be displayed provided routine procedures do not require its use.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–079–01 **SMS FAIL ***** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. Operators must develop alternative procedures based on their own practice and use of the Surface Management System (SMS).

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–081–01 **FMS 1 FAIL** (CAUTION)	C	May be displayed provided: (a) The following message is not displayed: FMS 2 FAIL (caution), (b) Enroute operations do not require its use, and (c) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–083–01 **FMS 2 FAIL** (CAUTION)	C	May be displayed provided: (a) The following message is not displayed: FMS 1 FAIL (caution), (b) Enroute operations do not require its use, and (c) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–087–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – GPS 1 INOP	C	May be displayed provided: (a) Operations do not require its use, and (b) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–089–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – GPS 1 INOP	D	May be displayed provided: (a) Operations do not require its use, and (b) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–091–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – GPS 2 INOP	C	May be displayed provided: (a) Operations do not require its use, and (b) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–093–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – GPS 2 INOP	D	May be displayed provided: (a) Procedures do not require its use, and (b) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–095–01 **GNSS NOT AVAIL** (CAUTION)	C	May be displayed except where operations require its use. (a) Operations do not require its use, and (b) RNP AR Approach operations are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–099–01 **WXR FAIL** (ADVISORY)	C	Except for extended operations beyond 120 minutes, may be displayed provided it is not required by regulations.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–101–01 **WXR AUTO FAULT** (ADVISORY)	C	(O) May be displayed provided the manual tilt function is verified operative.

1. OPERATIONS (O)

A. Control of the WXR manual tilt function is verified manually using the Control Tuning Panel (CTP) Radar page.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–103–01 **WXR CTRL FAULT** (ADVISORY)	C	Except for extended operations beyond 120 minutes, may be displayed provided it is not required by regulations.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–105–01 **WXR FAULT** (ADVISORY)	C	May be displayed. NOTE: Any mode which is operative may be used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–107–01 **WXR TURB FAULT** (ADVISORY)	C	May be displayed. NOTE: Any WXR modes which are operative may be used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–109–01 **WXR PWS FAIL ***** (ADVISORY)	B	(O) May be inoperative provided alternate procedures are established and used.

1. OPERATIONS (O)

A. Operator's alternate procedures should include reviewing windshear avoidance and windshear recovery procedures.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–110–01 **WXR PWS FAIL ***** (ADVISORY)	C	(O) May be inoperative provided: (a) Alternate procedures are established and used, and (b) TAWS Windshear Warning System (Reactive) operates normally.

1. OPERATIONS (O)

A. Operator's alternate procedures should include reviewing windshear avoidance and windshear recovery procedures.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–112–01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – WXR L DSPL INOP	D	May be displayed provided 34 AVIONIC FAULT – WXR R DSPL INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–112–02 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – WXR R DSPL INOP	D	May be displayed provided 34 AVIONIC FAULT – WXR L DSPL INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–112–03 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – WXR–4 BUS INOP	C	Except for extended operations, may be displayed provided it is not required by regulations. NOTE: Any WXR modes which are operative may be used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–112–04 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – WXR L CTRL INOP	D	May be displayed provided 34 AVIONIC FAULT – WXR R CTRL INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–112–05 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT – WXR R CTRL INOP	D	May be displayed provided 34 AVIONIC FAULT – WXR L CTRL INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–113–01 **HUD FAIL ***** (ADVISORY)	D	May be displayed provided: (a) Procedure do not require its use, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–114–01 **HUD FAIL ***** (ADVISORY)	C	(O) May be displayed provided: (a) Alternate procedures are established and used, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).

1. OPERATIONS (O)

A. Each operator must establish and use alternate procedures.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–115–01 **L HUD FAIL ***** (ADVISORY)	C	May be displayed provided: (a) Alternate procedures are established and used, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–116–01 **L HUD FAIL ***** (ADVISORY)	D	May be displayed provided: (a) Procedures do not require its use, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–117–01 **R HUD FAIL ***** (ADVISORY)	C	May be displayed provided: (a) Alternate procedures are established and used, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–118–01 **R HUD FAIL ***** (ADVISORY)	D	May be displayed provided: (a) Procedures do not require its use, (b) Operations with Steep Approach are not conducted, and (c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations)

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–121–01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – HUD FAN INOP	D	May be displayed provided: (a) Procedures do not require use of the HUD, and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–123–01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – L HUD FAN INOP ***	C	May be displayed provided: (a) Operations doe not require its use, and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–125–01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – R HUD FAN INOP ***	C	May be displayed provided: (a) Operations doe not require its use, and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – L INBD DISP L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – L INBD DISP R FAN INOP 34 AVIONIC FAN FAULT – L OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L OUTBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–02 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – L INBD DISP R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – L INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L OUTBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–03 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – L OUTBD DISP L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – L OUTBD DISP R FAN INOP 34 AVIONIC FAN FAULT – L INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L INBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–04 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – L OUTBD DISP R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – L OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – L INBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–05 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – LWR DISP L FAN INOP	C	May be displayed provided 34 AVIONIC FAN FAULT – LWR DISP R FAN INOP info message is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–06 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – LWR DISP R FAN INOP	C	May be displayed provided 34 AVIONIC FAN FAULT – LWR DISP L FAN INOP info message is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–07 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – R INBD DISP L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – R INBD DISP R FAN INOP 34 AVIONIC FAN FAULT – R OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R OUTBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–08 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – R INBD DISP R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – R INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R OUTBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–09 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – R OUTBD DISP L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – R OUTBD DISP R FAN INOP 34 AVIONIC FAN FAULT – R INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R INBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL34–00–160–10 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT – R OUTBD DISP R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT – R OUTBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R INBD DISP L FAN INOP 34 AVIONIC FAN FAULT – R INBD DISP R FAN INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL35–00–001–01 **CREW OXY LO PRESS** (CAUTION)	A	(O) May be displayed and observer seat occupied provided: (a) Oxygen pressure is checked to be above minimum required oxygen pressure before each flight, (b) Crew oxygen EICAS Pressure Readout is verified operative before each flight, (c) Crew oxygen EICAS Pressure is monitored during flight, (d) Crew oxygen masks are verified operative before each flight, and (e) Repairs are made within one flight day.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure, by two methods of indication, that the crew oxygen bottle shows the same pressure value. The EICAS oxygen pressure indication can be compared with either the Ground Service Panel pressure gauge or the Crew Oxygen Bottle pressure gauge.

NOTE: If indications on the bottle pressure gauge are not clearly visible to the flight crew through the sight glass, the oxygen bottle enclosure must be removed by qualified persons as per Section 1, item 35–11–05.

(2) Use the chart that follows to read the oxygen pressure quantity on the pressure gauge of the oxygen bottle.

FULL PRESS PSI vs AMBIENT TEMPERATURE

OXY CYC SERVICING: CHARGE CYL AT RATE NOT TO EXCEED 200 PSI/MIN TO ”FULL”PRESSURE										
COCKPIT* TEMP	**CELSIUS**	**–40**	**–29**	**–18**	**–7**	**5**	**16**	**21**	**27**	**38**
	FAHRENHEIT	**–40**	**–20**	**0**	**19**	**41**	**61**	**70**	**81**	**100**
FULL PRESSURE	**PSI**	**1340**	**1435**	**1530**	**1620**	**1710**	**1805**	**1850**	**1900**	**1990**
*COCKPIT TEMPERATURE IS USED AS AN APPROXIMATION FOR THE OXYGEN COMPARTMENT AMBIENT TEMPERATURE										

(3) Make sure that the oxygen pressure indication in the flight compartment is above 1300 psi.

B. Before each flight, do the steps that follow:

(1) Make sure that the oxygen pressure is above the minimum limits for a three member crew for the intended flight.

(2) Make sure that the flight crew oxygen masks have sufficient oxygen flow.

NOTE: If the observer seat is occupied, for the intended flight, the observer seat mask must be checked to be operative.

C. During the flight, do the steps that follow:

(1) Monitor the flight crew oxygen pressure. If an oxygen leak is suspected, initiate the descent to a safe altitude.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL35–00–001–02 **CREW OXY LO PRESS** (CAUTION)	B	(O) May be displayed provided: (a) Oxygen pressure is checked to be above minimum required oxygen pressure before each flight, (b) Crew oxygen EICAS Pressure Readout is verified operative before each flight, (c) Crew oxygen EICAS Pressure is monitored during flight, (d) Crew oxygen masks are verified operative before each flight, and (e) Observer seat is not occupied.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Make sure, by two methods of indication, that the crew oxygen bottle shows the same pressure value. The EICAS oxygen pressure indication can be compared with either the Ground Service Panel pressure gauge or the Crew Oxygen Bottle pressure gauge.

NOTE: If indications on the bottle pressure gauge are not clearly visible to the flight crew through the sight glass, the oxygen bottle enclosure must be removed by qualified persons per Section 1, Item 35–11–05.

(2) Use the chart that follows to read the oxygen pressure quantity on the pressure gauge of the oxygen bottle.

FULL PRESS PSI vs AMBIENT TEMPERATURE

OXY CYC SERVICING: CHARGE CYL AT RATE NOT TO EXCEED 200 PSI/MIN TO ”FULL”PRESSURE										
COCKPIT* TEMP	**CELSIUS**	**–40**	**–29**	**–18**	**–7**	**5**	**16**	**21**	**27**	**38**
	FAHRENHEIT	**–40**	**–20**	**0**	**19**	**41**	**61**	**70**	**81**	**100**
FULL PRESSURE	**PSI**	**1340**	**1435**	**1530**	**1620**	**1710**	**1805**	**1850**	**1900**	**1990**
*COCKPIT TEMPERATURE IS USED AS AN APPROXIMATION FOR THE OXYGEN COMPARTMENT AMBIENT TEMPERATURE										

B. Before each flight, do the steps that follow:

(1) Make sure that the oxygen pressure is above the minimum limits for the intended flight.

(2) Make sure that the flight crew oxygen masks have sufficient oxygen flow.

C. During the flight, monitor the flight crew oxygen pressure. If an oxygen leak is suspected, initiate the descent to a safe altitude.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–001–01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT – L BLEED MON PRESS SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–003–01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT – L BLEED TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–005–01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT – R BLEED MON PRESS SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–005–03 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT – R BLEED TEMP SNSR REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–009–01 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L BLEED TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the L BLEED switch to OFF.

(2) Make sure the Crossbleed Valve is operative, as follows:

(a) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(b) Make sure the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR control panel, set the XBLEED switch to AUTO.

(3) Conduct flight in single bleed configuration at or below FL 310.

(4) Extended range operations are prohibited.

(5) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–011–03 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L HPV FAIL CLSD	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR panel, select the L BLEED switch to OFF.

(a) Make sure that the L BLEED OFF status message is displayed on EICAS.

(2) Make sure that the cross bleed valve (CBV) is operative as follows:

(a) On the AIR panel, select the XBLEED switch to MAN OPEN.

(b) Make sure that the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR panel, select the XBLEED switch to AUTO.

(3) Make sure that flight is conducted under single bleed configuration at or below FL 310.

(4) Extended operations are prohibited.

(5) Make sure that the 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS info message is not displayed on EICAS.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–013–01 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL – L PRESS REG SOV INOP	C	(O) Except for extended operations, may be displayed provided: (a) Left Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the L BLEED switch to OFF.

(2) Make sure the Crossbleed Valve is operative, as follows:

(a) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(b) Make sure the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR control panel, set the XBLEED switch to AUTO.

(3) Conduct flight in single bleed configuration at or below FL 310.

(4) Extended range operations are prohibited.

(5) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–017–01 **LEAK DET FAULT** (ADVISORY) 36 LEAK DET FAULT – LOOP REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–031–01 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R BLEED TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the R BLEED switch to OFF.

(2) Make sure the Crossbleed Valve is operative, as follows:

(a) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(b) Make sure the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR control panel, set the XBLEED switch to AUTO.

(3) Conduct flight in single bleed configuration at or below FL 310.

(4) Extended range operations are prohibited.

(5) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–035–03 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R HPV FAIL CLSD	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the R BLEED switch to OFF.

(2) Make sure the Crossbleed Valve is operative, as follows:

(a) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(b) Make sure the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR control panel, set the XBLEED switch to AUTO.

(3) Conduct flight in single bleed configuration at or below FL 310.

(4) Extended range operations are prohibited.

(5) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL36–00–037–01 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL – R PRESS REG SOV INOP	C	(O) Except for extended operations, may be displayed provided: (a) Right Bleed System is selected OFF, (b) Crossbleed Valve (CBV) is verified operative, (c) Flight is conducted under single bleed configuration at or below FL310, (d) 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS is not displayed, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (f) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, set the R BLEED switch to OFF.

(2) Make sure the Crossbleed Valve is operative, as follows:

(a) On the AIR control panel, set the XBLEED switch to MAN OPEN.

(b) Make sure the XBLEED MAN OPEN status message is displayed on EICAS.

(c) On the AIR control panel, set the XBLEED switch to AUTO.

(3) Conduct flight in single bleed configuration at or below FL 310.

(4) Extended range operations are prohibited.

(5) Make sure that 26 FIRE SYSTEM FAULT – EQUIP BAY SMOKE DET REDUND LOSS message is not shown.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL45–00–003–01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT – CONFIG SYS INOP	C	May be inoperative provided routine maintenance procedures do not require loading Integrated Modular Avionics software.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL45–00–005–01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT – OMS INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL46–00–001–01 **HEALTH MGMT FAULT** (ADVISORY) 46 HEALTH MGMT FAULT – HMU DEGRADED	C	(O) May be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. In the event of a HEALTH MGMT FAULT advisory message being displayed on EICAS, the flight crew may need to record specific engine data requested by Maintenance for engine trending, since this fault could affect engine recordings for one or both engines.

NOTE 1: HEALTH MGMT FAULT advisory message being displayed on EICAS could affect engine recordings for one or both engines.

NOTE 2: Each Health Management Unit (HMU) channel records one engine's data.

NOTE 3: High Load Event Indication Function (HLEIF) (if installed) will not be functional with both HMU channels inoperative.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL46–00–002–01 **HEALTH MGMT FAULT** (ADVISORY) 46 HEALTH MGMT FAULT – HMU DEGRADED	A	May be displayed provided repairs are made before the completion of the next heavy maintenance visit.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL46–00–003–01 **HI LOAD MONITOR FAIL ***** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.

1. OPERATIONS (O)

A. Flight crew will need to record suspected hard landings and vertical/lateral gust events.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL46–00–004–01 **HI LOAD MONITOR FAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require its use.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–001–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – FUEL INERTING DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–003–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – FUEL INERTING REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–005–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – FUEL INERTING SHUTDOWN	C	May be displayed provided none of the following messages are displayed: 47 FUEL INERTING FAULT – DUAL FLOW SOV INOP 47 FUEL INERTING FAULT – INLET ISOL VLV INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–007–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – FUEL INERTING SHUTDOWN	C	May be displayed provided none of the following messages are displayed: 47 FUEL INERTING FAULT – DUAL FLOW SOV INOP 47 FUEL INERTING FAULT – TEMP ISOL VLV INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–013–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – TEMP ISOL VLV INOP	C	May be displayed provided none of the following messages are displayed: 47 FUEL INERTING FAULT – DUAL FLOW SOV INOP 47 FUEL INERTING FAULT – INLET ISOL VLV INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL47–00–015–01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT – INLET ISOL VLV INOP	C	May be displayed provided none of the following messages are displayed: 47 FUEL INERTING FAULT – DUAL FLOW SOV INOP 47 FUEL INERTING FAULT – TEMP ISOL VLV INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL49–00–001–01 **APU BLEED FAIL** (CAUTION)	C	(O) May be displayed provided: (a) APU BLEED is selected OFF, and (b) Bleed air valve is verified closed on AIR synoptic page before each flight. NOTE: APU is still available as source of electrical power, if required.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the AIR control panel, select the APU BLEED switch to the OFF position.

(2) On the AIR synoptic page, make sure that the APU Bleed Valve does not show amber dashed.

(3) On the AIR synoptic page, make sure that the APU Bleed Valve is shown closed and is not amber.

NOTE: The Ground HP Air will be necessary to start the engines. Refer to the FCOM for instructions.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL49–00–007–01 **APU FAULT** (ADVISORY) 49 APU FAULT – APU INOP	C	(O) Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) Select the APU to OFF.

(2) Use a ground cart to start the engine. Refer to the FCOM for instructions.

(3) Make sure that the external power is connected before the second engine is shut down at the gate.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL49–00–009–01 **APU FAULT** (ADVISORY) 49 APU FAULT – APU REDUND LOSS	C	Except for extended operations, may be displayed and APU used.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL49–00–013–01 **APU SHUTDOWN** (ADVISORY)	C	Except for extended operations, may be displayed, provided APU is considered inoperative.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–001–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD PAX DOOR SNSR INOP	C	(O) May be displayed provided: (a) Forward passenger door is verified operative before each flight, (b) Forward passenger door is CLOSED, LATCHED and LOCKED before each flight, (c) Forward passenger Door Lock Flag indicates LOCKED before each flight, (d) Forward passenger door external and internal handles are verified stowed before each flight, and (e) Forward passenger door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the forward passenger door is operative,

(2) Make sure that the forward passenger door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the forward passenger door mechanical lock flag indicates LOCKED, and

(4) Make sure that the forward passenger door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the forward passenger door external handles are stowed, and

(2) Make sure that the forward passenger door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–003–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD PAX DOOR TRGT INOP	C	(O) May be displayed provided: (a) Forward passenger door is verified operative before each flight, (b) Forward passenger door is CLOSED, LATCHED and LOCKED before each flight, (c) Forward passenger Door Lock Flag indicates LOCKED before each flight, (d) Forward passenger door external and internal handles are verified stowed before each flight, and (e) Forward passenger door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the forward passenger door is operative,

(2) Make sure that the forward passenger door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the forward passenger door mechanical lock flag indicates LOCKED, and

(4) Make sure that the forward passenger door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the forward passenger door external handles are stowed, and

(2) Make sure that the forward passenger door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–005–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD SERV DOOR SNSR INOP	C	(O) May be displayed provided: (a) Forward service door is verified operative before each flight, (b) Forward service door is CLOSED, LATCHED and LOCKED before each flight, (c) Forward service Door Lock Flag indicates LOCKED before each flight, (d) Forward service door external and internal handles are verified stowed before each flight, and (e) Forward service door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the forward service door is operative,

(2) Make sure that the forward service door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the forward service door mechanical lock flag indicates LOCKED, and

(4) Make sure that the forward service door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the forward service door external handles are stowed, and

(2) Make sure that the forward service door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–007–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD SERV DOOR TRGT INOP	C	(O) May be displayed provided: (a) Forward service door is verified operative before each flight, (b) Forward service door is CLOSED, LATCHED and LOCKED before each flight, (c) Forward service Door Lock Flag indicates LOCKED before each flight, (d) Forward service door external and internal handles are verified stowed before each flight, and (e) Forward service door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the forward service door is operative,

(2) Make sure that the forward service door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the forward service door mechanical lock flag indicates LOCKED, and

(4) Make sure that the forward service door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the forward service door external handles are stowed, and

(2) Make sure that the forward service door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–009–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT PAX DOOR SNSR INOP	C	(O) May be displayed provided: (a) Aft passenger door is verified operative before each flight, (b) Aft passenger door is CLOSED, LATCHED and LOCKED before each flight, (c) Aft passenger Door Lock Flag indicates LOCKED before each flight, (d) Aft passenger door external and internal handles are verified stowed before each flight, and (e) Aft passenger door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the aft passenger door is operative,

(2) Make sure that the aft passenger door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the aft passenger door mechanical lock flag indicates LOCKED, and

(4) Make sure that the aft passenger door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the aft passenger door external handles are stowed, and

(2) Make sure that the aft passenger door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–011–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT PAX DOOR TRGT INOP	C	(O) May be displayed provided: (a) Aft passenger door is verified operative before each flight, (b) Aft passenger door is CLOSED, LATCHED and LOCKED before each flight, (c) Aft passenger Door Lock Flag indicates LOCKED before each flight, (d) Aft passenger door external and internal handles are verified stowed before each flight, and (e) Aft passenger door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the aft passenger door is operative,

(2) Make sure that the aft passenger door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the aft passenger door mechanical lock flag indicates LOCKED, and

(4) Make sure that the aft passenger door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the aft passenger door external handles are stowed, and

(2) Make sure that the aft passenger door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–013–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT SERV DOOR SNSR INOP	C	(O) May be displayed provided: (a) Aft service door is verified operative before each flight, (b) Aft service door is CLOSED, LATCHED and LOCKED before each flight, (c) Aft service Door Lock Flag indicates LOCKED before each flight, (d) Aft service door external and internal handles are verified stowed before each flight, and (e) Aft service door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the aft service door is operative,

(2) Make sure that the aft service door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the aft service door mechanical lock flag indicates LOCKED, and

(4) Make sure that the aft service door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the aft service door external handles are stowed, and

(2) Make sure that the aft service door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–015–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT SERV DOOR TRGT INOP	C	(O) May be displayed provided: (a) Aft service door is verified operative before each flight, (b) Aft service door is CLOSED, LATCHED and LOCKED before each flight, (c) Aft service Door Lock Flag indicates LOCKED before each flight, (d) Aft service door external and internal handles are verified stowed before each flight, and (e) Aft service door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, flight crew to establish communication with cabin crew to:

(1) Make sure that the aft service door is operative,

(2) Make sure that the aft service door is CLOSED, LATCHED and LOCKED,

(3) Make sure that the aft service door mechanical lock flag indicates LOCKED, and

(4) Make sure that the aft service door internal handles are stowed.

B. Before each flight, establish communication with ground crew to:

(1) Make sure that the aft service door external handles are stowed, and

(2) Make sure that the aft service door external pressure vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–017–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – L OVERWING DOOR SNSR INOP	C	(O) May be displayed provided: (a) Left overwing door is CLOSED and LATCHED before each flight, and (b) Left overwing door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the left overwing door is CLOSED and LATCHED, and

(2) Make sure that the left overwing door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–019–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – L OVERWING DOOR TRGT INOP	C	(O) May be displayed provided: (a) Left overwing door is CLOSED and LATCHED before each flight, and (b) Left overwing door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the left overwing door is CLOSED and LATCHED, and

(2) Make sure that the left overwing door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–021–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – R OVERWING DOOR SNSR INOP	C	(O) May be displayed provided: (a) Right overwing door is CLOSED and LATCHED before each flight, and (b) Right overwing door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the right overwing door is CLOSED and LATCHED, and

(2) Make sure that the right overwing door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–023–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – R OVERWING DOOR TRGT INOP	C	(O) May be displayed provided: (a) Right overwing door is CLOSED and LATCHED before each flight, and (b) Right overwing door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the right overwing door is CLOSED and LATCHED, and

(2) Make sure that the right overwing door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–025–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – L OVERWING AFT DOOR SNSR INOP	C	(O) May be displayed provided: (a) Left overwing aft door is CLOSED and LATCHED before each flight, and (b) Left overwing aft door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the left overwing aft door is CLOSED and LATCHED, and

(2) Make sure that the left overwing aft door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–027–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – L OVERWING AFT DOOR TRGT INOP	C	(O) May be displayed provided: (a) Left overwing aft door is CLOSED and LATCHED before each flight, and (b) Left overwing aft door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the left overwing aft door is CLOSED and LATCHED, and

(2) Make sure that the left overwing aft door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–029–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – R OVERWING AFT DOOR SNSR INOP	C	(O) May be displayed provided: (a) Right overwing aft door is CLOSED and LATCHED before each flight, and (b) Right overwing aft door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the right overwing aft door is CLOSED and LATCHED, and

(2) Make sure that the right overwing aft door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–031–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – R OVERWING AFT DOOR TRGT INOP	C	(O) May be displayed provided: (a) Right overwing aft door is CLOSED and LATCHED before each flight, and (b) Right overwing aft door internal handle is verified stowed before each flight.

1. OPERATIONS (O)

A. Before each flight:

(1) Make sure that the right overwing aft door is CLOSED and LATCHED, and

(2) Make sure that the right overwing aft door internal handle is stowed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–033–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD EQUIP BAY DOOR SNSR INOP	C	(O) May be displayed provided: (a) Forward equipment bay door is verified CLOSED and LATCHED before each flight, and (b) EQUIP BAY DOOR caution message is not displayed.

1. OPERATIONS (O)

A. Before each flight, establish communication with ground crew to make sure that the forward equipment bay door is CLOSED and LATCHED, and

B. Make sure that the EQUIP BAY DOOR caution message is not displayed on EICAS when engines are running.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–035–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – MID EQUIP BAY DOOR SNSR INOP	C	(O) May be displayed provided: (a) Mid equipment bay door is verified CLOSED and LATCHED before each flight, and (b) EQUIP BAY DOOR caution message is not displayed.

1. OPERATIONS (O)

A. Before each flight, establish communication with ground crew to make sure that the mid equipment bay door is CLOSED and LATCHED, and

B. Make sure that the EQUIP BAY DOOR caution message is not displayed on EICAS when engines are running.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–037–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT EQUIP BAY DOOR SNSR INOP	C	(O) May be displayed provided: (a) Aft equipment bay door is verified CLOSED and LATCHED before each flight, and (b) EQUIP BAY DOOR caution message is not displayed.

1. OPERATIONS (O)

A. Before each flight, establish communication with ground crew to:

(1) Make sure that the aft equipment bay door is CLOSED and LATCHED, and

(2) Make sure that the EQUIP BAY DOOR caution message is not displayed on EICAS when engines are running.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–039–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD CARGO DOOR SNSR INOP	C	(O) May be displayed provided: (a) Forward cargo door is CLOSED, LATCHED and LOCKED before each flight, (b) Forward cargo door mechanical lock flag indicates LOCKED before each flight, (c) Forward cargo door external handle is verified stowed before each flight, and (d) Forward cargo door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, establish communication with qualified ground crew to:

(1) Make sure that the forward cargo door is closed, latched and locked,

(2) Make sure that the forward cargo door mechanical flag indicates LOCKED,

(3) Make sure that the forward cargo door external handle is stowed, and

(4) Make sure that the forward cargo door external vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–041–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – FWD CARGO DOOR TRGT INOP	C	(O) May be displayed provided: (a) Forward cargo door is CLOSED, LATCHED and LOCKED before each flight, (b) Forward cargo door mechanical lock flag indicates LOCKED before each flight, (c) Forward cargo door external handle is verified stowed before each flight, and (d) Forward cargo door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, establish communication with qualified ground crew to:

(1) Make sure that the forward cargo door is closed, latched and locked,

(2) Make sure that the forward cargo door mechanical flag indicates LOCKED,

(3) Make sure that the forward cargo door external handle is stowed, and

(4) Make sure that the forward cargo door external vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–043–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT CARGO DOOR SNSR INOP	C	(O) May be displayed provided: (a) Aft cargo door is CLOSED, LATCHED and LOCKED before each flight, (b) Aft cargo door mechanical lock flag indicates LOCKED before each flight, (c) Aft cargo door external handle is verified stowed before each flight, and (d) Aft cargo door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, establish communication with qualified ground crew to:

(1) Make sure that the aft cargo door is closed, latched and locked,

(2) Make sure that the aft cargo door mechanical flag indicates LOCKED,

(3) Make sure that the aft cargo door external handle is stowed, and

(4) Make sure that the aft cargo door external vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL52–00–045–01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT – AFT CARGO DOOR TRGT INOP	C	(O) May be displayed provided: (a) Aft cargo door is CLOSED, LATCHED and LOCKED before each flight, (b) Aft cargo door mechanical lock flag indicates LOCKED before each flight, (c) Aft cargo door external handle is verified stowed before each flight, and (d) Aft cargo door external pressure vent panel is verified closed before each flight.

1. OPERATIONS (O)

A. Before each flight, establish communication with qualified ground crew to:

(1) Make sure that the aft cargo door is closed, latched and locked,

(2) Make sure that the aft cargo door mechanical flag indicates LOCKED,

(3) Make sure that the aft cargo door external handle is stowed, and

(4) Make sure that the aft cargo door external vent panel is closed.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–009–01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT – FADEC FAULT 2	A	May be displayed provided repairs are made in accordance with times established by engine manufacturer.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–015–01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT – HEALTH MON DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–017–01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT – P2/T2 HEATER INOP	C	Except for extended operations, may be displayed provided: (a) 73 R ENGINE FAULT – P2/T2 HEATER INOP is not displayed, and (b) Flight is not conducted into known or forecast icing conditions.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–019–01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT – T3 SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–021–01 **L FUEL FLOW DEGRADED** (ADVISORY)	C	(O) Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: R FUEL FLOW DEGRADED 28 FUEL FAULT – FUEL GAUGING SNSR DEFECT, (b) All fuel tank fuel quantity indications are operative, (c) Left engine EICAS fuel flow readouts is considered degraded, and (d) Fuel used displayed on Fuel synoptic page is considered degraded.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the FPLN/FUEL page of the FMS select the FMS FOB MODE – SENSED.

(2) The messages that follow may be displayed on the FMS:

CHECK FUEL AT DEST

CHECK FUEL AT ALTN

Make sure to check that there is the necessary quantity of fuel in the tanks to complete the mission.

NOTE: The accuracy of the fuel flow indication of the left engine is degraded as a result of this message.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–023–01 **INFO NOTE** (INFO) 73 INFO NOTE – L ENG CTRL SYS REDUND LOSS	D	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–025–01 **INFO NOTE** (INFO) 73 INFO NOTE – L ENG FADEC FAULT 3	A	May be displayed provided repairs are made in accordance with times established by engine manufacturer.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–027–01 **INFO NOTE** (INFO) 73 INFO NOTE – R ENG CTRL SYS REDUND LOSS	D	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–029–01 **INFO NOTE** (INFO) 73 INFO NOTE – R ENG FADEC FAULT 3	A	May be displayed provided repairs are made in accordance with times established by engine manufacturer.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–039–01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT – FADEC FAULT 2	A	May be displayed provided repairs are made in accordance with times established by engine manufacturer.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–045–01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT – HEALTH MON DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–047–01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT – P2/T2 HEATER INOP	C	Except for extended operations, may be displayed provided: (a) 73 L ENGINE FAULT – P2/T2 HEATER INOP is not displayed, and (b) Flight is not conducted into known or forecast icing conditions.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–049–01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT – T3 SNSR INOP	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–00–051–01 **R FUEL FLOW DEGRADED** (ADVISORY)	C	(O) Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: L FUEL FLOW DEGRADED 28 FUEL FAULT – FUEL GAUGING SNSR DEFECT (b) All fuel tank quantity indications are operative, (c) Right engine EICAS fuel flow readouts is considered degraded, and (d) Fuel Used displayed on Fuel synoptic page is considered degraded.

1. OPERATIONS (O)

A. Before each flight, do the steps that follow:

(1) On the FPLN/FUEL page of the FMS select the FMS FOB MODE – SENSED.

(2) The messages that follow may be displayed on the FMS:

CHECK FUEL AT DEST

CHECK FUEL AT ALTN

Make sure to check that there is the necessary quantity of fuel in the tanks to complete the mission.

NOTE: The accuracy of the fuel flow indication of the right engine is degraded as a result of this message.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–34–001–01 **L ENG FUEL FILTER** (ADVISORY) 73 L ENG FUEL FILTER – IMPENDING BYPASS	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: 73 R ENGINE FAULT – FUEL FILTER PRESS SNSR INOP 73 R ENG FUEL FILTER – IMPENDING BYPASS, and (b) Repairs are made within 17.5 Engine Flight Hours (EFH).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL73–34–003–01 **R ENG FUEL FILTER** (ADVISORY) 73 R ENG FUEL FILTER – IMPENDING BYPASS	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: 73 L ENGINE FAULT – FUEL FILTER PRESS SNSR INOP 73 L ENG FUEL FILTER – IMPENDING BYPASS, and (b) Repairs are made within 17.5 Engine Flight Hours (EFH).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL74–00–001–01 **L ENGINE FAULT** (ADVISORY) 74 L ENGINE FAULT – IGN REDUND LOSS	C	May be displayed provided none of the following messages are displayed: 74 R ENGINE FAULT – IGN REDUND LOSS 73 R ENGINE FAULT – EEC A CTRL CPU INOP 73 R ENGINE FAULT – EEC B CTRL CPU INOP.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL74–00–002–01 **R ENGINE FAULT** (ADVISORY) 74 R ENGINE FAULT – IGN REDUND LOSS	C	May be displayed provided none of the following messages are displayed: 74 L ENGINE FAULT – IGN REDUND LOSS 73 L ENGINE FAULT – EEC A CTRL CPU INOP 73 L ENGINE FAULT – EEC B CTRL CPU INOP

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL75–42–001–01 **L ENG PCE DOOR OPEN** (ADVISORY)	C	May be displayed provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL75–42–003–01 **R ENG PCE DOOR OPEN** (ADVISORY)	C	May be displayed provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (b) Operations with Steep Approach are not conducted.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL76–00–001–01 **L ENGINE FAULT** (ADVISORY) 76 L ENGINE FAULT – THROTTLE REV BALK INOP	C	May be displayed provided: (a) 76 R ENGINE FAULT – THROTTLE REV BALK INOP is not displayed, and (b) Operations are not dependent on its use. NOTE: Maximum reverse thrust is available by extra pilot effort (at a nominal force of 25 lbs).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL76–00–002–01 **R ENGINE FAULT** (ADVISORY) 76 R ENGINE FAULT – THROTTLE REV BALK INOP	C	May be displayed provided: (a) 76 L ENGINE FAULT – THROTTLE REV BALK INOP is not displayed, and (b) Operations are not dependent on its use. NOTE: Maximum reverse thrust is available by extra pilot effort (at a nominal force of 25 lbs).

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL78–00–001–01 **L ENGINE FAULT** (ADVISORY) 78 L ENGINE FAULT – REVERSER REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL78–00–002–01 **R ENGINE FAULT** (ADVISORY) 78 R ENGINE FAULT – REVERSER REDUND LOSS	C	May be displayed.

1. OPERATIONS (O)

A. None required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–00–001–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – AUX OIL PRESS MON INOP	C	May be displayed provided none of the following messages are displayed: 77 R ENGINE FAULT – PHMU INOP 79 R ENGINE FAULT – AUX OIL PRESS MON INOP 79 L ENGINE FAULT – OIL DEBRIS MON INOP 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–00–007–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – VORV OPER DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–00–009–01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – AUX OIL PRESS MON INOP	C	May be displayed provided none of the following messages are displayed: 77 L ENGINE FAULT – PHMU INOP 79 L ENGINE FAULT – AUX OIL PRESS MON INOP 79 R ENGINE FAULT – OIL DEBRIS MON INOP 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–00–015–01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – VORV OPER DEGRADED	C	May be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–34–001–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: ENG VIBRATION (caution) 79 L ENGINE FAULT – OIL DEBRIS MON INOP 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT 79 R ENGINE FAULT – OIL FILTER SNSR INOP 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 R ENGINE FAULT – OIL DEBRIS MON INOP 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT (b) Repairs are made within 30 flight hours. NOTE: If «79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS» and «79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT» are both displayed, see item 79–21–06.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–34–003–01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: ENG VIBRATION (caution) 79 R ENGINE FAULT – OIL DEBRIS MON INOP 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT 79 L ENGINE FAULT – OIL FILTER SNSR INOP 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 L ENGINE FAULT – OIL DEBRIS MON INOP 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT (b) Repairs are made within 30 flight hours. NOTE: If «79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS» and «79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT» are both displayed, see item 79–21–06.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL79–34–005–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS	Item moved to section 1 per TC MMEL Issue 009.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication 1.	2. Remarks and Exceptions
MMEL79–34–007–01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS	Item moved to section 1 per TC MMEL Issue 009.

1. OPERATIONS (O)

A. Not applicable.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–001–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: ENG VIBRATION (caution) 79 L ENGINE FAULT – OIL FILTER SNSR INOP 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 R ENGINE FAULT – OIL FILTER SNSR INOP 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 R ENGINE FAULT – OIL DEBRIS MON INOP 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT (b) Repairs are made within 6 flight cycles (maximum 20 flight hours in total) or 6 flight hours whichever is less restrictive. NOTE: If «79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT» and «79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS» are both displayed, see item 79–21–06.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–003–01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT	A	Except for extended operations, may be displayed provided: (a) None of the following messages is displayed: ENG VIBRATION (caution) 79 R ENGINE FAULT – OIL FILTER SNSR INOP 79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 L ENGINE FAULT – OIL FILTER SNSR INOP 79 L ENGINE FAULT – OIL FILTER IMPENDING BYPASS 79 L ENGINE FAULT – OIL DEBRIS MON INOP 79 L ENGINE FAULT – OIL DEBRIS ABOVE LIMIT (b) Repairs are made within 6 flight cycles (maximum 20 flight hours in total) or 6 flight hours whichever is less restrictive. NOTE: If «79 R ENGINE FAULT – OIL DEBRIS ABOVE LIMIT» and «79 R ENGINE FAULT – OIL FILTER IMPENDING BYPASS» are both displayed, see item 79–21–06.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–021–01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – OIL DEBRIS MON INOP	C	Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–021–03 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – OIL DEBRIS MON INOP	C	Except for extended operations, may be displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–021–05 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT – OIL DEBRIS MON INOP	C	May be displayed provided: (a) Left engine Oil Filter Delta Pressure (OFDP) sensor is operative, and (b) 79 L ENGINE FAULT - OIL FILTER SNSR INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

CAS Message Indication	1.	2. Remarks and Exceptions
MMEL79–35–021–07 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT – OIL DEBRIS MON INOP	C	May be displayed provided: (a) Right engine Oil Filter Delta Pressure (OFDP) sensor is operative, and (b) 79 R ENGINE FAULT - OIL FILTER SNSR INOP is not displayed.

1. OPERATIONS (O)

A. Not required.

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