Model BD−500−1A10
Model BD−500−1A11

Transport Canada

Master Minimum Equipment List

MMEL

BD500−3AB48−12703−00

Issue No. 015

Manufacturer:

Airbus Canada Limited Partnership
13100 Henri Fabre Boulevard,
Mirabel (Quebec)
Canada J7N 3C6

Technical publications comment form

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Master Minimum Equipment List

Model BD-500-1A10

Model BD-500-1A11

Approved by the Chief, Flight Test for the Director,
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Date of approval: October 11, 2024

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014	Mar 07/2022	Mar 07/2022	Signature on file
015	Oct 11/2024	Oct 11/2024	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.

This document also contains small editorial changes that do not have an affect on technical content.

FRONT MATTER	TYPE OF CHANGE	SUMMARY OF CHANGE
Acronyms	Editorial	Updated.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21−00−01	Editorial	Missing “May be inoperative” added to each relief. Note revised for L(R) PACK FAIL.
21−20−01−2	Technical	Title revised to include “lanyard and pin”. Updated dispatch limitations by adding a NOTE in case cover is stuck closed.
21−24−24	Technical	Addition of modsums effectivity and repair category changed from “C” to “D”.
21−26−15	Technical	Item deleted, redundant to Section 2 item 21-00-035-01.
21−33−05	Technical	Addition of “Before each flight” in Remarks or Exceptions.
21−51−01−1	Technical	Remarks or Exceptions revised.
21−51−01−2	Technical	New relief added for One pack inoperative.
21−51−02	Editorial	Layout changed to clearly show each dispatch limitation.
21−52−04−1	Technical	(O) deleted and Remarks or Exceptions simplified.
21−52−04−2	Technical	(O) deleted. APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21−53−14−1	Technical	(O) deleted. APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21−53−14−2	Technical	(O) deleted and Remarks or Exceptions simplified.
21−53−18−1	Editorial	Enhancement of wording for ISA temperatures limitations.
21−53−18−2	Technical	New relief introduced (one RARV inop with associated pack inop).
21−53−18−3	Technical	Relief previously found under 21−53−18−2 APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21−63−00	Technical	Introduction of a NOTE describing expected behavior of valve on AIR synoptic page.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21−90−01	Technical	All items: Remarks or Exceptions simplified and MMEL references to the “considered inoperative” items added. Notes sequence revised.
23−11−00	Technical	Introduction of a NOTE in order to advise the loss of datalink when VHF 3 is used in voice mode.
23−12−01	Technical	All items: Addition of a limitation to deactivate the failed HF.
23−30−04	Technical	Reformatted as per TC MMEL Guidance Book to address separately Flight Deck to Cabin function and Cabin to Cabin function.
23−30−05−2	Editorial	Wording enhancement as per TC MMEL Guidance Book and introduction of (O) procedures.
23−30−05−3	Technical	Introduction of a new relief for “Cabin Visual Alerting”.
23−30−05−5	Technical	Introduction of a new relief for “Aural Alerting System”.
23−31−01−1	Editorial	Wording enhancement as per TC MMEL Guidance Book and Proviso (d) has been updated.
23−31−04−2	Editorial	Wording enhancement as per TC MMEL Guidance Book.
23−40−01	Technical	Introduction of a new “Service and Mechanic Call Panel (MECH CALL)“ item.
23−40−02	Technical	Introduction of a new “Electrical Towing Panel Service Panel (CALL)” item.
23−51−01−1	Technical	Title revised to include “Failed open” condition. Enhancement of the wording to specify the location of the remaining PTT switches.
23−51−01−2	Technical	Introduction of a new “PTT Failed closed” relief.
23−51−01−3	Editorial	Previously 23−51−01−2. Enhancement of the wording to specify the location of the remaining PTT switches.
23−51−01−4	Editorial	Previously 23−51−01−3. Enhancement of the wording to specify the location of the remaining PTT switches.
23−51−02−1	Technical	Title revised to include “Failed open” failure condition. Enhancement of the wording to specify the location of the remaining PTT switches and addition of a condition to verify the failed open status accompanied by (O) procedures.
23−51−02−2	Technical	Introduction of a new “INT Failed closed” relief.
23−51−04−3	Editorial	Wording enhancement as per TC MMEL Guidance Book.
23−73−01−1−A	Technical	Added a limitation in order to have the interphone operative.
24−11−01	Technical	Introduction of dedicated reliefs for one or two guards inop or missing.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
24−11−02−2	Technical	Introduction of a new relief for “VFG Disconnected”.
24−12−01−1−B	Technical	Introduction of a new relief for “ROLS” for non extended operations.
24−20−44	Editorial	Removal of the item previously deleted at MMEL Issue 013.
24−32−01	Technical	Introduction of a new item for “Battery System 1”.
25−00−01−1	Editorial	Addition of the *** symbol as ELT−DT panel may also be installed.
25−00−01−2	Technical	Introduction of a new item for “ELT−DT panel LED indicator”.
25−02−02	Technical	Limitations simplified and one relief deleted.
25−12−01	Editorial	Both reliefs: Minor editorial changes.
25−18−05	Technical	Deleted item for Sun Visors/Sunshades, to be covered under NEF item 25−29−08.
25−21−01−3	Editorial	Wording enhancement as per TC MMEL Guidance Book.
25−23−05	Editorial	Both reliefs: Wording enhancement as per TC MMEL Guidance Book.
25−29−08	Technical	Per TC guidance material, passenger convenience items are removed to address NEF items only.
25−61−01	Editorial	Both reliefs: Wording enhancement as per TC MMEL Guidance Book.
25−61−04	Technical	Introduction of a new “Life Raft” item.
25−61−06	Editorial	Wording enhancement as per TC MMEL Guidance Book.
25−61−07−1	Editorial	Wording enhancement as per TC MMEL Guidance Book.
25−62−01−1	Technical	Revised the Number installed / required to 1 / 0.
25−62−01−2	Technical	Introduction of a new item for “ELT−DT”.
26−12−02	Technical	Introduction of a new item for “APU Horn”.
26−20−01	Editorial	Minor editorial change.
26−25−01	Technical	Deleted, redundant item covered in Section 2.
26−25−02	Technical	Deleted, redundant item covered in Section 2.
26−25−03	Technical	Deleted, redundant item covered in Section 2.
26−25−04	Technical	Deleted, redundant item covered in Section 2.
26−25−06	Technical	Deleted, redundant item covered in Section 2.
26−25−08	Technical	Deleted, redundant item covered in Section 2.
27−00−08	Technical	New item introduced for the “Glareshield PRIORITY switch”.
27−00−15−2	Technical	New item introduced for the “Stick Shaker”.
27−53−01−1	Technical	Number required revised to “0” because whole RVDT is deactivated for dispatch and Remarks and exceptions revised.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27−53−01−2	Technical	Number required revised to “0” because whole RVDT is deactivated for dispatch and Remarks and exceptions revised.
28−23−05	Technical	Item deleted because refuelling will be inhibited.
29−11−05	Technical	Item entirely revised to show with/without Modsums configuration.
29−11−06	Technical	Item entirely revised to show with/without Modsums configuration.
29−11−07	Technical	Item entirely revised to show with/without Modsums configuration.
29−31−02	Editorial	Item deleted in revision 15.
30−00−01	Editorial	All reliefs: Addition of “May be inoperative” to Remarks or Exceptions.
30−12−01	Technical	Addition of “Except for engine start” to CBV limitation.
30−22−01−1	Major	(O) deleted, and outside temperature limitations introduced. Clarification of the NOTE: related info messages added.
30−22−01−2	Major	Completely revised in order to allow dispatch only for valve P/N 999D0006-521 with outside air temperature limitations.
30−22−01−3	Major	Deleted.
30−41−08−1	Technical	(O) and approach limitations deleted because there is currently no approach minimum requiring windshield heat system to be operative.
30−42−01−1	Technical	(O) and approach limitations deleted because there is currently no approach minimum requiring windshield wiper system to be operative.
30−71−00	Technical	Split item for FWD and AFT mast.
32−00−01	Technical	All reliefs: Addition of “May be inoperative” to Remarks or Exceptions.
32−00−02−1	Technical	Item entirely revised, simplified to one relief.
32−47−01	Technical	Addition of a new item for “TPIS”.
32−51−38	Technical	Typo correction in title, “TOW” light shall read “TOWING”. Revised, added a new item to facilitate dispatch with flight compartment not-attended.
33−11−01−2	Technical	Revised as per TC MMEL Guidance Book. Repair category revised to “C”, and number required revised to “0”.
33−13−15	Editorial	Wording simplified to be in accordance with the “0” qty required for dispatch.
33−20−04	Editorial	Item removed previously deleted at MMEL Issue 012.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
33−24−00	Editorial	Title standardized to “Passenger Lighted Information Signs”.
33−24−00−1	Technical	(O) deleted and limitations revised as per TC MMEL Guidance Book.
33−24−00−2	Technical	Revised as per TC MMEL Guidance Book.
33−24−00−3	Technical	Repair category and number required revised as per TC MMEL Guidance Book.
33−41−03−1−B	Technical	Repair category revised as per TC MMEL Guidance Book.
33−41−03−2−B	Technical	Repair category revised as per TC MMEL Guidance Book.
33−41−06−1−B	Technical	Repair category revised as per TC MMEL Guidance Book.
33−41−06−2−B	Technical	Repair category revised as per TC MMEL Guidance Book.
33−44−07−1	Editorial	Minor editorial change.
33−44−07−2	Technical	(O) deleted and limitations revised accordingly.
33−50−01	Technical	Change the number required to 7 in order to keep adequate lighting intensity.
34−43−01−1	Technical	Limitations revised as per TC MMEL Guidance Book.
34−43−01−2−A	Editorial	Minor wording change.
34−43−01−2−B	Technical	Limitations revised as per TC MMEL Guidance Book.
34−43−01−3	Technical	Limitations revised as per TC MMEL Guidance Book.
34−44−00−01	Technical	Repeated provisios operations do not require its use is removed. Three 27 PFCC REDUND LOSS items added.
34−44−00−03	Technical	Repeated provisios operations do not require its use is removed. Three 27 PFCC REDUND LOSS items added.
34−61−09	Technical	Entirely revised as per TC MMEL Guidance Book.
36−11−92−2	Technical	Note deleted in Remarks or Exceptions.
36−11−92−3	Technical	Note deleted in Remarks or Exceptions.
36−12−00−1−A	Technical	Remarks orExceptions procedure revised.
36−12−00−1−B	Technical	Introduction of temp limitations for takeoff and NOTES added for APU bleed and system considered inoperative.
36−12−00−1−C	Technical	New “unpressurized” relief introduced.
36−12−01−3	Technical	Remarks or Exceptions revised.
36−12−01−4	Technical	Remarks or Exceptions procedure revised.
36−12−05−1	Technical	Remarks or Exceptions revised.
36−12−05−2	Technical	Introduction of temp limitations for takeoff and NOTES added for APU bleed and system considered inoperative.

SECTION 1 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
36−17−01	Technical	Note deleted in Remarks or Exceptions.
36−21−00	Editorial	Revised the SB incorporation status to ”pre” or “post”.
36−21−03	Editorial	Revised the SB incorporation status to ”pre”.
36−21−05	Editorial	Revised the SB incorporation status to ”pre”.
36−21−07	Editorial	Revised the SB incorporation status to ”pre”.
36−21−09	Editorial	Revised the SB incorporation status to ”pre” or “post”.
38−10−01	Technical	Content of MMEL 38-10-02 moved under 38-10-01.
38−10−02	Technical	Item moved under 38-10-01. Item revised to align with TCCA guide book revision 8.
38−30−01	Technical	Item renamed “Lavatory Waste System”. Content of MMEL 38-30-02 moved under 38-30-01-3.
38−30−02	Technical	Item moved under 38-30-01.
38−32−03−1	Technical	Introduction of a new relief for the 75% level sensor.
38−32−03−2	Technical	Harmonized dispatch limitations to agree with the limitations of the 75% level sensor.
75−24−01	Editorial	Changed sub-item’s title in order to simplify text and cover all engine models.

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21-00-003-03	Technical	Addition of Info messages in limitations.
21-00-017-03	Technical	Addition of NOTE to describe expected duct temp behavior on synoptic page.
21-00-035-01	Technical	Addition of a NOTE describing that K band antenna will not operate on equipped aircraft.
21-00-047-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-047-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-047-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-051-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-051-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-051-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-061-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-061-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-061-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-069-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-069-02	Editorial	Item removed, previously deleted at MMEL Issue 013.

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21-00-069-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-077-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-077-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-077-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-085-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-085-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-085-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-093-01	Technical	Addition of a remark allowing MAN pressurization mode in flight if required by an AFM Non-normal procedures.
21-00-095-03	Technical	Item deleted, MAN pressurization mode must remain operational when required by AFM Non-normal procedures.
21-00-099-01	Technical	Addition of a remark allowing MAN pressurization mode in flight if required by an AFM Non-normal procedures.
21-00-103-01	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-103-02	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-103-03	Editorial	Item removed, previously deleted at MMEL Issue 013.
21-00-107-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-119-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-121-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-123-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-125-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-127-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-129-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-131-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
21-00-133-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
21-00-135-01	Technical	APU bleed note deleted, it contained redundant information to the AFM non-normal procedure (ENG BLEED MISCONFIG).
24-00-015-03	Technical	Removed (O) and NOTE introduced in order to advise that APU start may be inoperative.
24-00-105-01	Technical	NOTE deleted, dispatch with generator disconnected is now covered by 24-11-02-2.
24-00-107-01	Editorial	Revised the SB incorporation status to “post”.
24-00-119-01	Technical	NOTE deleted, dispatch with generator disconnected is now covered by 24-11-02-2.
24-00-121-01	Editorial	Revised the SB incorporation status to “post”.
24-00-123-01	Editorial	Revised the SB incorporation status to “pre”.
24-00-125-01	Editorial	Revised the SB incorporation status to “pre”.
24-00-147-01	Technical	Limitations entirely revised, repair category changed from “A” to “B” and SB effectivity added.
24-00-153-01	Technical	Introduction of a new relief for the battery charger 1 (24 BATT CHARGER FAULT - BATT CHARGER 1 INOP (Info)).
24-00-155-01	Technical	Introduction of a new relief for the battery 1 (24 BATT CHARGER FAULT - BATT 1 TEMP SNSR INOP (Info)).
24-00-157-01	Technical	Introduction of a new relief for the battery 1 (BATT 1 FAIL (Caution)).
25-00-062-01	Technical	Introduction of a new relief for the optional ELT-DT (25 ELT FAULT - DISTRESS TRACKING INOP (Info)).
25-00-062-02	Technical	Introduction of a new relief for the optional ELT-DT (25 ELT FAULT - DMC INPUT REDUND LOSS (Info)).
26-00-001-01	Technical	(O) deleted and limitations simplified.
26-00-003-03	Technical	(O) deleted and limitations simplified.
26-00-013-01	Technical	(O) deleted and limitations simplified.
26-00-015-01	Technical	(O) deleted and limitations simplified.
26-00-043-01	Technical	Addition of “verified” added to each limitation and (O) procedure revised.
26-00-059-01	Technical	(O) deleted and limitations simplified.
26-00-061-03	Technical	(O) deleted and limitations simplified.
27-00-007-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-007-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-007-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-011-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-011-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-011-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-012-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-012-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-012-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-012-07	Technical	Introduction of a new relief: 27 FLT CTRL FAULT - PFCC ADS INPUT REDUND LOSS (Info)
27-00-013-01	Technical	Limitations revised, obsolete messages removed from the list.
27-00-014-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-014-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-014-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-015-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-015-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-015-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-015-07	Technical	Introduction of a new relief for the primary flight control computer (27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (Info) for aircraft equipped with any radio altimeter except for P/N: 822-0615 206.
27-00-015-09	Technical	Introduction of a new relief for the primary flight control computer (27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (Info) for aircraft equipped with at least one radio altimeter P/N: 822-0615 206.
27-00-018-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-018-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-018-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-019-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-019-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-019-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-020-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-020-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-020-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-021-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-021-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-021-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-022-01	Technical	Limitations revised, obsolete messages removed from the list.
27-00-023-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-023-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-023-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-024-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-024-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-024-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-024-07	Technical	Introduction of a new relief: 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS (Info).
27-00-025-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-025-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-025-07	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-025-09	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-025-13	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-026-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-026-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-026-07	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-026-09	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-026-13	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-027-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-027-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-027-07	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-027-09	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-027-13	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-028-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-028-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-028-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-029-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-029-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-029-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-030-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-030-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-030-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-031-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-031-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-031-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-032-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-032-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-032-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-033-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-033-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-033-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-034-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-034-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-034-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-035-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-035-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-035-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-052-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-052-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-052-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-054-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-054-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-054-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-060-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-060-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-060-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-062-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-062-03	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-062-05	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-110-01	Technical	Addition of a limitation to verify operative remaining shaker with associated (O) procedures.
27-00-110-03	Technical	Addition of a limitation to verify operative remaining shaker with associated (O) procedures.
27-00-136-01	Technical	Note 1 revised in (O) procedures.
27-00-137-01	Technical	Remarks and exceptions revised and Note 1 in (O) procedure revised.
27-00-137-03	Technical	Introduction of a new relief: 27 FLT CTRL FAULT - L TOGA SW INOP (Info).
27-00-139-01	Technical	Remarks and exceptions revised and Note 1 in (O) procedure revised.
27-00-139-03	Technical	Introduction of a new relief: 27 FLT CTRL FAULT - R TOGA SW INOP (Info).
27-00-151-01	Technical	Item deleted, message is no longer applicable (whole fleet post Avionics 8A Build).
27-00-153-01	Technical	Revised, new set of limitations introduced (messages based) to make sure that all the required inputs are available for continued safe flight and landing.
27-00-156-01	Technical	Revised, new set of limitations introduced (messages based) to make sure that all the required inputs are available for continued safe flight and landing.

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
27-00-221-01	Editorial	Typo correction, associated CAS message shall read “SLAT FAULT”.
28-00-019-01	Minor	Item removed, previously deleted at MMEL Issue 013.
28-00-025-01	Minor	Item removed, previously deleted at MMEL Issue 013.
30-00-003-01	Editorial	Remarks or Exceptions revised.
30-00-005-01	Editorial	Remarks or Exceptions revised.
30-00-007-01	Editorial	Typo correction in R&E, 30 WING A/ICE “FAIL” shall read “FAULT”.
30-00-007-03	Technical	Revised, CBV is allowed open for engine start.
30-00-011-01	Editorial	Typo correction in R&E, 30 WING A/ICE “FAIL” shall read “FAULT”.
30-00-011-03	Technical	Revised, CBV is allowed open for engine start.
30-00-017-01	Editorial	Remarks or Exceptions revised.
30-00-019-01	Editorial	Remarks or Exceptions revised.
30-00-021-01	Editorial	Typo correction in R&E, 30 WING A/ICE “FAIL” shall read “FAULT”.
30-00-021-03	Technical	Revised, CBV is allowed open for engine start.
30-00-025-03	Technical	Revised, CBV is allowed open for engine start.
30-12-005-01	Technical	Revised, CBV is allowed open for engine start and left pack must be selected off.
30-12-005-03	Technical	Revised, CBV is allowed open for engine start and right pack must be selected off.
32-00-003-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-005-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-007-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-009-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-011-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-013-01	Editorial	Revised the SB incorporation status to ”pre”.
32-00-015-01	Technical	Revised to prohibit operations in the U.S airspace when equipped with non 5G tolerant radio altimeters
32-00-015-02	Technical	New L GEAR WOFFW REDUND LOSS item introduced for 5G tolerant radio altimeters.
32-00-017-01	Technical	Revised to prohibit operations in the U.S airspace when equipped with non 5G tolerant radio altimeters.
32-00-017-02	Technical	New R GEAR WOFFW REDUND LOSS item introduced for 5G tolerant radio altimeters.

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
32-00-047-01	Technical	Revised to prohibit operations in the U.S airspace when equipped with non 5G tolerant radio altimeters and added a limitations for the autobrake.
32-00-047-02	Technical	New BDCU 1 NORM INOP item introduced for 5G tolerant radio altimeters.
32-00-049-01	Technical	Revised to prohibit operations in the U.S airspace when equipped with non 5G tolerant radio altimeters and added a limitations for the autobrake.
32-00-049-02	Technical	New BDCU 2 NORM INOP item introduced for 5G tolerant radio altimeters.
32-00-071-01	Technical	Introduction of a NOTE that refers ABS considered inoperative.
32-00-073-01	Technical	Introduction of a NOTE that refers ABS considered inoperative.
32-61-005-01	Editorial	Revised the SB incorporation status to ”post”.
32-61-005-03	Editorial	Revised the SB incorporation status to ”post”.
34-00-063-01	Technical	Three 27 PFCC REDUND LOSS items added.
34-00-065-01	Technical	Three 27 PFCC REDUND LOSS items added.
34-00-067-01	Technical	Three 27 PFCC REDUND LOSS items added.
34-00-069-01	Technical	Three 27 PFCC REDUND LOSS items added.
34-00-071-01	Technical	Three 27 PFCC REDUND LOSS items added.
34-00-073-01	Technical	Item deleted for further evaluation.
34-00-075-01	Technical	Item deleted for further evaluation.
34-00-081-01	Technical	Added limitation to select NAV source from cross−side FMS.
34-00-083-01	Technical	Added limitation to select NAV source from cross−side FMS.
34-00-087-01	Technical	Added limitation to deactivate GPS 1.
34-00-089-01	Technical	Added limitation to deactivate GPS 1 with associated (O) procedures.
34-00-091-01	Technical	Added limitation to deactivate GPS 2.
34-00-093-01	Technical	Added limitation to deactivate GPS 2 with associated (O) procedures.
36-00-001-01	Editorial	Revised the SB incorporation status to ”pre”.
36-00-001-03	Editorial	Revised the SB incorporation status to ”post”.
36-00-005-01	Editorial	Revised the SB incorporation status to ”pre”.
36-00-005-05	Editorial	Revised the SB incorporation status to ”post”.
36-00-009-01	Technical	Added a limitation to verify operative the opposite bleed system.

SECTION 2 ITEM NUMBER	TYPE OF CHANGE	SUMMARY OF CHANGE
36-00-011-03	Technical	Repair category changed to “C” and limitations revised. Left Engine EGT variation step added.
36-00-013-01	Technical	Added a limitation to verify operative the opposite bleed system.
36-00-017-01	Editorial	Revised the SB incorporation status to ”post”.
36-00-031-01	Technical	Added a limitation to verify operative the opposite bleed system.
36-00-035-03	Technical	Repair category changed to “C” and limitations revised.
36-00-037-01	Technical	Added a limitation to verify operative the opposite bleed system.
52-00-003-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-007-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-011-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-015-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-019-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-023-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-027-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-031-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-041-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.
52-00-045-01	Technical	Item deleted, because no-dispatch door caution message will be displayed after engine start.

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1. Systems Definitions: Systems numbers are based on the Air Transport Association (ATA) Specification Number 100, and items are numbered sequentially.

   A. “Item” (Column 1) means the equipment, system, component, or function listed in the “Item” column.

   B. “Number Installed” (Column 2) is the number (quantity) of items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MMEL. Should the number be a variable (e.g. passenger cabin items) a number is not required.

   C. “***” symbol in Column 1 indicates an item which is not required by regulation but which may have been installed on some models of aircraft covered by this MMEL. This item may be included in the operator’s MEL after the approving office has determined that the item has been installed on one or more of the operator’s aircraft. The symbol, however, shall not be carried forward into the operator’s MEL. It should be noted that neither this policy nor the use of this symbol provide authority to install or remove an item from an aircraft. The “***” symbol may be considered equivalent to the term “if installed”.

   D. “Number Required for Dispatch” (Column 3) is the minimum number (quantity) of items required for operation provided the conditions specified in Column 4 are met.

      NOTE: Where the MMEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by Transport Canada.

   E. “Remarks or Exceptions” (Column 4) in this column includes a statement either prohibiting or permitting operation with a specific number of items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.

   F. “Vertical Bar” (change bar) in the margin indicates a change, addition or deletion in the adjacent text for the current revision of that page only. The change bar is dropped at the next revision of that page.

   G. “Approved” means approved by the Minister.

   H. “Master Minimum Equipment List (MMEL)” means a document approved by the Minister that establishes the aircraft equipment allowed to be inoperative under conditions specified therein for a specific type of aircraft.

   I. “Minimum Equipment List (MEL)” means a document approved by the Minister that authorizes an operator to dispatch an aircraft with aircraft equipment inoperative under the conditions specified therein.

   J. “Minister” means the Minister of Transport.

2. “Administrative Control Items” means an item listed by the operator in the MEL for tracking and informational purposes. It may be added to an operator’s MEL provided no relief is granted, or provided conditions and limitations are contained in an approved document such as the Structural Repair Manual. If relief other than that granted by an approved document is sought for an administrative control item, a request must be submitted to Transport Canada. If the request results in review and approval, the item becomes an MMEL item rather than an administrative control item.

3. “Affected” means the subject item of equipment (component, system or function) listed in Column 1.

4. “Aircraft Crew” means the operating crew members including the flight crew members, flight attendants, aircraft maintenance personnel and supervisory crew members.

5. “Airplane Flight Manual (AFM)” is the document required for type certification and approved by Transport Canada. The approved AFM for the specific aircraft is listed on the applicable Type Certification Data Sheet.

6. “Alphabetical Symbol” in Column 4 indicates a proviso (condition or limitation) that must be complied with for operation with the listed item inoperative.

7. “Alternate Procedures” means that the air operator (carrier) needs to develop normal, abnormal and/or emergency procedures, as applicable, for the associated item.

8. “Any in excess of those required by regulations” means that the equipment required by the Canadian Aviation Regulations must be operative and only excess equipment may be inoperative.

9. “As Required by Regulation, As Required by FAR” and other similar statements mean that the listed item is subject to certain provisions (restrictive or permissive) expressed in such regulations as the Canadian Aviation Regulations, Federal Aviation Regulations or the Airworthiness Manual, etc. Unless the MMEL provides otherwise, the items specified by these requirements must be operative.

10. “Associated” means a related component, system or function other than the subject one.

11. “Considered Inoperative” means that item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item shall not be used or operated until the deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MMEL provisions, including any (M) and (O) procedures and observing the repair category.

12. “Crew Member” unless otherwise specified, in addition to the CAR 101.01 (1) definition includes:

    A. A person whose presence on board the aircraft is necessary for:

        (1) The safety of the flight,

        (2) The safe handling of animals,

        (3) The safe handling of dangerous goods,

        (4) The security of valuables or confidential cargo,

        (5) The preservation of fragile or perishable cargo, or

        (6) The handling of cargo.

    B. Aircraft maintenance personnel, and

    C. Supervisory crew members and non−operating crew members and/or flight attendants who are qualified on aircraft type.

13. Dash “−” symbol in Column 2 and/or Column 3 indicates a variable number (Quantity) of the item installed.

14. “Day of Discovery” is the calendar day an equipment/instrument malfunction was discovered. This day is excluded from the calendar days or flight days specified in the MMEL for the repair of an inoperative item of equipment, and is applicable to all MMEL items in categories A, B, C, and D.

15. “Deactivated“ means that the specified component must be put into an acceptable condition for safe flight. An acceptable method of deactivating and securing will be established by the operator for inclusion in it’s MEL.

16. “Deleted” in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft.

17. “Engine Indicating Crew Alerting System (EICAS)” provide four classes of primary messages (WARNING, CAUTION, ADVISORY and STATUS). INFO messages are a category of non-alerting CAS messages that indicate a failure condition pertaining only to a dispatch decision. Any message that affects aircraft dispatch will be at the WARNING, CAUTION, ADVISORY or INFO level. The absence of an EICAS STATUS or higher level (WARNING, CAUTION, ADVISORY) indicates that the system/component is operating within its approved operating limits or tolerances. Maintenance level messages not associated with higher level EICAS messages and displayed on the Onboard Maintenance System (OMS) do not affect dispatch and shall be addressed in accordance with the operator’s standard maintenance program.

18. “Extended Operations” means the operation of a turbine-engine airplane on a route containing a point that is farther from an adequate aerodrome than the distance that can be flown in 60 minutes at the one-engine-inoperative cruise speed.

19. “Extended Overwater Operations” means an operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline.

20. “Federal Aviation Regulations (FARs)” means the applicable portions of the Federal Aviation Act and Federal Aviation Regulations.

21. “Flight” means a movement of the aircraft that includes one takeoff and one landing.

22. “Flight Attendant” (CARs) means a crew member, other than a flight crew member, who has been assigned duties to be performed in the interest of the passengers in a passenger-carrying aircraft.

23. “Flight Crew Member” (CARs) means a crew member assigned to act as pilot or flight engineer of an aircraft during flight time.

24. “Flight Day” means a 24 hour period (e.g. from midnight to midnight) − either Universal Coordinated Time (UCT) or local time, based on the recorded “out time” of the first flight of each 24 hour period following the day of discovery, during which at least one flight is initiated for the affected aircraft.

25. “Heavy Maintenance Visit” means an airworthiness maintenance program inspection where the aircraft is scheduled to be out of service for 4 or more days.

26. “Icing Conditions” means an atmospheric environment that may cause ice to form on the aircraft or in the engine(s).

27. “Inoperative” means a system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) or tolerance(s).

28. “Inoperative components of an inoperative system” Inoperative items which are components of a system which is inoperative are usually considered components directly associated with and having no other function than to support that system. (Warning/Caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL.)

29. “Is not used” in the provisos, remarks or exceptions for an MMEL item may specify that another item relieved in the MMEL “is not used.” In such cases, crew members should not activate, actuate, or otherwise utilize that component or system under normal operations. It is not necessary for the operators to accomplish the (M) procedures associated with the item. However, operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used to inform crew members that a component or system is not to be used under normal operations.

30. “Long Range Communications System (LRCS)” is defined in CFR 14 Section 1.1 as a system that uses satellite relay, data link, high frequency, or other approved communication system which extends beyond line-of-sight. Examples of such systems are HF-voice, HF-data link, SATCOM-voice, and SATCOM-data link.

31. “(M)” symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment must be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are required to be published as part of the operator’s manual or MEL.

32. “Message Oriented” relief refers to the MMEL dispatch provisos as provided for in Section 2 of this MMEL. Typically, this type of MMEL relief will not require fault isolation by maintenance personnel, allowing flight crew direct association of dispatch provisos to messages posted on the Crew Alerting System (CAS).

33. “Non-combustible materials” for MMEL purposes is addressed by the following NOTE in those items where applicable “Note Unit Load Devices (ULDs) may be carried in the associated compartment provided that 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.”

34. “Non-essential Equipment and Furnishings (NEF)” are those items installed on the aircraft as part of the original certification, supplemental type certificate, or engineering order that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that if inoperative, damaged, or missing have no effect on the aircraft’s ability to be operated safely under all operational conditions. These non-essential items may be installed in areas including, but not limited to, the passenger compartment, flight deck area, service areas, cargo areas, crew rest areas, lavatories, and galley areas. NEF items are not items already identified in the MEL or CDL of the applicable aircraft.

35. “Notes” Column 4 provides additional information for the crew member or maintenance consideration. Notes are used to identify applicable material which is intended to assist with compliance, but do not relieve the operator of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.

36. “(O)” symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally these procedures are accomplished by a crew member; however, other personnel may be qualified and authorized to perform certain functions. Although some of the CB/SSPC deactivation tasks are identified as (O) within this MMEL the operator might include them as (M) tasks within their MEL. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. The recommend (O) procedure(s) presented in the DDG may not address airline-specific operating requirements. Incorporation of these procedures into the operator’s MEL must take applicable operating requirements into consideration. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. Recording of the accomplishment of the required specific operations procedures in the log book will be accomplished by adding a statement to the “Instructions for Journey Log Book Use” found in the Operator’s Journey Log Book to cover those items requiring Operational Procedures.

    NOTE: The (M) and (O) symbols are required in the operator’s MEL unless otherwise authorized by Transport Canada.

37. “Observer’s Seat” refers to a seat in the flight deck of an airplane, of which there are usually one or two. The primary observer’s seat is used for official purposes such as Transport Canada check rides, company training, etc.

38. “Official Capacity” for the purpose of this document with respect to the occupant of the observer’s seat includes flight training, Transport Canada Civil Aviation Safety Inspector/company check rides, a crew member, or a person authorized by the air operator in accordance with procedures specified in the air operator’s company operating manual.

39. “Operative” for the purpose of this document means that a system or component will accomplish its intended function. When an MMEL item specifies that an item of equipment must be operative it does not necessarily mean that its operational status must be verified; it is to be considered operative unless reported or is known to be malfunctioning.

40. “Passenger” means a person, other than a crew member, who is carried on board an aircraft.

41. “Passenger Convenience Items” means those items related to passenger convenience, comfort, or entertainment such as, but not limited to, galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps, etc.

42. “Placarding” means each inoperative item must be placarded to inform and remind the crew members and maintenance personnel of the equipment condition.

    NOTE: To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified, placard wording and location will be determined by the operator.

43. “Protective Breathing Equipment (PBE)” (CARs) means equipment designed to cover the eyes, nose, and mouth of the wearer, or the nose and mouth where accessory equipment is provided to protect the eyes, and to protect the wearer from the effects of smoke, carbon dioxide or other harmful gases.

44. “Reduced Vertical Separation Minimum (RVSM) Airspace” means any airspace or route where aircraft are separated by 1000 feet vertically between FL 290 and FL 410. RVSM Operations means operations conducted in RVSM airspace.

45. “Repair Intervals” All users of an MEL must do repairs of inoperative systems or components, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators:

    – “Category A” Items in this category shall be repaired within the time interval specified in the “Remarks or Exceptions” column of the operator’s approved MEL. Whenever the proviso in the “Remarks or Exceptions” column of the MMEL states cycles or flight time, the time interval begins with the next flight. Whenever the time interval is listed as flight days, the time interval begins on the flight day following the day of discovery.

    – “Category B” Items in this category shall be repaired within three (3) consecutive calendar days, excluding the day of discovery. For example, if it were discovered at 10 a.m on January 26th, the three day interval would begin at midnight the 26th and end at midnight the 29th.

    – “Category C” Items in this category shall be repaired within ten (10) consecutive calendar days, excluding the day of discovery. For example, if it were discovered at 10 a.m. on January 26th, the ten day interval would begin at midnight the 26th and end at midnight February 5th.

    – “Category D” Items in this category shall be repaired within one hundred and twenty (120) consecutive calendar days, excluding the day of discovery.

46. “Runways near water” are runways where an over−run, under−run, or lateral runway excursion could end with the aeroplane in water deep enough that it would float. If a runway has such water within an area bounded by 1 Nm from the runway threshold, to 1 Nm beyond the departure end of the runway, and within 1000’ laterally of the runway centerline, then it is considered near water.

47. “Safety Belt” (CARs) means a personal restraint system consisting of either a lap strap or a lap strap combined with a shoulder harness.

48. “Secured” means that the specified component must be put into an acceptable condition for safe flight. If required, an acceptable method of securing will be specified in the MEL.

49. ”Shoulder Harness” (CARs) means any device that is used to restrain the upper torso of a person and that consists of a single diagonal upper torso strap or dual upper torso straps.

50. “System” means the group of directly related components which together perform a specified function; for example, the N2 Tachometer System would include the N2 indicator, tachometer generator and associated circuitry.

51. “System & Sequence Numbers” are based on Air Transport Association (ATA) Specification No. 100 and items are numbered sequentially.

52. “Time Limited Dispatch (TLD)” relief that is subject to time limited dispatch expressed as a specific number of engine hours or cycles, and will start in accordance with the times established by the engine manufacturer or as indicated in the remarks column of the MMEL. Time limited relief cannot be extended.

53. “Verified” means that a visual inspection or test is required to confirm unit or system operation or condition, as applicable.

54. “Visible Moisture” means an atmospheric environment containing water in any form that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail, or snow.

55. “Visual Flight Rules (VFR)” is as defined in the CARs. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

56. “Visual Meteorological Conditions (VMC)” means the atmospheric environment is such that would allow a flight to proceed under the Visual Flight Rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.

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1. The acronyms that follow can be used on flight compartment displays, radio tuning units, and the flight management system or can be found in this manual. Acronyms that have limited usage are explained in the chapters where they are used.

A

A/ICE	Anti-Ice
ABS	Auto Brake System
A/C	Aircraft
AC	Alternating Current
ACARS	Aircraft Communication Addressing and Reporting System
ACAS	Airborne Collision Avoidance System
ACC	Active Clearance Control
ACCUM	Accumulator
ACMP	Alternating Current Motor Pump
ACP	Audio Control Panel
ACPT	Accept
ADF	Automatic Direction Finder
ADS	Air Data System
ADS−B	Automatic Dependent Surveillance − Broadcast
ADS−C	Automatic Dependent Surveillance − Contract
ADSP	Air Data Smart Probe
AED	Automatic External Defibrillator
AEV	Avionics Exhaust Valve
AF	Automatic Fixed
AFCU	Alternate Flight Control Unit
AFD	Adaptative Flight Display
AFM	Airplane Flight Manual
AGCU	APU Generator Control Unit
AGL	Above Ground Level
AGEN	APU Generator
AHRS	Attitude and Heading Reference System
AIS	Aircraft Information Server
ALC	APU Line Contactor
ALT	Altitude
ALTN	Alternate
ANS	Aircraft Network Switch
AOA	Angle Of Attack
AOH&S	Aviation Occupational Health & Safety
AMCU	Advanced Master Control Unitt
AP	Autopilot
APPR	Approach
APT	Airport
APU	Auxiliary Power Unit
ARINC	Integrated Air System Controller
ARR	Arrival
AT	Autothrottle
ATA	Air Transport Association
ATC	Air Traffic Control
ATN	Aeronautical Telecommunication Network
ATS	Air Traffic Service, Air Turbine Starter
AUTO	Automatic
AUX	Auxiliary
AVAIL	Available

B

B/AIR	Bleed Air
B/C	Back Course
B/CRS	Back Course
B/LEAK	Bleed Leak
BARO	Barometric
BATT	Battery
BDCU	Brake Data Concentrator Unit
BLC	Battery Line Contactor
BRK	Brake
BRT	Bright
BTC	Bus Tie Contactor
BTL	Bottle
BTM	Brake Temperature Monitoring
BTMS	Brake Temperature Monitoring System
BTS	Brake Temperature Sensor

C

C	Cabin, Caution, Celsius, Center
CAA	Civil Aviation Authority
CAB	Cabin
CAIV	Cowling Anti−Ice Valve
CAS	Crew Alerting System
CAT	Category
CBV	Cross Bleed Valve
CCDA	Cargo Compartment Door Actuator
CCP	Cursor Control Panel
CDL	Configuration Deviation List
CFR	Code of Federal Regulations
CHAN	Channel
CHKL	Checklist
CHR / CHRONO	Chronometer
CLR	Clear
CLSD	Closed
CMD	Command
CMS	Central Maintenance System
CNCL	Cancel
CNS	Communication, Navigation and Surveillance
CPCS	Cabin Pressure Control System
CPDLC	Controller-Pilot Datalink Communication
CSD	Customer Service Display
CSOV	Cargo Shutoff Valve
CT	Crew Terminal
CTP	Control Tuning Panel
CTRL	Controller
cTWLU	Cellular Terminal Wireless LAN Unit
CVR	Cockpit Voice Recorder
CWLU	Crew Wireless LAN Unit

D

DAP	Downlinked Aircraft Parameters
DDG	Dispatch Deviation Guide
DEL	Delete
DEP	Departure
DEPRESS	Depressurization
DET	Detector
DFSOV	Dual Flow Shut-Off Valve
DISC	Disconnect
DMC	Data Concentrator Unit Module Cabinet
DME	Distance Measuring Equipment
DN	Down
DNLK	Downlock
DOS	Door Opening System
DPI	Differential Pressure Indicator
DPLY	Deployed

DSK	Double Stack Knob
DSPL	Display
DTC	DC Tie Contactor
DU	Display Unit

E

ECL	Electronic Check List
EEC	Electronic Engine Control
EDM	Emergency Descent Mode
EDP	Engine Driven Pump
EDU	Electronic Display Unit
EFAN	Extraction Fan
EFB	Electronic Flight Bag
EFH	Engine Flight Hour
EGT	Exhaust Gas Temperature
EICAS	Engine Indicating and Crew Alerting System
ELC	External Line Contactor
ELT	Emergency Locator Transmitter
ELT-DT	Emergency Locator Transmitter-Distress Tracking
EMA	Electric Motor Actuator
EMAC	Electric Motor Actuator Controller
EMER	Emergency
EMU	Expansion Module Unit
EOAM	Emergency Opening Assist Means
EPC	Electrical Power Center
EPCTA	External Power Current Transformer Assembly
EQUIP	Equipment
ERAV	Emergency Ram Air Valve
EVAC	Evacuation
EXEC	Execute
EXT	External

F

FADEC	Full Authority Digital Engine Control
FAK	First Aid Kit
FANS	Future Air Navigation System
FAR	Federal Aviation Regulations
FAV	Fan Air Valve
FBW	Fly-by-Wire
FCP	Flight Control Panel
FCS	Flight Control System
FCV	Flow Control Valve
FD	Flight Director
FDR	Flight Data Recorder
FDRAS	Flight Deck Remote Access System
FIDEX	Fire Detection and Extinguishing
FL	Flight Level
FLC	Flight Level Change
FLTA	Forward Looking Terrain Avoidance
FMA	Flight Mode Annunciator
FMS	Flight Management System
FPA	Flight Path Angle
FTIS	Fuel Tank Inerting System
FTWRM	Foot Warmer
ft	Feet
FWD	Forward
FWSOV	Firewall Shut-Off Valve

G

GCU	Generator Control Unit
GEN	Generator
GFAN	Galley Fan
GHTR	Galley Heater
GHTS	Galley Heater Temperature Sensor
GLC	Generator Line Contactor
GND	Ground
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GPWS	Ground Proximity Warning System
GRAV	Gravity
GS	Ground Spoiler
GSE	Ground Support Equipment
GSM	Global System Mobile

H

HDG	Heading
HF	High Frequency
HI	High
HLSL	High Lift Select Lever
HMU	Health Management Unit
Hpa	Hectopascal
HPGC	High Pressure Ground Connection
HPV	High Pressure Valve
HRD	High Rate Discharge
HSI	Horizontal Situation Indicator
HUD	Head-Up Display
HYD	Hydraulic

I

inHg	Inches of mercury
IAS	Indicated Airspeed
IASC	Integrated Air System Controller
IDENT	Identify
IDS	Ice Detector System
IFE	In-Flight Entertainment
IFIS	Integrated Flight Information System
IFR	Instrument Flight Rules
IGN	Ignition
IIV	Inlet Isolation Valve
ILS	Instrument Landing System
IMS	Information Management System
INBD	Inboard
INFO	Information
INHIB	Inhibit
INOP	Inoperative
INT	Intermittent
IRS	Inertial Reference System
ISA	International Standard Atmosphere
ISI	Integrated Standby Instrument
ISPS	In-Seat Power Supply

K

KIAS	Knots Indicated Airspeed

L

L	Left
LAN	Local Area Network
LCT	Line Current Transformer
LDS	Laptop Docking Station
LFE	Landing Field Elevation
LF−ULB	Low Frequency−Underwater Locating Beacon
LH	Left Hand
LO	Low
LPGC	Low Pressure Ground Connection
LRCS	Long Range Communication System
LRD	Low Rate Discharge
LRU	Line Replaceable Unit
LSK	Line Select Key
LVTO	Low Visibility Takeoff
LWR	Lower

M

MAINT	Maintenance
MAN	Manual
MB	Marker Beacon
MDA	Minimum Descent Altitude
MDH	Minimum Descent Height
MEL	Minimum Equipment List
MFA	Maintenance Free Accumulator
MFS	Multi-Function Spoiler
MFW	Multi-Function Window
MID	Middle
MKP	Multifunction Keyboard Panel
MLG	Main Landing Gear
MMEL	Master Minimum Equipment List
MODSUM	Modification Summary
MON	Monitoring
MSG	Message
MSL	Mean Sea Level

N

N_1	Low pressure rotor speed
N_2	High pressure rotor speed
NAV	Navigation
NEF	Non-Essential Equipment and Furnishings
NF	Fan Speed
NLG	Nose Landing Gear
NORM	Normal

O

ODL	Onboard Data Loader
ODM	Oil Debris Monitor
OFDP	Oil Filter Delta Pressure
OFDPS	Oil Filter Delta Pressure Sensor
OFV	Outflow Valve
OMS	Onboard Maintenance System
OPU	Overvoltage Protection Unit
OUTBD	Outboard
OVRHD	Overhead
OWEED	Overwing Emergency Exit Door
OXY	Oxygen

P

PA	Passenger Address
PAX	Passenger
PBA	Pushbutton Annunciator
PBE	Protective Breathing Equipment
PBIT	Power up Built-In Test
PCE	Pre-Cooler Exit
PCU	Power Control Unit
PDA	Premature Descent Alert
PDOS	Powered Door Opening System
PED	Personal Electronic Device
PEV	Pressure Equalization Valve
PF	Pilot Flying
PFD	Primary Flight Display
PFCC	Primary Flight Control Computer
PFD	Primary Flight Display
PHMU	Prognostics Health Monitoring Unit
PIM	Panel Interface Module
PMC	Publication Model Code
PMG	Permanent Magnet Generator
PRAM	Pre-Recorded Announcement Messages
PRESS	Pressure, Pressurization
PREV	Previous
PRSOV	Pressure Regulating Shutoff Valve
PRV	Pressure Relief Valve
PSU	Passenger Service Unit
PTT	Push-to-Talk
PTU	Power Transfer Unit
PWR	Power

R

R	Right
RA	Resolution Advisory
RAD ALT	Radar Altimeter
RARV	Ram Air Regulating Valve
RAT	Ram Air Turbine
RDC	Remote Data Concentrator
RECIRC	Recirculation
REDUND	Redundancy
REU	Remote Electronic Unit
REV	Reverser
RFAN	Recirculating Fan
RH	Right Hand
RIU	Radio Interface Unit
RJCT	Reject
RNP AR	Required Navigation Performance with Authorization Required
ROC	Rate of Change
ROLS	Remote Oil Sensor
RSP	Reversion Switch Panel
RTSA	Radio Tuning System Application

RVDT	Rotary Voltage Differential Transformer
RVSM	Reduced Vertical Separation Minimum
RWY	Runway

S

SATCOM	Satellite Communication
SB	Service Bulletin
SEL	Select
SELCAL	Selective Calling
SERV	Service
SFECU	Slat/Flap Electronic Control Unit
SLIPCOMP	Slip Compensation
SMS	Surface Management System
SNSR	Sensor
SOV	Shutoff Valve
SRC	Source
STBY	Standby
SW	Switch
SYNCH	Synchronize

T

TA	Traffic Advisory
TAPRV	Trim Air Pressure Regulating Valve
TASOV	Trim Air Shut-off Valve
TAT	Total Air Temperature
TAV	Trim Air Valve
TAWS	Terrain Awareness and Warning System
TCAS	Traffic Collision Avoidance System
TCB	Thermal Circuit Breaker
TEMP	Temperature
TERR	Terrain
TFC	Traffic
TIV	Temperature Isolation Valve
TLD	Time Limited Dispatch
TOGA	Takeoff/Go Around
TPIS	Tire Pressure Indication System
TPMU	Tire Pressure Monitoring Unit
TRGT	Target
TRU	Transformer Rectifier Unit

U

ULD	Unit Load Device
UCT	Universal Coordinated Time
UPLK	Uplock
UPR	Upper
UTC	Universal Time Coordination

V

V_1	Takeoff decision speed
V/S	Vertical Speed
VENTS	Ventilated Temperature Sensor
VFG	Variable Frequency Generator
VFR	Visual Flight Rules
VHF	Very High Frequency
VLV	Valve
VMC	Visual Meteorological Conditions
VNAV	Vertical Navigation
VOR	VHF Omnidirectional Range

W

WAI	Wing Anti-Ice	WSHLD	Windshield
WAIV	Wing Anti-Ice Valve	WST	Wheel Speed Transducer
WLAN	Wireless Local Area Network	WX	Weather
WOFFW	Weight Off Wheel	WXR	Weather Radar

X

XFR / XFER	Transfer	XPDR	Transponder

1. All equipment installed on an aircraft in compliance with the Airworthiness Standards and Operating Rules must be operative. However, Canadian Aviation Regulations (605.07 and 705.07) permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative component can provide the required level of safety.

   A Master Minimum Equipment List (MMEL) is developed by Transport Canada, with participation by the aviation industry, to improve aircraft utilization and thereby provide more convenient and economical air transportation for the public. The approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment Transport Canada finds may be inoperative and yet maintain the required level of safety by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders.

   The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the aircraft with inoperative equipment.

   Equipment not required by the operation being conducted and equipment in excess of the requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed on the MMEL must be operative.

   Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that the required level of safety is maintained.

   The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain the required level of safety and reliability, the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment.

   The MEL provides for release of the aircraft for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Logbook. The item is then either repaired or may be deferred per the MEL or other approved means acceptable to Transport Canada prior to further operation. MEL conditions and limitations do not relieve the operator from determining that the aircraft is in condition for safe operation with items of equipment inoperative.

   Operators are responsible for exercising the necessary operational control to ensure that the required level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on aircraft operation and crew workload must be considered.

   Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures, and schedules to ensure timely repair.

   WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.

A new section has been authorized as an alternative to the standard method of MMEL dispatch relief, as is normally achieved through fault isolation procedures, and subsequent reference to the dispatch LRU/Component MMEL relief. Standard references to MMEL dispatch relief are in Section 1. Following the standard MMEL herein, Section 2 has been developed with the objective of minimizing the requirement for maintenance personnel to be available, largely allowing flight crews to dispatch from the displayed CAS (Crew Alerting System) message, without specifically identifying failed LRUs or components.

As Section 2 is intended as an alternative dispatch relief methodology, the LRU/Component (Section 1) relief will be retained in order to provide maximum flexibility for relief. Flight crews/operators may dispatch failures with reference to either Section 1 or Section 2 of this MMEL to the advantage that either may provide.

It will be recognized in many cases that when comparing dispatch relief provisos for posted CAS messages in Section 2 to those of the related LRU/Component dispatch relief in Section 1, the provisos associated with dispatching the CAS message will generally be more restrictive in content and relief interval. Without the opportunity for fault isolation through maintenance, it must be assumed that worst-case failure conditions always underlie the posted message − commensurately, dispatch must be more restrictive. However, where maintenance personnel are available and fault isolation conducted, relief provisos in Section 1 may be found to provide fewer or less stringent restrictions upon operations and offer a longer relief interval.

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		May be inoperative.
2) PRESSURIZATION Control Panel − EMER DEPRESS “ON”	C	1	0		May be inoperative.
3) PRESSURIZATION Control Panel − AUTO PRESS “MAN”	C	1	0		May be inoperative.
4) PRESSURIZATION Control Panel − AUTO PRESS “FAIL”	C	1	0		May be inoperative.
5) PRESSURIZATION Control Panel − DITCHING “ON”	C	1	0		May be inoperative.
6) EQUIP COOLING Control panel − INLET “OFF”	C	1	0		May be inoperative.
7) AIR Control Panel − PACK FLOW “HI”	C	1	0		May be inoperative.
8) AIR Control Panel − TRIM AIR “OFF”	C	1	0		May be inoperative.
9) AIR Control Panel − RECIRC AIR “OFF”	C	1	0		May be inoperative.
10) AIR Control Panel − RAM AIR “OPEN”	C	1	0		May be inoperative.

(Cont’d)

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) (Cont'd)				
11)	AIR Control Panel − L (R) PACK "FAIL"	C	2	0	May be inoperative.
12)	AIR Control Panel − L (R) PACK "OFF"	C	2	0	May be inoperative.
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. NOTE: For left air conditioning pack considered inoperative refer to Section 2 item 21-00-133-01.
2)	Cover (Including lanyard and pin)	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 (Cont'd)

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) (Cont'd)					(d) LPGC access panel (CDL item 53−24) is installed and confirmed not missing. NOTE: With the cover stuck closed aircraft can be dispatched without any limitations.
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 verified 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).
23−62 Floor Heaters, Flight Crew (FTWRM) ***	D	2	0	(M)	One or both may be inoperative provided affected heater is deactivated.
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.
23−65 Galley Heater (GHTR)	C	2	0	(M)	One or both may be inoperative provided affected heater is deactivated.

System & Sequence Nº	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.
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.
24−18	Avionics Bay Exhaust Valves (AEV)	C	2	0	(M) One or both may be inoperative provided affected AEV is secured OPEN.
24−24	Ground Valve, MID Avionics Bay (A/C without production Modsums 500T104207 & 500T103597)	D	1	0	(M) May be inoperative provided affected valve is secured CLOSED.
26−15	Forward/Middle Bay Inlet Fan				Item deleted at MMEL Issue 015.
26−17	Aft Bay Fan (In-Flight Entertainment (IFE) In-Seat Power Supply (ISPS) and Connectivity) ***				
1)	Except for operations with ground ambient temperature more than ISA +35°C	C	1	0	(O) May be inoperative provided the fan is deactivated.

(Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 − AIR CONDITIONING					
26−17	Aft Bay Fan (In-Flight Entertainment (IFE) In-Seat Power Supply (ISPS) and Connectivity) *** (Cont'd)				
2)	For operations with ground ambient temperature more than ISA +35°C	C	1	0	(O) May be inoperative provided: (a) In-flight entertainment, connectivity and in-seat power supply systems are deactivated, and (b) Fan is deactivated. NOTE: The cabin crew shall be notified that alternate means are to be used for passenger's safety briefings.
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.
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.

System & Sequence Nº	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.
33−00	Cabin Altitude Indication				
1)	Pressurized aircraft	C	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	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.
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: (Cont'd)

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 (Cont'd)					(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.
33−02 Cabin Rate of Change (ROC) Indication					
1) Pressurized aircraft	C	1	0		May be inoperative provided both cabin pressurization automatic modes are operative.
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.
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, (b) Autopilot is operative, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 − AIR CONDITIONING					
33−03	Landing Field Elevation (LFE) Indication (Cont'd)				(c) Operations are restricted to airports at or below 8000 feet Landing Field Elevation (LFE).
33−04	Landing Field Elevation (LFE) Automatic Selection				
1)	LFE operative in manual selection	C	1	0	(O) 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, (b) Autopilot is operative, and (c) Operations are restricted to airports at or below 8000 feet Landing Field Elevation (LFE).
33−05	Emergency Depressurization PBA Switch Guard	C	1	0	(O) May be damaged or missing provided that the associated PBA is verified operative before each flight.
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.

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, and (e) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16°C.
2)	One pack inoperative	C	2	1	(M)(O) Except for extended operations, may be inoperative provided: (a) Affected Air Conditioning Pack is selected OFF, (b) Flight is conducted 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.
51−02	Packs High Flow Mode	C	1	0	(O) PACK FLOW HI mode may be inoperative provided: (a) Both air conditioning packs are operative, and (b) Both engines bleed air are operative.

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) Except for extended operations, may be inoperative provided: (a) Both packs are considered inoperative, (b) ERAV is secured OPEN, (c) Extended overwater operations are not conducted, and (d) Takeoffs and landings are not conducted on runways near water. NOTE: For both packs considered inoperative refer to Section 1 (Air Conditioning Packs) 21-51-01-1.
2)	Right pack considered inoperative	C	1	0	(M) Except for extended operations, may be inoperative provided: (a) ERAV is secured OPEN, (b) Right pack is considered inoperative, (c) Extended overwater operations are not conducted, and (d) Takeoffs and landings are not conducted on runways near water. NOTE: For right air conditioning pack considered inoperative refer to Section 2 item 21-00-135-01.
53−14	Flow Control Valve (FCV)				
1)	One FCV inoperative	C	2	1	(M) Except for extended operations, one may be inoperative provided: (a) Affected FCV is secured CLOSED, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 − AIR CONDITIONING					
53−14 Flow Control Valve (FCV) (Cont'd)					(b) Associated air conditioning pack is considered inoperative. NOTE 1: For left air conditioning pack considered inoperative refer to Section 2 item 21-00-133-01. NOTE 2: For right air conditioning pack considered inoperative refer to Section 2 item 21-00-135-01.
2) Both FCVs inoperative	C	2	0	(M)	Except for extended operations, both may be inoperative provided: (a) Both FCVs are secured CLOSED, and (b) Both air conditioning packs are considered inoperative, NOTE: For both packs considered inoperative refer to Section 1 (Air Conditioning Packs) 21-51-01-1.
53−18 Ram Air Regulating Valve (RARV)					
1) One or both Ram Air Regulating Valve (RARV) inoperative and 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, (b) Associated temperature control valve is verified operative, and (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)					(c) Operations at OAT between ISA and ISA −30 inclusively are prohibited. NOTE 1: When one or both RARV are secured OPEN, associated pack will operate in degraded mode. NOTE 2: ISA temperature range is applicable for ground and in-flight operations.
2) One Ram Air Regulating Valve (RARV) inoperative and associated pack inoperative.		C	2	1	Except for extended operations, one may be inoperative provided associated air conditioning pack is considered inoperative. NOTE 1: For left air conditioning pack considered inoperative refer to Section 2 item 21-00-133-01. NOTE 2: For right air conditioning pack considered inoperative refer to Section 2 item 21-00-135-01.
3) One Ram Air Regulating Valve (RARV) inoperative and opposite pack inoperative.		C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Affected RARV is secured OPEN, (b) Associated Temperature Control Valve is verified operative, and (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)					(c) Opposite air conditioning pack is considered inoperative. NOTE 1: For left air conditioning pack considered inoperative refer to Section 2 item 21-00-133-01. NOTE 2: For right air conditioning pack considered inoperative refer to Section 2 item 21-00-135-01.
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) Cargo 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.

System & Sequence Nº	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)	Cargo 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.
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.
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 verified operative, (c) Both air conditioning packs are verified operative, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
21 − AIR CONDITIONING					
63−00 Trim Air Pressure Regulating Valve (TAPRV) (Cont'd)					(d) Trim Air Shut-Off Valve (TASOV) is verified operative when live animals or temperature sensitive cargo is carried in the forward cargo compartment. NOTE: Duct temperature may fluctuate rapidly (AIR synoptic page) with TAPRV secured closed. Warmer air may be expected in the affected zones.
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 verified operative, (c) Both air conditioning packs are verified operative, and (d) Trim Air Pressure Regulating Valve (TAPRV) is verified operative when live animals or temperature sensitive cargo is carried in the forward cargo compartment.
90−01 Integrated Air System Controller (IASC)					
1) IASC 1A	C	1	0	(M)(O)	May be inoperative provided: (a) Trim Air Shut-Off Valve (TASOV) is verified closed, (b) TASOV is considered inoperative, (c) IASC 1A is deactivated, (d) Remaining IASC channels are verified operative, and (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)					(e) Cabin Pressure Control System (CPCS) Auto Mode redundancy is considered inoperative. NOTE 1: For TASOV considered inoperative, refer to Section 1 item 21-63-01. NOTE 2: For Cabin Pressure Control System (CPCS) Auto Mode redundancy considered inoperative, refer to Section 2 item 21-00-097-01.
2) IASC 1B		C	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) IASC 1B is deactivated. (b) Remaining IASC channels are verified operative, (c) Left bleed temperature sensor redundancy is considered inoperative, (d) Left pack temperature sensor redundancy is considered inoperative, (e) Extraction Fan (EFAN) is considered inoperative, and (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4. Remarks or Exceptions
21 − AIR CONDITIONING					
90−01 Integrated Air System Controller (IASC) (Cont'd)					(f) Primary altitude limiter is considered inoperative. NOTE 1: When IASC 1B is deactivated IASC 1C becomes inoperative. NOTE 2: For left bleed temperature sensor redundancy considered inoperative, refer to Section 2 item 36-00-003-01. NOTE 3: For left pack temperature sensor redundancy considered inoperative, refer to Section 2 item 21-00-063-01. NOTE 4: For Extraction Fan (EFAN) considered inoperative, refer to Section 2 item 21-00-031-01. NOTE 5: For primary altitude limiter considered inoperative, refer to Section 2 item 21-00-099-01.
3) IASC 1C	C	1	0	(M)(O)	Except for extended operations may be inoperative provided: (a) IASC 1B is deactivated, (b) Remaining IASC channels are verified operative, (c) Left bleed temperature sensor redundancy is considered inoperative, (d) Left pack temperature sensor redundancy is considered inoperative, (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
21 − AIR CONDITIONING					
90−01 Integrated Air System Controller (IASC) (Cont'd)					(e) Extraction Fan (EFAN) is considered inoperative, and (f) Primary altitude limiter is considered inoperative. NOTE 1: For left bleed temperature sensor redundancy considered inoperative, refer to Section 2 item 36-00-003-01. NOTE 2: For left pack temperature sensor redundancy considered inoperative, refer to Section 2 item 21-00-063-01. NOTE 3: For Extraction Fan (EFAN) considered inoperative, refer to Section 2 item 21-00-031-01. NOTE 4: For primary altitude limiter considered inoperative, refer to Section 2 item 21-00-099-01.
4) IASC 2A	C	1	0	(M)(O)	May be inoperative provided: (a) IASC 2A is deactivated, (b) Remaining IASC channels are verified operative, and (c) Cabin Pressure Control System (CPCS) Auto Mode redundancy is considered inoperative. NOTE: For CPCS Auto Mode redundancy considered inoperative, refer to Section 2 item 21-00-097-01. (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)					
5) IASC 2B		C	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) All other IASC 1 and 2 channels are verified operative before each flight, (b) IASC 2B is deactivated, (c) Remaining IASC channels are verified operative, (d) Right bleed temperature sensor redundancy is considered inoperative, (e) Right pack temperature sensor redundancy is considered inoperative, (f) Extraction Fan (EFAN) is considered inoperative, and (g) Backup altitude limiter is considered inoperative. NOTE 1: When IASC 2B is deactivated IASC 2C becomes inoperative. NOTE 2: For right bleed temperature sensor redundancy considered inoperative, refer to Section 2 item 36-00-005-03. NOTE 3: For right pack temperature sensor redundancy considered inoperative, refer to Section 2 item 21-00-079-01. NOTE 4: For Extraction Fan (EFAN) considered inoperative, refer to Section 2 item 21-00-031-01. (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)					NOTE 5: For backup altitude limiter considered inoperative, refer to Section 2 item 21-00-093-01.
6) IASC 2C		C	1	0	(M)(O) Except for extended operations may be inoperative provided: (a) All other IASC 1 and 2 channels are verified operative before each flight, (b) IASC 2B is deactivated, (c) Remaining IASC channels are verified operative, (d) Right bleed temperature sensor redundancy is considered inoperative, (e) Right pack temperature sensor redundancy is considered inoperative, (f) Extraction Fan (EFAN) is considered inoperative, and (g) Backup altitude limiter is considered inoperative. NOTE 1: For right bleed temperature sensor redundancy considered inoperative, refer to Section 2 item 36-00-005-03. NOTE 2: For right pack temperature sensor redundancy considered inoperative, refer to Section 2 item 21-00-079-01. NOTE 3: For Extraction Fan (EFAN) considered inoperative, refer to Section 2 item 21-00-031-01. (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)				NOTE 4: For backup altitude limiter considered inoperative, refer to Section 2 item 21-00-093-01.

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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	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.
2) One TOGA switch inoperative	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.
3) Both TOGA switches inoperative	B		2	0	(O) Both may be inoperative provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (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, (Cont'd)

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) (Cont'd)				(d) APPR 2 (CAT II) and autoland operations are not conducted, and (e) RNP AR approach operations are not conducted.
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.
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 (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)				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.
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.

(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)				
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.
17)	Altitude Feet to Meter Selector Knob				
A)	Used during routine procedures	B	1	0	(O) May be inoperative provided alternate procedures are established and used. (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)					
B) Not used during 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.
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.

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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	0	May be inoperative.
2)	CVR “TEST”	C	1	0	May be inoperative.
11−00	VHF Communications Systems	D	3	2	(O) Any in excess of those required by regulations may be inoperative provided that VHF 1 or VHF 3 is operative. NOTE: VHF 3 based datalink systems will not be available when it is used in voice mode.
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) SATCOM coverage is available over the intended route of flight, (c) Alternate procedures are established and used, and (d) Failed HF system is deactivated.
2)	For others in excess	D	−	−	(O) Any in excess of those required by regulations may be inoperative, provided that failed HF system is deactivated.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
15−00	Iridium Satellite Communication System (SATCOM) ***				
1)	Procedures require SATCOM	C	1	0	(O) 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.
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.

System & Sequence Nº	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 require FANS	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 do not require FANS	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 require ATN	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 do not require ATN	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 require ACARS	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 do not require ACARS	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.
30−01 Pre−recorded Announcement (Passenger Briefing System)		C	1	0	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Nº	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 to Cabin and Cabin to Flight Deck				
A) Required by regulations	B	−	1	(O) May be inoperative provided: (a) Flight deck to cabin and cabin to flight deck interphone functions operate normally on at least fifty percent of the cabin handsets, (b) An operative flight deck to cabin interphone system (two way) is at an operative flight attendant seat, and (c) Alternate communications procedures are established and used. NOTE: Any station function(s) that operates normally may be used.
B) Not required by regulations	C	−	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 operates normally may be used.
C) 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, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
30−04 Crew Member Interphone System (Cont'd)					(b) Alternate procedures are established and used.
2) Cabin to Cabin					
A) Required by regulations	B	−	−	(O)	May be inoperative provided: (a) Cabin to cabin interphone functions operate normally on at least fifty percent of the cabin handsets, and (b) Alternate communications procedures are established and used. NOTE: Any station function(s) that operates normally may be used.
B) Not required by regulations	C	−	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 operates normally may be used.
C) 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. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
30−04 Crew Member Interphone System (Cont'd)					
3) 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.
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	(O) May be inoperative provided: (a) Passenger Address (PA) system is operative, and (b) Alternate procedures for contacting flights attendants are established and used.
3) Cabin Visual Alerting System	B		3	0	(O) May be inoperative provided: (a) Aural chime alerting system operates normally, and (b) Alternate procedures for contacting flights attendants are established and used.
4) 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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
30−05 Alerting System (Cont'd)					(c) Alternate procedures for contacting flight attendants are established and used.
5) Cabin Aural Alerting System	B	−	0	(O)	May be inoperative provided: (a) Visual alerting system operates normally, (b) Flight deck indication of lavatory smoke detector alert is operative, and (c) Alternate procedures for contacting flight attendants are established and used.
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 to 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) There are at least two 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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
31−01 Public Address System (Cont'd)					
					(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: (a) Crew members are the only occupants of the aircraft, and (b) Alternate procedures are established and used.
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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
31−04 Handsets (Cont'd)					(c) Alternate communications procedures 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.
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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
23 − COMMUNICATIONS					
31−06	Flight Deck Speakers (Cont'd)				
					(c) All aural alerts, messages and other communication which are normally routed through the flight deck speakers must be audible through the headsets.
31−07	Lavatory Speaker	C	−	0	(O) May be inoperative provided alternate procedures are established and used.
40−01	SERVICE and MECH CALL Control Panel				
1)	MECH CALL function used for routine procedures	C	1	0	(O) May be inoperative provided alternate procedures are established and used.
2)	MECH CALL function not-used for routine procedures	D	1	0	May be inoperative provided procedures are not dependent on its use.
40−02	Electrical Towing Service Panel				
1)	CALL function used for routine procedures	C	1	0	(O) May be inoperative provided alternate procedures are established and used.
2)	CALL function not-used for routine procedures	D	1	0	May be inoperative provided procedures are not dependent on its use.
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.

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 PTT Switch (Failed open)	C	2	1	(O)	One may be inoperative open provided: (a) At least one PTT switch must stay operative on the affected side (ACP or CCP PTT switch), and (b) Affected switch is verified failed open (non-transmitting).
2) Sidestick PTT Switch (Failed closed)	C	2	1	(M)	One may be inoperative (closed) provided: (a) At least one PTT switch must stay operative on the affected side (ACP or CCP PTT switch), (b) Affected switch is deactivated, and (c) Sidestick INT switch is considered inoperative. NOTE: For sidestick INT switch considered inoperative, refer to 23-51-02-2.
3) Audio Control Panel PTT Switch	C	2	1	(O)	One may be inoperative provided: (a) At least one PTT switch must stay operative on the affected side (sidestick or CCP PTT switch), and (b) Affected switch is verified failed open (non-transmitting).
4) Cursor Control Panel (CCP) PTT Switch	A	4	0	(O)	One or more may be inoperative provided: (a) At least one PTT switch must stay operative on the affected side (sidestick, ACP or CCP PTT switch), and (b) Affected switch is verified failed open (non-transmitting), and (c) Repairs are made within thirty flight days.

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 INT Switch (Failed open)	C		2	1	(O) One may be inoperative open (non-transmitting) provided: (a) Onside ACP INT switch or associated hand microphone is operative.
2) Sidestick INT Switch (Failed closed)	C		2	1	(M) One may be inoperative closed provided: (a) Onside ACP INT switch or associated hand microphone is operative, (b) Affected switch is deactivated, and (c) Sidestick PTT switch is considered inoperative. NOTE: For sidestick PTT switch considered inoperative, refer to 23-51-01-2.
3) 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.
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.

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 for three flight days provided associated hand microphone is installed and operates normally.
70−06	Cockpit Voice Recorder (CVR) System				
1)	Recorder Independent Power Supply (RIPS)				
A)	RIPS Installed	C	1	0	(M) May be inoperative provided CVR is confirmed to be operative every three flight days.
B)	RIPS Removed	C	1	0	(M) May be inoperative provided that the Recorder Independent Power Supply (RIPS) is removed from CVR.

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 (FDDSS)					
1) Electronic system***					
A) Viewing port inoperative	A		1	0	(O) May be inoperative provided: (a) Interphone must be operative, (b) Alternate procedures are established and used, and (c) Repairs are made within three flight days.
B) Viewing port operative	C		1	0	(O) May be inoperative provided: (a) Flight deck door viewing port operates normally, and (b) Alternate procedures are established and used.
C) Procedures do not require FDDSS	D		1	0	May be inoperative provided procedures do not require its use.
2) Viewing port					
A) Electronic FDDSS unavailable	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) Electronic FDDSS available	C		1	0	(O) May be inoperative provided: (a) Electronic flight deck door visual surveillance system is operative, and (b) Alternate procedures are established and used.

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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	May be inoperative.
2)	RAT GEN “ON”	C	1	0	May be inoperative.
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	May be inoperative.
6)	EXT PWR “IN USE”	C	1	0	May be inoperative.
7)	L(R) DISC “OIL”	C	2	0	May be inoperative.
8)	L/(R) DISC “DISC”	C	2	0	May be inoperative.
00−02	Electrical/Towing Service Panel PBA Switch Lights (light function only)				
1)	EXT AC SERV “AVAIL”	D	1	0	May be inoperative.
2)	EXT AC SERV “IN USE”	D	1	0	May be inoperative.

(Cont’d)

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) (Cont'd)				
3)	BATT Annunciator Light	C	1	0	May be inoperative. NOTE: Battery may deplete if not selected OFF.
11−01	L DISC / R DISC Switch Guards				
1)	One Switch Guard Affected	B	2	1	One may be damaged or missing provided that the opposite VFG is operative.
2)	Two Switch Guards Affected	B	2	0	(O) May be damaged or missing provided: (a) Both VFG Systems are operative, and (b) EPC 1 and EPC 2 are verified operative.
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: (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4.	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)] (Cont'd)						
						(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.
2) Remotely Activated Disconnect	A		2	1	(O)	Except for extended operations, one generator may be disconnected 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, (e) Opposite VFG is verified operative, and (f) Repairs are made within 8 flight hours.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 − ELECTRICAL POWER					
12−01 Variable Frequency Generator (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 non-extended operations	A	2	1	(M)	Except for extended operations, one may be inoperative provided: (a) Following info messages are not displayed: 24 ELECTRICAL FAULT − L GEN DEGRADED 24 ELECTRICAL FAULT − R GEN DEGRADED (b) Oil level is verified to be within the operating level range every three flight days, and (c) Afected VFG's oil system is verified not to have leaks for initial deferral, and (d) Repairs are made prior to completion of next heavy maintenance visit. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 − ELECTRICAL POWER					
12−01 Variable Frequency Generator (VFG) Oil System (Cont'd)					
C) 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.
2) Oil low level		A	2	1	(M)(O) VFG oil level may be low on one side provided: (a) Affected VFG oil system is verified not to have leaks, (b) Both VFGs are operative, (c) Affected VFG disconnect function is verified operative, and (d) Affected VFG oil is serviced within 12 flight hours after the message was displayed.
3) Oil low pressure or high temperature		A	2	1	(M)(O) Except for extended operations, one VFG may be inoperative due to low oil pressure or high oil temperature 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 during 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.

System & Sequence Nº		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.
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.
23−03	RAT GEN Switch Guard	C	1	0	May be damaged or missing.
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.
32−01	Battery System 1				
1)	Battery 1, Battery Charger 1, Battery Line Contactor (BLC) 1 (Failed Open), Heater 1, and Temperature Sensor 1 (A/C post SB BD500-311001 or with Modsum 500T104177)	B	1	0	(O) Except for extended operations, may be inoperative provided: (a) Battery charger 1 is deactivated, (b) Battery 1 heater is deactivated, (c) Battery 1 voltage is verified lower than battery 2, (d) Battery Line Contactor (BLC1) is verified open, (e) Forward cargo compartment door actuator is considered inoperative, (f) BATT 1 is selected OFF before each flight, (g) Both VFG systems are verified operative before each flight, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
24 − ELECTRICAL POWER					
32−01	Battery System 1 (Cont'd)				(h) All BTCs and DTCs are verified operative before each flight, (i) All TRUs are verified operative before each flight, (j) Battery system 2 is verified operative before each flight, (k) APU is started before departure and operated continuously throughout the flight, (l) APU GEN is selected ON before each flight, and (m) APU generator is verified operative before each flight. NOTE: Limit battery power only operations to a minimum in order to keep battery 2 fully charged.
33−03	AC Bus Tie Contactor (BTC)				Item deleted at MMEL Issue 012.
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.
40−02	Cockpit Thermal Circuit Breaker (TCB) Status Indication	C	−	0	May be inoperative for indication "− −" provided cockpit lighting is operative.
54−02	CABIN PWR Switch Guard	D	1	0	May be damaged or missing.

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.
71−69	Transformer Rectifier Unit (TRU)				
1)	TRU Line Contactor 1 (TLC1)	B	1	0	(M)(O) Except for extended operations, may be inoperative open (failed to close) provided: (a) TRU 2 and TRU 3 are verified operative, (b) TRU 1 is deactivated, (c) Both VFG systems are operative, and (d) All other EPCs functions are verified operative.
2)	TRU Line Contactor 2 (TLC2)	B	1	0	(M)(O) Except for extended operations, may be inoperative open (failed to close) provided: (a) TRU 1 and TRU 3 are verified operative, (b) TRU 2 is deactivated, (c) Both VFG systems are operative, and (d) All other EPCs functions are verified operative.

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	0	(M) May be inoperative provided ELT test function is verified to be operative.
2)	ELT-DT “Amber” LED Indicator***	C	1	0	(M) May be inoperative provided ELT−DT test function is verified to be operative.
3)	PBA Switch Light (light function only) EVAC CMD “ON”	C	1	0	(O) May be inoperative provided evacuation (EVAC) horn is verified to be operative.
02−02	Observer Seat (Including Associated Equipment)	D	1	0	(M) May be inoperative provided: (a) Procedures do not require its use, 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.
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.

(Cont’d)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
11−01	Pilot Seats (Cont'd)				
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.
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.
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, (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)					(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/are 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, (d) Procedures are established and used to alert crew members and passengers of inoperative bins/compartments/closets, and (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)				(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.
16−03	Footrests	C	4	0	One or more may be inoperative provided it is acceptable to affected flight crew member.
16−17	Eye Level Locator	C	1	0	May be inoperative or missing.
18−05	Cockpit Sun Visors/Sunshades				Item deleted at MMEL Issue 015.
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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
21−01 Passenger Seats (Cont'd)					(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 the taxi, takeoff, and landing position.
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.

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 restraint system is considered 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: (a) Properly stowed, or (b) Secured in the retracted position, or (Cont’d)

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) (Cont'd)				(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 restraint system is considered inoperative.
29−08	Non Essential Equipment & Furnishings (NEF) ***		−	0	May be inoperative, damaged, or missing provided item(s) is deferred in accordance with the NEF program outlined in the operator's Maintenance Control Manual (MCM) or Maintenance Control System, as applicable. (M) and (O) procedures, if required, must be available to the flight crew and included in the operator's appropriate document. NOTE: Exterior lavatory door ashtrays are not considered NEF items.
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.
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 (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
31−02	Galley/Cabin Waste Receptacles Access Doors/Covers (Cont'd)				(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.
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.
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.
41−08	Lavatory NO SMOKING Placards	B	−	−	May be missing provided associated lavatory smoke detection system is operative.
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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
60−01 Printed Supplemental Safety Information (Cont'd)					(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.
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.
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. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
60−03	Emergency Medical Kit (Cont'd)				
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).
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.
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 and used to alert crew members of missing or incomplete kits.
1)	First Aid Kit Seal (Required First Aid Kits)	A	−	−	(O) The 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 (Cont'd)

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) (Cont'd)				(d) Procedures are established and used to alert crew members of: 1 Missing or broken seal, and 2 Need to perform an inventory under proviso (c).
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.
61−04	Life Raft				
1)	Extended Flight Overwater Permitted	C	−	−	(M)(O) Any in excess of those required for the intended flight may be inoperative or missing for extended overwater flights provided: (a) Required distribution is maintained, (b) Inoperative life raft and its installed location are placarded inoperative, (c) When practical, the inoperative life raft is secured out of sight, and (d) Procedures are established and used to alert crewmembers of inoperative or missing equipment. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
25 − EQUIPMENT/FURNISHINGS					
61−04	Life Raft (Cont'd)				
2)	Extended Flight Overwater Restricted	D	−	−	(O) May be inoperative or missing provided: (a) Extended overwater flights are not conducted, and (b) Procedures are established and used to alert crewmembers of inoperative or missing equipment.
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 and used to alert crew members of inoperative or missing megaphones.
61−07	Flight Attendant Flashlights/Flashlight Holders				
1)	Flashlights	C	−	0	(O) May be inoperative or missing provided each inoperative or missing 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.

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 Emergency Locator Transmitter (ELT)	A	1	0	(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) Fixed Emergency Locator Transmitter − Distress Tracking (ELT−DT)***	A	1	0	(M)	May be inoperative provided: (a) ELT-DT is deactivated, (b) Placard is displayed in the flight deck indicating the date ELT-DT has been deactivated, and (c) Repair or replacement is made within the time interval prescribed by regulations.
	D	−	−	(M)	Any in excess of those required by regulations may be inoperative provided system is deactivated.
3) Survival Type ELTs	D	−	−		Any in excess of those required by regulations may be inoperative or missing.
4) 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.
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.

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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.
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 (Cont’d)

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
26 − FIRE PROTECTION					
10−01 FIDEX Control Unit (Cont'd)					(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: (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 (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)					(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.
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.
12−02 Auxiliary Power Unit (APU) Fire Warning Horn (Multifunctional Horn)	C	1	0	(O)	May be inoperative provided: (a) The APU condition is continuously monitored in the flight deck during APU operations, (b) The equipment cooling condition is continuously monitored in the flight deck when the aircraft is energized, (c) Battery only power is limited to 5 minutes, and (d) MECH CALL Panel Button is considered inoperative.

System & Sequence Nº	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) Operations are conducted in accordance with Airplane Flight Manual (AFM) Supplement 5 (Operation with airplane systems inoperative) for the required flight duration with landing gear extended, and (d) Operations with Steep Approach are not conducted. NOTE 1: In case of engine failure after V1, performance is the prime consideration and the landing gear should be retracted normally until performance penalty with gear down is not a problem. NOTE 2: The aircraft performance and flight path for takeoff and initial climb shall be determined considering the landing gear is left extended for a minimum of 10 minutes after takeoff. NOTE 3: The mission fuel planning shall be determined considering the landing gear is left extended for minimum of 10 minutes after takeoff.
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. (Cont'd)

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 (Cont'd)					
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.
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: (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)					(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 (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.
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 and used to alert crew members of missing portable fire extinguishers.
22−10 Overhead ENGINE & APU FIRE Panel					
1) APU FIRE PBA Switch Guard		C	1	0	May be inoperative, damaged or missing.

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)				Deleted, MMEL Issue 015.
25−02	Cargo High Rate Discharge (HRD) Fire Extinguisher Cartridge Bridgewire				Deleted, MMEL Issue 015.
25−03	Cargo High Rate Discharge (HRD) Fire Extinguisher Cartridge Bridgewire				Deleted, MMEL Issue 015.
25−04	Cargo Bay Fire Extinguisher, Low Rate Discharge (LRD) 1				Deleted, MMEL Issue 015.
25−06	Cargo Low Rate Discharge (LRD) 1 Fire Extinguisher Cartridge Bridgewire				Deleted, MMEL Issue 015.
25−08	Cargo Low Rate Discharge (LRD) 1 Fire Extinguisher Cartridge Bridgewire				Deleted, MMEL Issue 015.
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, (Cont'd)

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 (Cont'd)				(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.

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.
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.
00−08	Glareshield Panel SIDESTICK Priority Switch (“Arrow” and/or “PTY” light function only)	B	2	1	(O) One may be inoperative provided: (a) Glareshield sidestick priority function on both sides is verified operative, (b) Opposite glareshield panel SIDESTICK priority switch light functions are verified operative, and (c) Priority audio voice message is verified operative on both sides before each flight.
00−15	Side Stick				
1)	Autopilot (AP) Detents	C	2	0	(O) May be inoperative provided autoland operations are not conducted.
2)	Stick Shaker	B	2	1	(O) May be inoperative provided: (a) Remaining stick shaker is verified operative prior to each flight, and (b) Pilot flying has the operative side stick shaker.
01−05	Primary Flight Control Computer – Cut Out Switch				Item moved to 27−04−05 per TC MMEL Issue 012.
04−03	Aileron and Rudder Trim Panel				
1)	Lightplate	C	1	0	May be inoperative.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
27 − FLIGHT CONTROLS					
04−05 Primary Flight Control Computer (PFCC)					
1) PFCC 1		C	1	0	(O) May be inoperative provided: (a) PFCC 1 is deactivated, and (b) Remaining two PFCCs are operative.
A) 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) PFCC 2		C	1	0	(O) May be inoperative provided: (a) PFCC 2 is deactivated, and (b) Remaining two PFCCs are operative.
A) 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) PFCC 3		C	1	0	(O) May be inoperative provided: (a) PFCC 3 is deactivated, (b) Remaining two PFCCs are operative, and (c) APU is operated continuously during flight and APU generator is verified operative.
A) 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.

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.
53−01	High Lift Select Lever (HLSL)				
1)	Slat Channel 1 RVDT	B	2	0	(O) One or both HLSL RVDT related to Slat Channel 1 may be inoperative provided: (a) Both Flap channels are operative, (b) Slat Channel 2 is operative, (c) Slat/Flap Electronic Control Unit (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)	Flap Channel 2 RVDT	B	2	0	(O) One or both HLSL RVDT related to Flap Channel 2 may be inoperative provided: (a) Both Slat channels are operative, (b) Flap Channel 1 is operative, (c) Slat/Flap Electronic Control Unit (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. (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)				
3)	Panel Lightplate	C	1	0	May be inoperative.
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.
62−01	Multi-Function Spoiler				
1)	#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. (Cont'd)

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 (Cont'd)					(h) Electronic FCS Test (PBIT) is not performed, and (i) May be inoperative for one calendar day.
66−01 Flight Spoiler Control Panel					
1) Lightplate		C	1	0	May be 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.
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.
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 (Cont'd)

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) (Cont'd)				(e) PRVs for center tanks are operative.
21−40	Engine Inlet Fuel Pressure Switch	C	2	1	(M)(O) Except for extended operations, one may be inoperative provided: (a) Affected DMC contact of the switch is verified closed, (b) Left and right boost pumps are verified operative, (c) Fuel gravity transfer is verified operative, and (d) Left and right boost pumps are selected ON during the entire flight.
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.
22−03	Overhead FUEL Control Panel PBA Switch Lights (light function only)				
1)	FUEL GRAV XFR "ON"	C	1	0	May be inoperative.
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.
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.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
28 − FUEL					
23−02	L AC Boost Pump				Item deleted at MMEL Issue 015.
23−05	Defuel/Isolation Transfer Shutoff Valve (SOV)				Item deleted at MMEL Issue 015.
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.
23−25	Refuel Shutoff Valve (SOV)				
1)	Left/Right Wing Tank	B	2	1	(O) 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: Alternate procedure may be used to refuel affected tank.
2)	Center Tank	C	1	0	Except for extended operations, may be inoperative closed. NOTE: Refueling the center tank will not be possible.

System & Sequence Nº	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.
23−31	Flight Deck Virtual Refuel Panel ***	D	1	0	May be inoperative.

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 Nº	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.
41−03	Fuel Temperature Sensor	C	2	1	(O) Except for extended operations, one fuel temperature sensor may be inoperative provided: (a) Affected fuel temperature indication must show invalid on the FUEL synoptic page, and (b) Fuel tank temperature sensor in the opposite wing tank is verified operative before each 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.
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.
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.
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.
11−05 Pressure Filter Manifold					
1) Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C without Production Modsum 500T103776 and/or 500T104327)	C		3	2	(M) One may be inoperative provided: (a) Both case drain filter DPIs of the associated system are verified for non-activated condition, (b) Return filter DPI of the associated system is verified for non-activated condition, and (c) Associated pressure filter element is replaced. (Cont'd)

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 (Cont'd)				
2)	Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C with Production Modsum 500T103776 and/or 500T104327)	B	3	2	(M) One may be inoperative provided: (a) All case drain filter DPIs of the associated system are verified for non-activated condition, (b) Return filter DPI of the associated system is verified for non-activated condition, and (c) Associated pressure filter element is replaced.
11−06	Case Drain Filter Manifold				
1)	Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C without Production Modsum 500T103776 and/or 500T104327)	C	6	3	(M) One per hydraulic system may be inoperative provided: (a) Pressure filter DPI of the associated system is verified for non-activated condition, (b) Return filter DPI of the associated system is verified for non-activated condition, (c) Other case drain filter DPI of the associated system is verified for non-activated condition, (d) Associated case drain filter element is replaced, and (e) Associated synoptic page pressure indication is operative.
2)	Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C with Production Modsum 500T103776 and/or 500T104327)	B	−	0	(M) One or more may be inoperative provided: (a) Pressure filter DPI of the associated system is verified for non-activated condition, (b) Return filter DPI of the associated system is verified for non-activated condition, (c) Associated case drain filter element is replaced, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 − HYDRAULIC POWER					
11−06 Case Drain Filter Manifold (Cont'd)					(d) Associated synoptic page pressure indication is operative.
11−07 Return Filter Manifold					
1) Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C without Production Modsum 500T103776 and/or 500T104327)	C	3	0	(M)	One or more may be inoperative provided: (a) Both case drain filter DPIs of the associated system are verified for non-activated condition, (b) Pressure filter DPI of the associated system is verified for non-activated condition, and (c) Associated return filter element is replaced.
2) Differential Pressure Indicators (DPI), Systems 1, 2 and 3 (A/C with Production Modsum 500T103776 and/or 500T104327)	B	3	0	(M)	One or more may be inoperative provided: (a) All case drain filter DPIs of the associated system are verified for non-activated condition, (b) Pressure filter DPI of the associated system is verified for non-activated condition, and (c) Associated return filter element is replaced.
11−30 Hydraulic Reservoir Quantity Level Transducers (Systems 1, 2 and 3)	C	3	0	(M)	One or more may be inoperative provided: (a) Affected hydraulic reservoir quantity level transducer is deactivated, and (b) Associated hydraulic system reservoir quantity is visually verified once each flight day.

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.
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.
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.
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.
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.
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.

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.
14−09	Ground Servicing Panel				
1)	Cap, connection	D	9	0	(M) One or more may be damaged or missing.
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.
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.
31−02	Hydraulic System Pressure Sensors/Transducers				Item Deleted in Issue 015
31−03	Hydraulic Pump Pressure Switches				
1)	Hydraulic System 1 Pressure Switches	C	2	1	(M)(O) One may be inoperative provided: (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
29 − HYDRAULIC POWER					
31−03	Hydraulic Pump Pressure Switches (Cont'd)				
					(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.

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	May be inoperative.
2)	L WSHLD “OFF”	C	1	0	May be inoperative.
3)	R WSHLD “OFF”	C	1	0	May be inoperative.
4)	R SIDE “OFF”	C	1	0	May be inoperative.
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.
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) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) Associated WAI Valve is secured closed, (d) Both Ice Detection Systems are operative, (Cont’d)

System & Sequence Nº	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 (Cont'd)					(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.
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.
22−01 Engine Cowl Anti−Ice Valve (CAIV)					
	1) Lower Engine CAIV	B	2	0	(M) May be inoperative provided: (a) Affected valve is secured open, and (b) Same side upper CAIV is verified operative for outside temperature below 15°C (59°F) for initial deferral. NOTE 1: L(R) ENGINE FAULT (Advisory) and 30 L(R) ENGINE FAULT - COWL A/ICE REDUND LOSS (Info) may be displayed and remain active every second engine start with the valve secured open. NOTE 2: If the outside temperature is equal or higher than 15°C (59°F) for initial deferral, replace both valves prior to dispatch.
	2) Upper Engine CAIV [P/N: 999D0006-521]	B	2	0	(M) May be inoperative provided: (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4.	Remarks or Exceptions
30 − ICE AND RAIN PROTECTION						
22−01 Engine Cowl Anti−Ice Valve (CAIV) (Cont'd)						(a) Affected valve is secured open, and (b) Same side lower CAIV is verified operative for outside temperature below 15°C (59°F) for initial deferral. NOTE 1: L(R) ENGINE FAULT (Advisory) and 30 L(R) ENGINE FAULT - COWL A/ICE REDUND LOSS (Info) may be displayed and remain active every second engine start with the valve secured open. NOTE 2: If the outside temperature is equal or higher than 15°C (59°F) for initial deferral, replace both valves prior to dispatch.
41−08 Windshield Heating System						
1) Windshield Heat System	C	2	1	(M)		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, and (c) APPR 2 (CAT II) and Autoland Operations are not conducted.
42−01 Windshield Wiper Systems	C	2	0			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, and (b) APPR 2 (CAT II) and Autoland Operations are not conducted. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
30 − ICE AND RAIN PROTECTION					
42−01	Windshield Wiper Systems (Cont'd)				
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.
71−00	Drain Mast Heater Systems				
1)	FWD Drain Mast	C	1	0	(M) May be inoperative provided: (a) Associated heater is deactivated, (b) Associated drain valve is deactivated, (c) Water supply to the associated galley(s) and lavatory(ies) is/are secured OFF, (d) AFT drain mast heater system is operative, and (Cont'd)

System & Sequence Nº	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 (Cont'd)					(e) Procedures are established and used to ensure that the associated sink is not used.
2) AFT Drain Mast	C	1	0	(M)	May be inoperative provided: (a) Associated heater is deactivated, (b) Water supply to the associated galley(s) and lavatory(ies) is/are secured OFF, (c) FWD drain mast heater system is operative, and (d) Procedures are established and used to ensure that the associated sink is not used.
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.

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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	0	(O) May be inoperative provided Display Tuning Inhibit is verified operative.
2)	L CURSOR R/ INHIB Light Bars	C	2	0	One or both may be inoperative provided associated cursor inhibit function is verified operative before each flight.
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.
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.

(Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 − INDICATING/RECORDING SYSTEMS					
21−01	Clock Indications on AFD (Cont'd)				
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.
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.
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	

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.
5) BARO Rotary Knob		C	2	1	(O) One may be inoperative provided alternate procedures are established and used.

(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)				
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.
12)	"1/2" Push Button	C	2	1	
13)	TUNE/DATA Rotary knob	C	2	1	(O) May be inoperative provided:

(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)					(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.
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.
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. (Cont'd)

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) (Cont'd)				
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.
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. (Cont'd)

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) (Cont'd)				
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.
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.
61−24 Adaptive Flight Display				
1) Display Unit #3 (DU3)	A	1	0	(O) May be inoperative provided: (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 − INDICATING/RECORDING SYSTEMS					
61−24 Adaptive Flight Display (Cont'd)					(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, (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, (b) All remaining DUs are operative, and (c) Repairs are made within three flight days.
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. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
31 − INDICATING/RECORDING SYSTEMS					
74−00 Electronic Checklist (ECL) Function (Cont'd)					
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.

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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	May be inoperative.
2)	GEAR AURAL “CNCL”	C	1	0	May be inoperative.
3)	ALTN BRAKE “ON”	C	1	0	May be inoperative.
00−02	External Service Control Panel PBA Switch Lights (light function only)				
1)	TOW PWR “ON”	C	1	0	(O) May be inoperative provided TOW STATUS “NO TOW”, “TOW” lights are verified 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.
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 (Cont’d)

System & Sequence Nº	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 (Cont'd)				(e) Operations with steep approach are not conducted.
43−03	Electric Motor Actuator Controller (EMAC)	C	8	6	(M)(O) One EMAC per landing gear may be inoperative provided: (a) Affected EMAC(s) is/are deactivated, (b) Associated EMAs are retracted, (c) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), and (d) Operations with steep approach are not conducted.
43−05	Electric Motor 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.
43−15	AutoBrake System (ABS)	C	1	0	(O) May be inoperative provided AUTOBRAKE control knob is selected OFF.
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.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
32 − LANDING GEAR					
45−01 Electrical / Towing Service Panel					
1) PARK BRK Switch	D		1	0	(O) May be inoperative provided cockpit PARK BRAKE switch is operative.
2) TOW PWR Function	D		1	0	(O) May be inoperative provided alternate towing procedures are established and used.
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.
47−01 Tire Pressure Indication System (TPIS)	C		1	0	(O) May be inoperative provided TPIS is deactivated.
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. NOTE: This item is applicable when 32 BRAKE FAULT − BRAKE TEMP SENSOR INOP (Info) is not displayed before deactivating the affected sensor.
49−20 Brake Wear Monitoring System					
1) Brake Wear Annunciation	C		4	0	(O) May be inoperative provided alternate procedures are established and used.

(Cont'd)

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 (Cont'd)				
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.
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.
51−38	Towing Control Box "NO TOWING" "TOW" Lights				
1)	Towing with flight compartment attended	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.
2)	Alternate towing procedures	C	2	0	(O) May be inoperative provided alternate procedures are established and used.
51−40	Towing Lug on NLG				
1)	Lug inoperative	C	1	0	(M) May be inoperative provided alternate towing procedures are established and used.

(Cont'd)

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 (Cont'd)					
2) Lug missing	C	1	0	(O)	May be missing provided alternate towing procedures are established and used.

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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.
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	C	−	0	May be inoperative for day operations.
13−15	Entry Lights	C	6	0	May be inoperative.
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.

System & Sequence Nº	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.
24−00	Passenger Lighted Information Signs				
1)	Affected seat or lavatory is not occupied	C	−	−	(M) May be inoperative provided: (a) Associated passenger seat, flight attendant seat or lavatory from which a passenger lighted information sign is not readily legible is not occupied, (b) Associated seat or lavatory is blocked and placarded “DO NOT OCCUPY”, and (c) For extended operations with passengers there are at least two serviceable lavatories on the aircraft.
2)	Affected seat or lavatory is occupied	C	−	−	(O) May be inoperative and associated passenger seat, flight attendant seat or lavatory may be occupied provided: (a) Passenger Address (PA) system operates normally, and (b) PA system is used to notify passengers and cabin crew when associated sign(s) are placed on or off.
3)	Operations without passengers	C	−	0	(O) May be inoperative 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.

(Cont’d)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 − LIGHTS				
24−00 Passenger Lighted Information Signs (Cont'd)				
5) Automatic Function	C	−	0	(O) May be inoperative provided: (a) Manual control function is operative, and (b) Alternate procedures are established and used.
31−01 Cargo Compartment Lights System	D	−	−	Individual lights may be inoperative provided sufficient lighting is available for ground personnel to perform their duties.
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.
32−03 Wing Inspection Lights System	C	2	0	May be inoperative provided ground deicing procedures do not require their use.
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	C	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 (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
33 − LIGHTS					
41−03 Landing Lights System (Cont'd)					(b) Nose landing light is operative.
B) Day operations		C	2	0	Both may be inoperative for daylight operations.
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		C	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		C	2	0	Both may be inoperative for daylight operations.
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 (Cont'd)

System & Sequence Nº		Item	1.	2. Number Installed	3. Number Required For Dispatch		4. Remarks or Exceptions
33 − LIGHTS							
42−02	Navigation Lights System (Cont'd)						(c) One white aft navigation light.
2)	Day operations	C		6	0		May be inoperative for daylight operations.
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.
44−07	Red Beacon Lights System						
1)	Day and night operations	C		2	0	(O)	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		May be inoperative provided airplane is not operated at night.
46−01	Logo Lights System ***	D		2	0		One or both may be inoperative.
50−01	Aisle Overhead Emergency Lights	C		8	7		One light may be inoperative.

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		A	−	−	One may be inoperative for three flight days provided that associated door/exit is considered inoperative. NOTE 1: If any twin overwing exits are served by a single sign, both exits should be considered inoperative. NOTE 2: Refer to item ATA 52-11-00 for operations with emergency exits inoperative.
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.
55−02 Exterior Emergency Lights System					
1) Overwing Emergency Lights					
A) Day operations		C	4	0	May be inoperative for day operations.

(Cont'd)

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 (Cont'd)					
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.

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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.
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.
41−01 Weather Radar System (WXR)	C	1	0	Except for extended operations beyond 120 minutes, may be inoperative provided weather radar is not required by regulations. NOTE: Any WXR mode or function that is operative may be used.

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 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)					(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.
42−03	Overhead Control Panel PBA Switchlights (light function only)					
1)	TAWS GEAR "INHIB"	C	1	0	(O)	May be inoperative provided the TAWS GEAR "INHIB" PBA switch function is verified operative.
2)	TAWS TERR "INHIB"	C	1	0	(O)	May be inoperative provided the TAWS TERR "INHIB" PBA switch function is verified operative.
3)	TAWS FLAP "INHIB"	C	1	0	(O)	May be inoperative provided the TAWS FLAP "INHIB" PBA switch function is verified operative.
4)	TAWS GS "CNCL"	C	1	0		May be inoperative.
43−01	Traffic Alert and Collision Avoidance System					
1)	TCAS II System	B	1	0	(O)	May be inoperative provided: (a) The system is deactivated and secured, and (b) Enroute or approach 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
34 − NAVIGATION					
43−01 Traffic Alert and Collision Avoidance System (Cont'd)					
2) RA Display System(s) (Overlays on MFW and HSI) (left and right sides)					
A) Inoperative on non−flying pilot side		C	2	1	May be inoperative on non-flying pilot side.
B) One or both inoperative on any side		C	2	0	May be inoperative provided: (a) Traffic alert visual display and audio functions are operative, (b) TA only mode is selected by the crew, and (c) Enroute or approach procedures do not require its use.
3) TA Display System(s) (Overlays on MFW and HSI) (left and right sides)		C	2	0	May be inoperative provided: (a) RA visual display and audio functions are operative, and (b) Enroute or approach procedures do not require its use.
4) Audio Functions		B	1	0	May be inoperative provided enroute or approach procedures do not require use of TCAS.
44−00 Radio Altimeter					
1) One radio altimeter inoperative, 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) (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 − NAVIGATION					
44−00 Radio Altimeter (Cont'd)					27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (b) Faulty radio altimeter is deactivated, (c) The other radio altimeter is verified operative, (d) Operations with steep approach are not conducted, (e) Approach minimums do not require its use, (f) Autoland operations are not conducted, and (g) RNP AR approach operations are not conducted.
2) One radio altimeter inoperative, aircraft with third radio altimeter ***		C	3	2	(O) May be inoperative provided: (a) Faulty radio altimeter is deactivated, (b) Remaining two radio altimeters are verified operative, (c) Approach minimums do not require its use, (d) LAND 3 Operations (CAT III − fail operational) are not conducted, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 − NAVIGATION					
44−00 Radio Altimeter (Cont'd)					
					(e) Operations with steep approach require to check STEEP APPR in the ARRIVALS dialog box, on ground, prior to flight.
3) Two radio altimeters inoperative, aircraft with third radio altimeter ***	C	3	1	(O)	May be inoperative provided: (a) None of the following messages are displayed: RAD ALT 1 FAIL (Advisory) if RAD ALT 2 and RAD ALT 3 are failed RAD ALT 2 FAIL (Advisory) if RAD ALT 1 and RAD ALT 3 are failed RAD ALT 3 FAIL (Advisory) if RAD ALT 1 and RAD ALT 2 are failed AT RETARD INHIBIT (Caution) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (b) Faulty radio altimeters are deactivated, (c) The third radio altimeter is verified operative, (d) Operations with steep approach are not conducted, (e) Approach minimums do not require their use, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 − NAVIGATION					
44−00 Radio Altimeter (Cont'd)					(f) Autoland operations are not conducted, and (g) RNP AR approach operations are not conducted.
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.
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.
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). (Cont'd)

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) (Cont'd)					
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.
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.
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.
53−00 Distance Measuring Equipment (DME)	D	−	−		Any in excess of those required by regulations may be inoperative.
54−00 ATC Transponder					
1) All modes except ADS-B OUT	D	2	1	(O)	May be inoperative provided the other ATC transponder is verified operative.
2) One ADS-B OUT extended squitter					
A) Required by operations	D	2	1	(O)	One may be inoperative provided: (a) The ADS-B OUT function is verified operative on the other transponder, and (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
34 − NAVIGATION					
54−00 ATC Transponder (Cont'd)					
					(b) The other transponder is selected before flight.
3) Both ADS-B OUT extended squitters					
A) Required by operations	C	2	0	(O)	Both may be inoperative provided alternate procedures are established and used.
B) Not required by operations	A	2	0		Both may be inoperative provided: (a) Operations do not require ADS-B use, and (b) Repairs are made prior to completion of the next heavy maintenance visit.
61−09 Flight Management System (FMS) Navigation Databases					
1) One database inoperative	C	2	1	(O)	Any in excess of one may be inoperative provided: (a) The operative database must be up to date for routes, departures, arrival and approach procedures that require the use of navigation database for RNAV/RNP, (b) The operative database is available and used by the flight crew member(s) responsible for navigation, and (c) Radio navigation aids, which are required to be flown for departure, arrival and approach procedures are manually tuned and identified. (Cont'd)

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 (Cont'd)					
2) Two databases inoperative		C	2	0	(O) One or more may be inoperative for the intended flight route where conventional (non-RNAV/RNP) navigation is sufficient, provided: (a) Current aeronautical information (e.g charts) is available for entire route and for the aerodromes to be used, (b) Navigation database information is disregarded, (c) Radio navigation aids, which are required to be flown for departure, arrival and approach procedures are manually tuned and identified, and (d) RNP AR Approach operations are not conducted.
3) One or more database out of date		A	2	0	(O) One or more may be out of date for a maximum of 10 calendar days provided: (a) Area Navigation (RNAV/RNP) departure, arrival and approach procedures are checked not to depend on the data amended in the current database cycle or Conventional (Non− RNAV/RNP) or ANSP assistance are used as an alternative to RNAV/RNP procedures which have been amended in the current database cycle, (b) Before each flight, current aeronautical information is used to verify the database Navigation Fixes, the coordinates, frequencies, status (as applicable) and suitability of Navigation Facilities required for the intended flight route, and (Cont'd)

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 (Cont'd)				(c) Radio navigation aids, which are required to be flown for departure, arrival and approach procedures and which have been amended in the current database cycle, are manually tuned and identified.

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, (d) Crew oxygen EICAS pressure readout is verified operative before each flight, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 − OXYGEN					
11−05 Oxygen Pressure Switch (Cont'd)					(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.
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.

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.
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.
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.
21−01 Individual Passenger Oxygen Box Units	D	−	−	(M)(O) May be inoperative with no flight altitude restriction provided: (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 − OXYGEN					
21−01	Individual Passenger Oxygen Box Units (Cont'd)				(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.
21−04	Passenger Service Unit (PSU) Oxygen Release Tool	D	3	0	(O) May be inoperative or missing.
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.

System & Sequence Nº	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.
25−01 Overhead Control Panel PBA Switch Lights (light function only)					
1) PAX OXY “ DPLY”		C	1	0	
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 (Cont’d)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
35 − OXYGEN					
30−01 Protective Breathing Equipment (PBE) (Cont'd)					(c) Procedures are established and used to alert crew members of inoperative or missing equipment.
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.

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.
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 at or below FL 310, (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), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.
2)	Associated bleed air and 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, (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)					(c) Associated air conditioning pack is selected OFF, (d) Flight is conducted at or below FL 310, (e) Both avionics bay smoke detectors are operative, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.
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, (f) Fuel tank inerting system is considered inoperative, and (g) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16°C. NOTE 1: For fuel tank inerting system consider inoperative refer to Section 1 item 47-30-00-1.

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 to 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 ducts is verified, (e) Crossbleed Valve (CBV) is verified operative, (f) Flight is conducted at or below FL 310, (g) Both avionics bay smoke detectors are operative, (h) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (i) FLAP 4 landings are prohibited in icing conditions, and (j) 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 Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	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, (g) Fuel Tank Inerting System is considered inoperative, and (h) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16°C. NOTE 1: For fuel tank inerting system consider inoperative refer to Section 1 item 47-30-00-1.
C) Both engine bleed air systems inoperative					Item deleted at MMEL Issue 015
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, (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)					(c) Flight is conducted at or below FL 310, (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), (g) FLAP 4 landings are prohibited in icing condition, and (h) Operations with steep approach are not conducted.
2) Associated engine bleed air and pack off	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) Associated air conditioning pack is selected OFF, (d) Flight is conducted at or below FL 310, (e) Both avionics bay smoke detectors are operative, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing condition, and (h) Operations with steep approach are not conducted. (Cont'd)

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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 flight 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 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, (f) Fuel Tank Inerting System is considered inoperative, and (g) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16° C. NOTE: For fuel tank inerting system consider inoperative refer to Section 1 item 47−30−00−1.
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 at or below 23000 ft, per AFM Chapter 2 "APU Bleed Air Limitations", (e) Passenger load is limited per AFM Chapter 2 "APU Bleed Air Limitations", (Cont'd)

System & Sequence Nº	Item	1.	2.	3.	4.
			Number Installed	Number Required For Dispatch	Remarks or Exceptions
36 − PNEUMATIC					
12−01 Engine Bleed Pressure Regulating Shutoff Valve (PRSOV) (Cont'd)					(f) Airplane is not operated in known or forecast icing conditions, (g) Both avionics bay smoke detectors are operative, and (h) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16°C.
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) Associated bleed system is selected to OFF, (b) Affected 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 ducts is verified, (e) Crossbleed Valve (CBV) is verified operative, (f) Flight is conducted at or below FL 310, (g) Both avionics bay smoke detectors are operative, (h) Operations are conducted in accordance with AFM Supplement 5 (Operation with Airplane Systems Inoperative), (i) FLAP 4 landings are prohibited in icing conditions, and (j) 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					
12−05	High Pressure Shut Off Valve (HPV) (Cont'd)				
2)	Both HPV inoperative	B	2	0	(M)(O) Except for extended operations, 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, (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 ft MSL, (e) Airplane is not operated in known or forecast icing conditions, (f) Aircraft crews are the only occupants of the aircraft, (g) Fuel tank inerting system is considered inoperative, and (h) Takeoffs are conducted with Outside Air Temperature (OAT) at or above 16°C. NOTE 1: For fuel tank inerting system consider inoperative refer to Section 1 item 47-30-00-1.
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.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−00 Bleed Air Leak and Overheat Detection System					
1) Loop Redundancy (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 post SB BD500−362002)					
A) 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	−	−	(M) May be displayed provided that affected loops have implemented SB BD500−362002. NOTE: This item is applicable to all loops except trim air, APU, and fuselage left side bleed loops.
2) Loop Redundancy (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500−362002 OR BD500−362003)					
A) 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	−	−	(M) May be displayed provided: (a) Inoperative loop(s) and associated sensing element(s) is/are identified, (b) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, (c) Functional test the sensing elements for the remaining operative loops, and (d) Verify no additional loops have faulted before each flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−03 Pack Bleed Air Leak and Overheat Detection Loop					
1) Left Pack Zone					
A) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	2	0	(M)(O) May be inoperative provided: (a) Except for engine start, APU bleed is selected OFF, (b) Left Pressure Regulating Shutoff Valve (PRSOV) is considered inoperative, (c) Left pack is considered inoperative, (d) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (e) Fuel tank inerting system is considered inoperative, (f) Wing Anti-Ice (WAI) system is selected OFF, (g) Aircraft is not operated in known or forecast icing conditions, and (h) Verify no additional loops have faulted before each flight.
B) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362002)		C	2	0	(M)(O) May be inoperative provided: (a) Except for engine start, APU bleed is selected OFF, (b) Left Pressure Regulating Shutoff Valve (PRSOV) is considered inoperative, (c) Left pack is considered inoperative, (d) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (e) Fuel tank inerting system is considered inoperative, (f) Wing Anti-Ice (WAI) system is selected OFF, (Cont'd)

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System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−03 Pack Bleed Air Leak and Overheat Detection Loop (Cont'd)					(g) Aircraft is not operated in known or forecast icing conditions, (h) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (i) Verify no additional loops have faulted before each flight.
2) Right Pack Zone					
A) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)	C	2	0	(M)(O)	May be inoperative provided: (a) Right Pressure Regulating Shutoff Valve (PRSOV) is considered inoperative, (b) Right pack is considered inoperative, (c) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (d) Wing Anti-Ice (WAI) system is selected OFF, (e) Aircraft is not operated in known or forecast icing conditions, and (f) Verify no additional loops have faulted before each flight. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−03 Pack Bleed Air Leak and Overheat Detection Loop (Cont'd)					
	B) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362002)	C	2	0	(M)(O) May be inoperative provided: (a) Right Pressure Regulating Shutoff Valve (PRSOV) is considered inoperative, (b) Right pack is considered inoperative, (c) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (d) Wing Anti-Ice (WAI) system is selected OFF, (e) Aircraft is not operated in known or forecast icing conditions, (f) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (g) Verify no additional loops have faulted before each flight.
21−05 Wing Anti-Ice Bleed Air Leak and Overheat Detection Loop					
1) Left Wing Anti−Ice Zone					
	A) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)	C	2	0	(M) May be inoperative provided: (a) Left Wing Anti-Ice Valve (WAIV) is considered inoperative, and (b) Verify no additional loops have faulted before each flight. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−05 Wing Anti-Ice Bleed Air Leak and Overheat Detection Loop (Cont'd)					
B) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362002)		C	2	0	(M) May be inoperative provided: (a) Left Wing Anti-Ice Valve (WAIV) is considered inoperative, (b) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (c) Verify no additional loops have faulted before each flight.
2) Right Wing Anti-Ice Zone					
A) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	2	0	(M) May be inoperative provided: (a) Right Wing Anti-Ice Valve (WAIV) is considered inoperative, and (b) Verify no additional loops have faulted before each flight. (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−05 Wing Anti-Ice Bleed Air Leak and Overheat Detection Loop (Cont'd)					
	B) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362002)	C	2	0	(M) May be inoperative provided: (a) Right Wing Anti-Ice Valve (WAIV) is considered inoperative, (b) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (c) Verify no additional loops have faulted before each flight.
21−07 APU Bleed Air Leak and Overheat Detection Loop					
	1) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)	C	2	0	(M) May be inoperative provided: (a) APU system is considered inoperative, and (b) Verify no additional loops have faulted before each flight.
	2) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362002 or BD500-362003)	C	2	0	(M) May be inoperative provided: (a) APU system is considered inoperative, (b) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (c) Verify no additional loops have faulted before each flight.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
36 − PNEUMATIC					
21−09 Trim Air Bleed Leak and Overheat Detection Loop					
1) Inoperative not annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	2	0	(M) May be inoperative provided: (a) Trim air system is considered inoperative, (b) Trim Air Shutoff Valve (TASOV) is secured closed, (c) Trim Air Pressure Regulating Valve (TAPRV) is secured closed, and (d) Verify no additional loops have faulted before each flight.
2) Inoperative annunciated by 36 LEAK DET FAULT − LOOP REDUND LOSS (Info) (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 pre SB BD500-362003)		C	2	0	(M) May be inoperative provided: (a) Trim air system is considered inoperative, (b) Trim Air Shutoff Valve (TASOV) is secured closed, (c) Trim Air Pressure Regulating Valve (TAPRV) is secured closed, (d) No bleed leakage adjacent to and surrounding the inoperative sensing element(s) is verified, and (e) Verify no additional loops have faulted before each flight.
3) Loop Redundancy (A/C 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 post SB BD500-362003)					
A) 36 LEAK DET FAULT − LOOP REDUND LOSS (Info)		C	−	−	(M) May be displayed provided that trim air loop has implemented SB BD500−362003.

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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 Potable Water System		C	1	0	(M)(O) May be inoperative provided: (a) System is drained, and (b) Procedures are established to ensure that system is not serviced. 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) Individual Components of Potable Water System		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.
	A) Water Pumps	D	2	1	May be inoperative.
	B) Water Heaters	D	−	0	May be inoperative.
	C) Potable Water Mixers	D	−	0	(M) May be inoperative provided that associated water heater is deactivated.
10−02 Potable Water System					Content moved under 38-10-01 at MMEL Issue 015.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 − WATER/WASTE					
30−01	Lavatory Waste System				
1)	Non-extended operations	C	−	0	(M)(O) Except for extended operations with passengers, associated system may be inoperative provided: (a) Associated components are deactivated or isolated to prevent leaks, and (b) Associated lavatory door is secured closed and placarded,“ INOPERATIVE − DO NOT ENTER“. NOTE: These provisions are not intended to prohibit inspections by crew members. NOTE: Aviation Occupational Health & Safety (AOH&S) requirements should be addressed.
2)	Extended operations	C	−	2	(M)(O) Associated lavatory system may be inoperative provided: (a) Associated components are deactivated or isolated to prevent leaks, (b) Associated lavatory door is closed and placarded,“INOPERATIVE − DO NOT ENTER“, and (c) There are at least two serviceable lavatories on the aircraft.
3)	Individual Component of Lavatory Waste System	C	−	−	(M)(O) Individual components may be inoperative provided: (a) Associated components are deactivated or isolated, and (Cont’d)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
38 − WATER/WASTE					
30−01 Lavatory Waste System (Cont'd)					(b) Associated system components are verified not to have leaks. NOTE 1: Any portion of system that operates normally may be used. NOTE 2: For the waste tank ultrasonic point level sensors, refer to item 38−32−03.
4) 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.
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.

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				Content moved under 38-30-01 at MMEL Issue 015.
32−03	Waste Tank Ultrasonic Point Level Sensor				
1)	75% Sensor	C	1	0	(M) May be inoperative provided: (a) Affected 75% sensor is deactivated, (b) 100% sensor is verified operative, and (c) Waste tank servicing is done every flight day.
2)	100% Sensor	C	1	0	(M) May be inoperative or showing misleading full tank provided: (a) Affected 100% sensor is deactivated, and (b) 75% sensor is verified operative.

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.
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. (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)				
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.
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. (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)					
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.
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.
11−09 CMS Backup Functions					
1) Cabin Handset	D		−	−	(O) May be inoperative provided alternate procedures are established and used.
11−13 CMS Passenger Service Unit Controllers	C		−	−	May be inoperative provided: (a) Associated ordinance signs are considered inoperative, (Cont'd)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
44 − CABIN SYSTEMS					
11−13	CMS Passenger Service Unit Controllers (Cont'd)				(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. NOTE 1: For cabin speakers considered inoperative refer to Section 1 (Emergency Evacuation Command System) Item 25-60-02. NOTE 2: For reading lights considered inoperative refer to Section 1 (NEF) Item 25-29-08. NOTE 3: For attendant call lights considered inoperative refer to Section 1 (Area Call Panel Lights System) Item 33-22-01.
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.
21−00	CMS Printer ***	D	1	0	May be inoperative.

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.
04−01 Onboard Data Loader (ODL)		C	1	0	May be inoperative provided maintenance procedure does not require its use.
40−00 Cockpit Printer		C	1	0	May be inoperative. NOTE: Any portion of printer which operates normally may be used.

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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.
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.
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.

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 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)					
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)					
	A) Procedures require cTWLU	D	1	0	(O) May be inoperative provided alternate procedures are established and used.
	B) Procedures do not require cTWLU	A	1	0	May be inoperative provided: (a) Operations do not require its use, and (b) Repair is made before the completion of the next base maintenance check as per latest Maintenance Planning Document (MPD).
8) CWLU (Crew Wireless LAN Unit)					
	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					
	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.

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.

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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 (TIV) 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.

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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	0	May be inoperative.
00−03	Auxiliary Power Unit (APU) System	C	1	0	Except for extended operations, may be inoperative.
14−19	APU Inlet Door Actuator				
1)	APU inlet door closed	C	1	0	(M)(O) Except for extended operations, may be inoperative in closed position provided APU is considered inoperative.
2)	APU inlet 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 inlet 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.
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.
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.

(Cont’d)

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
49 − AIRBORNE AUXILIARY POWER					
62−05	APU Shutdown Switches (Cont'd)				
	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.
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.

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 Nº	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.
22−01 Cargo Nets					
1) Door Net (including associated equipment)					
	A) Cargo compartment empty	D	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	D	2	0	(O) 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

(Cont'd)

System & Sequence Nº	Item 1.	2. Number Installed	3. Number Required For Dispatch	4. Remarks or Exceptions
50 − CARGO EQUIPMENT				
22−01 Cargo Nets (Cont'd)				aircraft Weight and Balance Manual (WBM) are observed. NOTE: Associated equipment includes quick release attachments, anchor plates, net posts, narrow hooks, floor pan fitting rings/post and cam buckles.

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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.
11−01	Passenger/Service Door Hold Open Mechanism	C	4	1	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Nº	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	
21−01	Overwing Emergency Exit Door (OWEED) Hold Open Mechanism	C	−	0	May be inoperative provided alternate procedures are established and used.
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. (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)					
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, (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.

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.
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.
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	

(Cont'd)

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 (Cont'd)					
2) Flight Attendant Position Control Panel (Call Buttons, Lights)	C		−	0	(O) May be inoperative provided alternate procedures are established and used.

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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.

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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.
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.
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.

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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)	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)	All engines except PW1519G	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.

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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.
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.

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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				Item deleted at MMEL Issue 012.
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. NOTE: For the oil debris monitor that is considered inoperative, observe the limitations provided in section 2 through the message: 79 L(R) ENGINE FAULT − OIL DEBRIS MON INOP (Info).
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.
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.
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.

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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.
32−01	Powered Door Opening System (PDOS)	D	2	0	(M) May be inoperative provided alternate procedures are established and used.
36−04	Pre-Cooler Exit (PCE) Doors				
1)	One or both inoperative in the open position	C	2	0	(O) 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.

(Cont'd)

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 (Cont'd)				
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.
38−00	Door Opening System (DOS)	D	2	0	May be inoperative.

System & Sequence Nº	Item	1.	2. Number Installed	3. Number Required For Dispatch	4. 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 restrictive.
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.
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.

System & Sequence Nº		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.

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.
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.

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SECTION 2

CAS MESSAGE ORIENTED MMEL RELIEF

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1. The following new section has been authorized in accordance with the provisions of TCCA MMEL GB Item 00−00−0, Rev 1, or later, regarding dispatching directly from displayed CAS (Crew Alerting System) messages. “CAS message” relief is an alternative to the standard method of MMEL dispatch relief, as is normally achieved through fault isolation procedures, and the subsequent dispatch under the traditional LRU oriented MMEL relief. This Section 2 has been developed with the objective of allowing flight crews to dispatch from the displayed CAS message, without specifically identifying associated failed LRUs or components.

   As Section 2 is intended as an alternative dispatch relief methodology, the LRU-oriented relief (Section 1) will be retained in order to provide maximum flexibility for dispatch relief. Flight crews/operators may dispatch failures with reference to either Section 1 or Section 2 of this MMEL to the advantage that either associated relief may provide. Upon comparison, it will be recognized in some cases that dispatch relief provisos for posted CAS messages to those of the related LRU dispatch relief, the provisos associated with the CAS message can appear more restrictive in content and/or relief interval. Without the opportunity for fault isolation through maintenance, it must be assumed that worst-case failure conditions always underlie the posted message − commensurately, dispatch should be more restrictive.

   However, where maintenance personnel are available and fault isolation conducted, relief provisos in Section 1 may be found to provide fewer or less stringent restrictions upon operations and offer a longer relief interval.

   Section 2 has been arranged in alphabetical order of the indicated CAS message, by ATA Chapter. However, to avoid any possible miss−identification, each message is identified beneath as to its alert level.

   Repair intervals (A, B, C & D) associated with CAS message reliefs herein, remain consistent with those of Section 1, and as described in the Definitions section in the front matter of this MMEL.

   In conjunction with Section 2, a new separate dispatch procedures section has also been developed, also arranged in alphabetical order of the indicated CAS message. Where deemed necessary, the familiar “O” indicates the need for such supporting tasks, the scope of which shall be at the discretion of the approval authority. Acceptable tasks include, but are not necessarily limited to the following duties:

   1. Procedures described which exercise cockpit (or cabin) system controls utilized in normal flight operations;

   2. Deactivation of affected systems, as achieved by pulling system breaker or use of remote electronic system isolation;

   3. Visual inspection behind panels (internal or external) which are accessible without tools via quick-release latches and which clearly indicate their unlocked or unsafe state; (red/green safe window; flush fit latches).

   4. Visual confirmation of remote gauge indications, or valve positions as provided by integral external indicators.

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CAS Message Indication	1.	2. Remarks and Exceptions
21−00−001−01 **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.
21−00−003−01 **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.
21−00−003−02 **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.
21−00−003−03 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT − FWD CARGO TAV INOP	C	(O) May be displayed provided: (a) None of the following messages is displayed: 21 AIR SYSTEM FAULT - TRIM AIR SOV FAIL OPEN (Info) 21 AIR SYSTEM FAULT − TRIM AIR PRV FAIL OPEN (Info), (b) TRIM AIR is selected OFF before each flight, and (c) Live animals or temperature sensitive cargo is not carried in the forward cargo compartment.

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−003−04 **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.
21−00−017−01 **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.
21−00−017−03 **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. NOTE: Duct temperature may fluctuate rapidly (AIR synoptic page) with TAPRV deactivated. Warmer air may be expected in the affected zones.
21−00−021−01 **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.
21−00−025−01 **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, (e) Minimum enroute altitude does not exceed 10000 ft above MSL, and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−025−01 **AUTO PRESS FAIL** (CAUTION) (Cont'd)		(f) Selected landing field elevation is at or below 8000 ft.
21−00−027−01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT − AVIO TEMP SNSR REDUND LOSS	D	May be displayed.
21−00−029−01 **EQUIP BAY COOL FAULT** (ADVISORY) 21 EQUIP BAY COOL FAULT − EFAN CAN BUS INOP	C	May be displayed.
21−00−031−01 **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.
21−00−035−01 **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. NOTE: When the INLET PBA switch is selected OFF, the K_a / K_u band antenna (if equipped) does not operate.
21−00−043−01 **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.
21−00−045−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−045−01 **FWD CARGO LO TEMP** (CAUTION) (Cont'd)		(b) Live animals or temperature sensitive cargo are not carried in forward cargo compartment.
21−00−063−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − L PACK TEMP SNSR REDUND LOSS	C	May be displayed.
21−00−065−01 **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 Airplane Flight Manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative).
21−00−067−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − MIX MANF TEMP SNSR REDUND LOSS	C	May be displayed.
21−00−073−01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT − L PACK PRESS SNSR REDUND LOSS	C	May be displayed.
21−00−079−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − R PACK TEMP SNSR REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−081−01 **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. NOTE: For left air conditioning pack considered inoperative refer to section 2 item 21-00-133-01.
21−00−083−01 **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. NOTE: For right air conditioning pack considered inoperative refer to section 2 item 21-00-135-01.
21−00−089−01 **AIR SYSTEM FAULT** (ADVISORY) 21 AIR SYSTEM FAULT − R PACK PRESS SNSR REDUND LOSS	C	May be displayed.
21−00−093−01 **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, (c) Aircraft is operated in AUTO pressurization mode, and (d) In flight, MAN pressurization mode is used if required by AFM Non-Normal procedures.
21−00−095−03 **PRESSURIZATION FAULT** (ADVISORY) 21 PRESSURIZATION FAULT − MANUAL MODE INOP		Item deleted at MMEL Issue 015.
21−00−097−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−099−01 **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, (c) Aircraft is operated in AUTO pressurization mode, and (d) In flight, MAN pressurization mode is used if required by AFM Non-Normal procedures.
21−00−107−01 **R PACK OVHT** (CAUTION) 21 R PACK OVHT − R PACK INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 L PACK FAULT − L PACK TEMP SNSR INOP 21 L PACK OVHT − L PACK INOP 21 PACK FAULT − L BYPASS VLV INOP 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP (b) Right air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with Airplane Flight manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−111−01 **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.
21−00−117−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−119−01 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL − L PACK INLET PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 PACK FAULT − R BYPASS VLV INOP 21 PACK FAULT − R PACK DISCH PRESS SNSR INOP 21 R PACK FAULT − R PACK TEMP SNSR INOP 21 R PACK OVHT − R PACK INOP (b) Left air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−121−01 **L PACK OVHT** (CAUTION) 21 L PACK OVHT − L PACK INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 PACK FAULT − R BYPASS VLV INOP 21 PACK FAULT − R PACK DISCH PRESS SNSR INOP 21 R PACK FAULT − R PACK TEMP SNSR INOP 21 R PACK OVHT − R PACK INOP (b) Left air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−123−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − L BYPASS VLV INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 PACK FAULT − R BYPASS VLV INOP (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−123−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − L BYPASS VLV INOP (Cont'd)		21 PACK FAULT − R PACK DISCH PRESS SNSR INOP 21 R PACK FAULT − R PACK TEMP SNSR INOP 21 R PACK OVHT − R PACK INOP (b) Left air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−125−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 PACK FAULT − R BYPASS VLV INOP 21 PACK FAULT − R PACK DISCH PRESS SNSR INOP 21 R PACK FAULT − R PACK TEMP SNSR INOP 21 R PACK OVHT − R PACK INOP (b) Left air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with Steep Approach are not conducted.
21−00−127−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − R BYPASS VLV INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 L PACK FAULT − L PACK TEMP SNSR INOP 21 L PACK OVHT − L PACK INOP 21 PACK FAULT − L BYPASS VLV INOP 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP (b) Right air conditioning pack is selected OFF, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−127−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − R BYPASS VLV INOP (Cont'd)		(c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−129−01 **PACK FAULT** (ADVISORY) 21 PACK FAULT − R PACK DISCH PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 L PACK FAULT − L PACK TEMP SNSR INOP 21 L PACK OVHT − L PACK INOP 21 PACK FAULT − L BYPASS VLV INOP 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP (b) Right air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−131−01 **R BLEED FAIL** (CAUTION) 36 R BLEED FAIL − R PACK INLET PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 L PACK FAULT − L PACK TEMP SNSR INOP 21 L PACK OVHT − L PACK INOP 21 PACK FAULT − L BYPASS VLV INOP 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP (b) Right air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
21−00−133−01 **L PACK FAIL** (CAUTION) 21 L PACK FAIL − L PACK INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 PACK FAULT − R BYPASS VLV INOP 21 PACK FAULT − R PACK DISCH PRESS SNSR INOP 21 R PACK FAULT − R PACK TEMP SNSR INOP 21 R PACK OVHT − R PACK INOP (b) Left air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with Airplane Flight manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.
21−00−135−01 **R PACK FAIL** (CAUTION) 21 R PACK FAIL − R PACK INOP	C	(O) Except for extended operations, may be displayed provided: (a) None of the below INFO messages is displayed: 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS 21 L PACK FAULT − L PACK TEMP SNSR INOP 21 L PACK OVHT − L PACK INOP 21 PACK FAULT − L BYPASS VLV INOP 21 PACK FAULT − L PACK DISCH PRESS SNSR INOP (b) Right air conditioning pack is selected OFF, (c) Flight is conducted at or below FL 310, (d) Operations are conducted in accordance with Airplane Flight manual (AFM) Supplement 5 (Operations with Airplane Systems Inoperative), and (e) Operations with steep approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
22−00−001−01 **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.
22−00−003−01 **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.
22−00−005−01 **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.
22−00−007−01 **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 (Info) 22 AUTO FLIGHT FAULT − AP 3 INOP (Info) 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.

CAS Message Indication	1.	2. Remarks and Exceptions
22−00−008−01 **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)
22−00−009−01 **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.
22−00−010−01 **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)
22−00−011−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
22−00−012−01 **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)
22−00−025−01 **APPR1 NOT AVAIL** (ADVISORY)	C	May be displayed provided ILS APPR 1 (CAT I), APPR 2 (CAT II) and Autoland Operations are not conducted.
22−00−027−01 **APPR2 NOT AVAIL** (ADVISORY)	C	May be displayed provided approach minima do not require use of ILS, APPR 2 (CAT II) and Autoland.
22−00−029−01 **LAND2 NOT AVAIL** (ADVISORY)	C	May be displayed provided Autoland Operations are not conducted.
22−00−031−01 **LAND3 NOT AVAIL ***** (ADVISORY)	C	May be displayed provided LAND 3 Operations (CAT III − fail operational) are not conducted.
22−00−033−01 **LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.
22−00−035−01 **LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.
22−00−037−01 **L LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.
22−00−039−01 **R LVTO NOT AVAIL ***** (ADVISORY)	C	May be displayed provided takeoff minima do not require low visibility takeoffs using HUD LVTO guidance.
22−00−041−01 **L LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.

CAS Message Indication	1.	2. Remarks and Exceptions
22−00−043−01 **R LVTO NOT AVAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require low visibility takeoffs using HUD LVTO guidance.
23−00−015−01 **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)
23−00−017−01 **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.
23−00−019−01 **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)
23−00−021−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
23−00−021−01 **AVIONIC FAULT** (ADVISORY) 23 AVIONIC FAULT − RIU CH 2B INOP (Cont'd)		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.
23−00−023−01 **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
23−00−025−01 **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
23−00−027−01 **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.
23−00−029−01 **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) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
23−00−029−01 **R CTP TUNING FAIL** (CAUTION) (Cont'd)		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.
23−00−031−01 **DATALINK FAIL ***** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.
23−00−031−03 **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.
23−00−031−05 **DATALINK STATUS ***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used.
23−00−031−07 **DATALINK STATUS ***** (ADVISORY)	D	May be displayed provided procedures do not require its use.
23−00−033−01 **SATCOM FAIL ***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link systems will not be available.
23−00−033−03 **SATCOM FAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link systems will not be available.
23−00−033−05 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
23−00−033−07 **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.
23−00−033−09 **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.
23−00−033−11 **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.
23−00−033−13 **SATCOM VOICE FAIL ***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link system is still available.
23−00−033−15 **SATCOM VOICE FAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link system is still available.
23−00−033−17 **SAT VOICE NO SIGNAL***** (ADVISORY)	C	May be displayed provided alternate procedures are established and used. NOTE: SATCOM-based data link system is still available.
23−00−033−19 **SAT VOICE NO SIGNAL***** (ADVISORY)	D	May be displayed provided procedures do not require its use. NOTE: SATCOM-based data link system is still available.
23−00−035−01 **CVR FAIL** (ADVISORY)	A	May be displayed provided: (a) Flight Data Recorder (FDR) is operative, and (b) Repairs are made within three flight days.

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−009−01 **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.
24−00−011−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − APU GEN DEGRADED	C	Except for extended operations, may be displayed.
24−00−013−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BPCU 1 DEGRADED	C	May be displayed.
24−00−015−03 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BPCU 2 DEGRADED	C	Except for extended operations, may be displayed. NOTE: Battery APU start may be inoperative.
24−00−015−04 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BPCU 2 DEGRADED	C	(O) May be displayed provided APU start is verified operative once each flight day.
24−00−035−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC PWR MODULE INOP	C	(O) May be displayed provided battery chargers are verified operative.
24−00−039−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC SSPC FAIL OPEN	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−043−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 1 MICRO 1 MODULE 1 INOP	C	May be displayed.
24−00−045−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 1 MICRO 2 MODULE 4 INOP	C	May be displayed.
24−00−051−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 2 MICRO 1 MODULE 1 INOP	C	May be displayed.
24−00−053−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 2 MICRO 2 MODULE 4 INOP	C	May be displayed.
24−00−077−01 **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.
24−00−079−01 **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.
24−00−081−01 **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

CAS Message Indication	1.	2. Remarks and Exceptions	
24−00−083−01 **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
24−00−087−01 **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.
24−00−089−01 **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.
24−00−091−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − L CB PANEL DEGRADED	C		May be displayed.
24−00−093−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − R CB PANEL DEGRADED	C		May be displayed.
24−00−099−01 **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.
24−00−105−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−105−01 **L GEN FAIL** (CAUTION) (Cont'd)		(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
24−00−107−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − L GEN DEGRADED (A/C post SB BD500-240006 or with Production Modsum 500T102479)	C	May be displayed provided 24 ELECTRICAL FAULT − R GEN DEGRADED (Info) is not displayed.
24−00−119−01 **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

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−121−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − R GEN DEGRADED (A/C post SB BD500-240006 or with Production Modsum 500T102479)	C	May be displayed provided 24 ELECTRICAL FAULT - L GEN DEGRADED (Info) is not displayed.
24−00−123−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − L GEN DEGRADED (A/C pre SB BD500-240006 or without Production Modsum 500T102479)	C	Except for extended operations, may be displayed provided: (a) Left generator is considered inoperative, and (b) 24 ELECTRICAL FAULT − R GEN DEGRADED (Info) is not displayed. NOTE: For left generator considered inoperative refer to Section 2 item 24-00-105-01 or Section 1 item 24-11-02.
24−00−125−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − R GEN DEGRADED (A/C pre SB BD500-240006 or without Production Modsum 500T102479)	C	Except for extended operations, may be displayed provided: (a) Right generator is considered inoperative, and (b) 24 ELECTRICAL FAULT − L GEN DEGRADED (Info) is not displayed. NOTE: For right generator considered inoperative refer to Section 2 item 24-00-119-01 or Section 1 item 24-11-02.
24−00−135−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 3 PWR SUPPLY MODULE 1 INOP	C	May be displayed provided: (a) Left thrust reverser is considered inoperative, and (b) Before each flight, no other CDC info message is displayed.
24−00−137−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 3 PWR SUPPLY MODULE 2 INOP	C	May be displayed provided: (a) Left thrust reverser is considered inoperative, and (b) Before each flight, no other CDC info message is displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−139−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 4 PWR SUPPLY MODULE 1 INOP	C	May be displayed provided: (a) Right thrust reverser is considered inoperative, and (b) Before each flight, no other CDC info message is displayed.
24−00−141−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 4 PWR SUPPLY MODULE 2 INOP	C	May be displayed provided: (a) Right thrust reverser is considered inoperative, and (b) Before each flight, no other CDC info message is displayed.
24−00−143−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 5 PWR SUPPLY MODULE 1 INOP	C	May be displayed provided before each flight, no other CDC info message is displayed.
24−00−145−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC 5 PWR SUPPLY MODULE 2 INOP	C	May be displayed provided before each flight, no other CDC info message is displayed.
24−00−147−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BATT 1 HEATER INOP (A/C post SB BD500-311001 or with Production Modsum 500T104177)	B	(O) Except for extended operations, may be displayed provided: (a) Battery charger 1 is deactivated, (b) Battery 1 heater is deactivated, (c) Battery 1 voltage is verified lower than battery 2, (d) Battery Line Contactor (BLC1) is verified open, (e) Forward cargo compartment door actuator is considered inoperative, (f) BATT 1 is selected OFF before each flight, (g) Both VFG systems are verified operative before each flight, (h) All BTCs and DTCs are verified operative before each flight, (i) All TRUs are verified operative before each flight, (j) Battery system 2 is verified operative before each flight, (k) APU is started before departure and operated continuously throughout the flight, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−147−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BATT 1 HEATER INOP (A/C post SB BD500-311001 or with Production Modsum 500T104177) (Cont'd)		(l) APU GEN is selected ON before each flight, and (m) APU generator is verified operative before each flight. NOTE 1: Reduce battery only operations on ground to preserve battery 2 at its fully charge capacity. NOTE 2: For BLC1 inoperative, refer to section 1 Battery System 1 item 24-32-01-1.
24−00−149−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − L GEN OIL LO LEVEL	A	(O) Except for extended operations, may be displayed provided: (a) Before each flight, none of the following messages is displayed: 24 ELECTRICAL FAULT − GEN INOP (Info) 24 ELECTRICAL FAULT − R GEN OIL LO LEVEL (Info) (b) Both Variable Frequency Generators (VFGs) are operative, (c) Before each flight, APU GEN is verified operative to supply AC BUS 1, and (d) Left VFG oil system is serviced within 12 flight hours.
24−00−151−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − R GEN OIL LO LEVEL	A	(O) Except for extended operations, may be displayed provided: (a) Before each flight, none of the following messages is displayed: 24 ELECTRICAL FAULT − GEN INOP (Info) 24 ELECTRICAL FAULT − L GEN OIL LO LEVEL (Info) (b) Both Variable Frequency Generators (VFGs) are operative, (c) Before each flight, APU GEN is verified operative to supply AC BUS 2, and (d) Right VFG oil system is serviced within 12 flight hours.

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−153−01 **BATT CHARGER FAULT** (ADVISORY) 24 BATT CHARGER FAULT − BATT CHARGER 1 INOP (A/C post SB BD500-311001 or with Production Modsum 500T104177)	B	(O) Except for extended operations, may be displayed provided: (a) Battery charger 1 is deactivated, (b) Battery 1 heater is deactivated, (c) Battery 1 voltage is verified lower than battery 2, (d) Battery Line Contactor (BLC1) is verified open, (e) Forward cargo compartment door actuator is considered inoperative, (f) BATT 1 is selected OFF before each flight, (g) Both VFG systems are verified operative before each flight, (h) All BTCs and DTCs are verified operative before each flight, (i) All TRUs are verified operative before each flight, (j) Battery system 2 is verified operative before each flight, (k) APU is started before departure and operated continuously throughout the flight, (l) APU GEN is selected ON before each flight, and (m) APU generator is verified operative before each flight. NOTE: Reduce battery only operations on ground to preserve battery 2 at it's fully charge capacity.
24−00−155−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BATT 1 TEMP SNSR INOP (A/C post SB BD500-311001 or with Production Modsum 500T104177)	B	(O) Except for extended operations, may be displayed provided: (a) Battery charger 1 is deactivated, (b) Battery 1 heater is deactivated, (c) Battery 1 voltage is verified lower than battery 2, (d) Battery Line Contactor (BLC1) is verified open, (e) Forward cargo compartment door actuator is considered inoperative, (f) BATT 1 is selected OFF before each flight, (g) Both VFG systems are verified operative before each flight, (h) All BTCs and DTCs are verified operative before each flight, (i) All TRUs are verified operative before each flight, (j) Battery system 2 is verified operative before each flight, (k) APU is started before departure and operated continuously throughout the flight, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
24−00−155−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − BATT 1 TEMP SNSR INOP (A/C post SB BD500-311001 or with Production Modsum 500T104177) (Cont'd)		(l) APU GEN is selected ON before each flight, and (m) APU generator is verified operative before each flight. NOTE: Reduce battery only operations on ground to preserve battery 2 at it's fully charge capacity.
24−00−157−01 **BATT 1 FAIL (A/C POST SB BD500-311001 OR WITH PRODUCTION MODSUM 500T104177)** (CAUTION)	B	(O) Except for extended operations, may be displayed provided: (a) Battery charger 1 is deactivated, (b) Battery 1 heater is deactivated, (c) Battery 1 voltage is verified lower than battery 2, (d) Battery Line Contactor (BLC1) is verified open, (e) Forward cargo compartment door actuator is considered inoperative, (f) BATT 1 is selected OFF before each flight, (g) Both VFG systems are verified operative before each flight, (h) All BTCs and DTCs are verified operative before each flight, (i) All TRUs are verified operative before each flight, (j) Battery system 2 is verified operative before each flight, (k) APU is started before departure and operated continuously throughout the flight, (l) APU GEN is selected ON before each flight, and (m) APU generator is verified operative before each flight. NOTE 1: Reduce battery only operations on ground to preserve battery 2 at it's fully charge capacity. NOTE 2: For an inoperative BATT 1 selector switch or an inoperative Battery Line Contactor 1 (BLC 1), refer to Section 1 item 24-32-01.

CAS Message Indication	1.	2. Remarks and Exceptions
24−01−015−01 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CAN COM REDUND LOSS	C	May be displayed.
24−01−015−03 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − CDC A664 COM REDUND LOSS	C	May be displayed.
24−01−015−05 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPDS COM REDUND LOSS	C	May be displayed.
24−01−015−13 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPGS COM REDUND LOSS	C	May be displayed.
24−01−015−19 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (BTC 1 operative)	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (Info) 24 ELECTRICAL FAULT − EPC 3 DEGRADED (Info), and (b) BTC 1 is verified operative before each flight.
24−01−015−21 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (BTC 2 / BTC 3 inoperative)	C	Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (Info) 24 ELECTRICAL FAULT − EPC 3 DEGRADED (Info), and (b) APU GEN is considered inoperative in flight. (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
24−01−015−21 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (BTC 2 / BTC 3 inoperative) (Cont'd)		NOTE: If available, APU GEN can be used for ground operations.
24−01−015−23 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (BTC 2 / BTC 3 operative)	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (Info) 24 ELECTRICAL FAULT − EPC 3 DEGRADED (Info) (b) BTC 2 and BTC 3 are both verified operative before each flight, and (c) APU is started before departure and operated continuously throughout the flight.
24−01−015−25 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 3 DEGRADED	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (Info) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (Info) (b) Ram Air Turbine (RAT) is verified not deployed, and (c) APU is started before departure and operated continuously throughout the flight.
24−01−015−27 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (BTC 1 inoperative)	C	Except for extended operations, may be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
24−01−015−27 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (BTC 1 inoperative) (Cont'd)		24 ELECTRICAL FAULT − EPC 3 DEGRADED (Info) NOTE 1: APU GEN cannot supply AC BUS 1. NOTE 2: EXT PWR cannot supply AC BUS 1 and AC BUS 2.
24−01−015−29 **ELECTRICAL FAULT** (ADVISORY) 24 ELECTRICAL FAULT − EPC 2 DEGRADED (BTC 2 / BTC 3 / ASC / BSC operative)	C	(O) May be displayed provided: (a) None of the following messages are displayed: TRU FAULT (Advisory) 24 ELECTRICAL FAULT − EPC 1 DEGRADED (Info) 24 ELECTRICAL FAULT − EPC 3 DEGRADED (Info) (b) BTC 2 and BTC 3 are verified operative before each flight, and (c) ASC and BSC are verified operative before each flight.
25−00−062−01 **ELT FAULT** (ADVISORY) 25 ELT FAULT - DISTRESS TRACKING INOP***	C	May be displayed provided ELT FAIL (Advisory) is not displayed.
25−00−062−02 **ELT FAULT** (ADVISORY) 25 ELT FAULT - DMC INPUT REDUND LOSS***	D	May be displayed provided none of the following messages is displayed: ELT FAIL (Advisory) 25 ELT FAULT - DISTRESS TRACKING INOP (Info)
25−00−071−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
25−00−073−01 **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.
25−00−075−01 **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.
25−00−077−01 **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.
25−00−079−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
25−00−081−01 **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.
25−00−083−01 **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.
25−00−085−01 **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.
25−00−087−01 **KU BAND ON** (CAUTION)	C	(O) May be displayed provided aircraft de−icing operations are not conducted.
26−00−001−01 **AFT CARGO BTL FAIL** (CAUTION)	C	May be displayed provided that the aft cargo compartment is empty or does not contain combustible materials.
26−00−003−03 **AFT CARGO SMOKE FAIL** (CAUTION)	C	May be displayed provided that the AFT cargo compartment is empty or does not contain combustible materials.

CAS Message Indication	1.	2. Remarks and Exceptions
26−00−005−01 **APU BTL FAIL** (CAUTION)	C	May be displayed provided Auxiliary Power Unit (APU) is considered inoperative and not used.
26−00−007−01 **APU BTL LO** (ADVISORY)	C	May be displayed provided Auxiliary Power Unit (APU) is considered inoperative and is not used.
26−00−009−01 **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.
26−00−013−01 **CARGO BTL FAIL** (CAUTION)	C	May be displayed provided that the forward and aft cargo compartments are empty or do not contain combustible materials.
26−00−015−01 **CARGO BTL LO** (ADVISORY)	C	May be displayed provided that the forward and aft cargo compartments are empty or do not contain combustible materials.
26−00−023−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – AFT CARGO BTL SQUIB REDUND LOSS	C	May be displayed.
26−00−025−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – AFT CARGO SMOKE DET REDUND LOSS	C	May be displayed.
26−00−029−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – APU BTL SQUIB REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions	
26−00−031−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – APU FIRE DET REDUND LOSS	C		Except for extended operations beyond 120 minutes, may be displayed.
26−00−032−01 **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.
26−00−033−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT − CTRL UNIT CHAN A DEGRADED	C		May be displayed.
26−00−036−01 **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.
26−00−037−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT − CTRL UNIT CHAN B DEGRADED	C		May be displayed.
26−00−043−01 **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 verified operative, (b) Both air conditioning packs are verified operative, (c) Cross bleed valve is verified operative, and (d) Both fire system control unit channels are verified operative.

CAS Message Indication	1.	2. Remarks and Exceptions
26−00−045−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – FWD CARGO BTL SQUIB REDUND LOSS	C	May be displayed.
26−00−047−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – FWD CARGO SMOKE DET REDUND LOSS	C	May be displayed.
26−00−049−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – L ENG BTL SQUIB REDUND LOSS	C	May be displayed.
26−00−051−01 **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.
26−00−053−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – MLG OVHT DET REDUND LOSS (Non−extended operations)	C	Except for extended operations, may be displayed.
26−00−053−03 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – MLG OVHT DET REDUND LOSS (Extended operations)	C	For extended operations, may be displayed provided 32 BRAKE FAULT − BRAKE TEMP SENSOR INOP (Info) is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
26−00−055−01 **FIRE SYSTEM FAULT** (ADVISORY) 26 FIRE SYSTEM FAULT – R ENG BTL SQUIB REDUND LOSS	C	May be displayed.
26−00−057−03 **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.
26−00−059−01 **FWD CARGO BTL FAIL** (CAUTION)	C	May be displayed provided that the FWD cargo compartment is empty or does not contain combustible materials.
26−00−061−03 **FWD CARGO SMOKE FAIL** (CAUTION)	C	May be displayed provided that the forward cargo compartment is empty or does not contain combustible materials .
27−00−000−01 **STEEP NOT AVAIL ***** (CAUTION)	D	(O) May be displayed provided operations with Steep Approach are not conducted.
27−00−007−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 TEST SW INOP		Item deleted at MMEL Issue 015.
27−00−007−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 TEST SW INOP		Item deleted at MMEL Issue 015.
27−00−007−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 TEST SW INOP		Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−009−01 **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
27−00−009−03 **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
27−00−009−05 **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.
27−00−011−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 ADS INPUT DEGRADED		Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2.	Remarks and Exceptions
27−00−011−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 ADS INPUT DEGRADED			Item deleted at MMEL Issue 015.
27−00−011−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 ADS INPUT DEGRADED			Item deleted at MMEL Issue 015.
27−00−012−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 ADS INPUT REDUND LOSS			Item deleted at MMEL Issue 015.
27−00−012−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 ADS INPUT REDUND LOSS			Item deleted at MMEL Issue 015.
27−00−012−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 ADS INPUT REDUND LOSS			Item deleted at MMEL Issue 015.
27−00−012−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT - PFCC ADS INPUT REDUND LOSS (A/C post SB BD500-270013 or with Production Modsum 500T100878)	C		May be displayed.
27−00−013−01 **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 (Cont'd)

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−013−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AHRS INOP (Cont'd)	27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS IRS 1 FAIL (advisory) IRS 2 FAIL (advisory) IRS 3 FAIL (advisory)
27−00−014−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 BDCU INPUT INOP	Item deleted at MMEL Issue 015.
27−00−014−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT INOP	Item deleted at MMEL Issue 015.
27−00−014−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT INOP	Item deleted at MMEL Issue 015.
27−00−015−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 BDCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−015−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 BDCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−015−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 BDCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−015−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (A/C equipped with any radio altimeter except for P/N 822-0615-206)	C	May be displayed provided: (a) None of the following messages is displayed: RAD ALT 1 FAIL (Advisory) RAD ALT 2 FAIL (Advisory) 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC RAD ALT INPUT DEGRADED (Info) 32 WOW FAULT - L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT - R GEAR WOFFW REDUND LOSS (Info) (b) Dispatch is not conducted from/to contiguous US airport unless identified as a 5G C−Band mitigated airport (5G CMA). NOTE 1: The list of U.S. 5G CMA airports are identified in an FAA Domestic Notice. NOTE 2: The contiguous U.S. airport limitation also apply when considering diversion airports.
27−00−015−09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (A/C equipped with at least one radio altimeter P/N 822-0615-206)	C	May be displayed provided: (a) None of the following messages is displayed: RAD ALT 1 FAIL (Advisory) RAD ALT 2 FAIL (Advisory) 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC RAD ALT INPUT DEGRADED (Info) 32 WOW FAULT - L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT - R GEAR WOFFW REDUND LOSS (Info) (b) Operations are not conducted in the contiguous U.S. airspace. NOTE: The contiguous U.S. airport limitation also apply when considering diversion airports.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−016−05 **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.
27−00−017−01 **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
27−00−017−03 **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
27−00−017−05 **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 (Cont'd)

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−017−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DEGRADED (Cont'd)	(c) APU is operated continuously during flight and APU generator is verified operative before flight.
27−00−018−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 DMC COM DEGRADED	Item deleted at MMEL Issue 015.
27−00−018−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 DMC COM DEGRADED	Item deleted at MMEL Issue 015.
27−00−018−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DMC COM DEGRADED	Item deleted at MMEL Issue 015.
27−00−019−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 DMC COM REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−019−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 DMC COM REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−019−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 DMC COM REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−020−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 IRS INPUT DEGRADED		Item deleted at MMEL Issue 015.
27−00−020−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 IRS INPUT DEGRADED		Item deleted at MMEL Issue 015.
27−00−020−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 IRS INPUT DEGRADED		Item deleted at MMEL Issue 015.
27−00−021−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 IRS INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−021−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 IRS INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−021−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 IRS INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−022−01 **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 IRS INPUT REDUND LOSS IRS 1 FAIL (advisory) (Cont'd)

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−022−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – ISI INPUT INOP (Cont'd)	IRS 2 FAIL (advisory) IRS 3 FAIL (advisory)
27−00−023−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−023−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−023−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−024−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 LGSCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−024−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 LGSCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−024−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 LGSCU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−024−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS	C	May be displayed provided: (a) None of the following messages is displayed: RAD ALT 1 FAIL (Advisory) RAD ALT 2 FAIL (Advisory) 27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC RAD ALT INPUT DEGRADED (Info) 32 BRAKE FAULT - BDCU 1 NORM INOP (Info) 32 BRAKE FAULT - BDCU 2 NORM INOP (Info)
27−00−025−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP (two RAD ALT Installation)		Item deleted at MMEL Issue 015.
27−00−025−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 1 INPUT INOP (three RAD ALT Installation)		Item deleted at MMEL Issue 015.
27−00−025−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP (two RAD ALT Installation)		Item deleted at MMEL Issue 015.
27−00−025−09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 2 INPUT INOP (three RAD ALT Installation)		Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−025−13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 RAD ALT 3 INPUT INOP ***	Item deleted at MMEL Issue 015.
27−00−026−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP (two RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−026−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 1 INPUT INOP (three RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−026−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP (two RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−026−09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 2 INPUT INOP (three RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−026−13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 RAD ALT 3 INPUT INOP ****	Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−027−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP (two RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−027−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 1 INPUT INOP (three RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−027−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP (two RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−027−09 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 2 INPUT INOP (three RAD ALT Installation)	Item deleted at MMEL Issue 015.
27−00−027−13 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 RAD ALT 3 INPUT INOP ***	Item deleted at MMEL Issue 015.
27−00−028−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT DEGRADED	Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−028−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−028−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−029−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−029−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−029−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−030−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−030−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−030−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−031−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FADEC INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−031−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FADEC INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−031−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FADEC INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−032−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 WAI INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−032−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 WAI INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−032−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 WAI INPUT REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−033−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 WAI INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−033−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 WAI INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−033−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 WAI INPUT DEGRADED	Item deleted at MMEL Issue 015.
27−00−034−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FMS INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−034−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FMS INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−034−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FMS INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−035−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 1 FMS INPUT INOP	Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−035−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 2 FMS INPUT INOP		Item deleted at MMEL Issue 015.
27−00−035−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC 3 FMS INPUT INOP		Item deleted at MMEL Issue 015.
27−00−052−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 DMC INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−052−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 DMC INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−052−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 DMC INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−052−07 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM INPUT REDUND LOSS	C	May be displayed.
27−00−054−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 IRS INPUT REDUND LOSS		Item deleted at MMEL Issue 015.

CAS Message Indication 1.	2. Remarks and Exceptions
27−00−054−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 IRS INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−054−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 IRS INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−060−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−060−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−060−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 SFECU INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−062−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 1 FADEC INPUT REDUND LOSS	Item deleted at MMEL Issue 015.
27−00−062−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 2 FADEC INPUT REDUND LOSS	Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−062−05 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – IIM 3 FADEC INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−064−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DMC IIM INPUT REDUND LOSS	C	May be displayed.
27−00−072−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DIRECT MODE COM REDUND LOSS	C	May be displayed.
27−00−073−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – INPUT POWER REDUND LOSS	C	May be displayed.
27−00−091−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – SPOILER LEVER SNSR REDUND LOSS	C	May be displayed.
27−00−092−01 **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.
27−00−110−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L SIDESTICK SHAKER INOP	B	(O) May be displayed provided: (a) The right stick shaker is verified operative, (b) Prior to each flight, verify the following message 27 FLT CTRL FAULT - R SIDESTICK SHAKER INOP (Info) is not displayed, and (c) Pilot flying is using the right sidestick.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−110−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R SIDESTICK SHAKER INOP	B	(O) May be displayed provided: (a) The left stick shaker is verified operative, (b) Prior to each flight, verify the following message 27 FLT CTRL FAULT - L SIDESTICK SHAKER INOP (Info) is not displayed, and (c) Pilot flying is using the left side stick.
27−00−114−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L AUTOPILOT SIDESTICK DETENT INOP	C	(O) May be displayed provided Autoland Operations are not conducted.
27−00−114−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R AUTOPILOT SIDESTICK DETENT INOP	C	(O) May be displayed provided Autoland Operations are not conducted.
27−00−115−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L SIDESTICK SNSR REDUND LOSS	C	May be displayed.
27−00−115−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R SIDESTICK SNSR REDUND LOSS	C	May be displayed.
27−00−131−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – RUDDER PEDAL SNSR REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−134−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AILERON TRIM SW REDUND LOSS	C	May be displayed.
27−00−135−01 **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.
27−00−135−03 **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.
27−00−136−01 **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.
27−00−137−01 **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. (e) APPR 2 (CAT II) and autoland operations are not conducted, and (f) RNP AR approach operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−137−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – L TOGA SW INOP	B	(O) May be displayed provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (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.
27−00−138−01 **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.
27−00−139−01 **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. (e) APPR 2 (CAT II) and autoland operations are not conducted, and (f) RNP AR approach operations are not conducted.
27−00−139−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R TOGA SW INOP	B	(O) May be displayed provided: (a) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (b) Autopilot and flight director are not used below: 1 2,000 feet AGL on ILS approaches; or (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−139−03 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – R TOGA SW INOP (Cont'd)		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.
27−00−151−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AFCU DMC INPUT REDUND LOSS		Item deleted at MMEL Issue 015.
27−00−152−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – DMC AFCU INPUT REDUND LOSS	C	May be displayed.
27−00−153−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT - PFCC INPUT REDUND LOSS	C	May be displayed provided none of the following messages is displayed: RAD ALT 1 FAIL (Advisory) RAD ALT 2 FAIL (Advisory) 27 FLT CTRL FAULT - PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC RAD ALT INPUT DEGRADED (Info) 32 BRAKE FAULT - BDCU 1 NORM INOP (Info) 32 BRAKE FAULT - BDCU 2 NORM INOP (Info) 32 WOW FAULT- L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT- R GEAR WOFFW REDUND LOSS (Info)
27−00−154−01 **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) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−154−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC IRS INPUT REDUND LOSS (Cont'd)		(b) Autoland Operations are not conducted, and (c) Steep Approach is not conducted.
27−00−155−01 **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 (Info) RAD ALT 1 FAIL (Advisory) RAD ALT 2 FAIL (Advisory) RAD ALT 3 FAIL (Advisory) (b) LAND 3 Operations (CAT III − fail operational) are not conducted, and (c) Operations with steep approach require to check STEEP APPR in the ARRIVALS dialog box, on ground, prior to flight.
27−00−156−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC RAD ALT INPUT DEGRADED	C	May be displayed provided: (a) Before each flight, make sure that none of the following messages are displayed: AT RETARD INHIBIT (Caution) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (b) Operations with steep approach are not conducted, and (c) Autoland operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−157−01 **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) NORM BRAKE FAIL (Caution) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info)
27−00−159−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – AFCU SFECU INPUT REDUND LOSS	C	May be displayed.
27−00−161−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – GND SPOILER SNSR INOP	C	(O) May be displayed provided only one ground spoiler proximity sensor is inoperative.
27−00−163−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PRIM PCU FAULT	C	May be displayed.
27−00−165−01 **FLT CTRL FAULT** (ADVISORY) 27 FLT CTRL FAULT – PFCC STEEP APPR INPUT INOP	C	May be displayed provided that operations with steep approach are not conducted.
27−00−201−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−203−01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT − DATA CONFIG INPUT REDUND LOSS	C	May be displayed.
27−00−207−01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT − OUTBD BRAKE PROX SNSR INOP	C	May be displayed.
27−00−209−01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT − PDU FAULT	C	May be displayed.
27−00−211−01 **FLAP FAULT** (ADVISORY) 27 FLAP FAULT − SKEW SNSR REDUND LOSS	B	(O) May be displayed provided Operations with Steep Approach are not conducted.
27−00−213−02 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW − CHAN 1 INOP	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW − CHAN 2 INOP (Info) 27 SLAT SLOW − CHAN 1 INOP (Info) 27 SLAT SLOW − CHAN 2 INOP (Info) (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.
27−00−213−04 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW − CHAN 2 INOP	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLAP SLOW − CHAN 1 INOP (Info) 27 SLAT SLOW − CHAN 1 INOP (Info) 27 SLAT SLOW − CHAN 2 INOP (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−213−04 **FLAP SLOW** (ADVISORY) 27 FLAP SLOW − CHAN 2 INOP (Cont'd)		(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.
27−00−215−01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT − DATA CONFIG INPUT REDUND LOSS	C	May be displayed.
27−00−217−01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT − OUTBD BRAKE PROX SNSR INOP	C	May be displayed.
27−00−219−01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT − PDU FAULT	C	May be displayed.
27−00−221−01 **SLAT FAULT** (ADVISORY) 27 SLAT FAULT − SKEW SNSR REDUND LOSS	B	(O) May be displayed provided Operations with Steep Approach are not conducted.
27−00−223−02 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW − CHAN 1 INOP	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW − CHAN 2 INOP (Info) 27 FLAP SLOW − CHAN 1 INOP (Info) 27 FLAP SLOW − CHAN 2 INOP (Info) (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. (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
27−00−223−02 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW − CHAN 1 INOP (Cont'd)		NOTE: Slat will operate at half speed.
27−00−223−04 **SLAT SLOW** (ADVISORY) 27 SLAT SLOW − CHAN 2 INOP	B	(O) May be displayed provided: (a) None of the following messages are displayed: 27 SLAT SLOW − CHAN 1 INOP (Info) 27 FLAP SLOW − CHAN 1 INOP (Info) 27 FLAP SLOW − CHAN 2 INOP, (Info) (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.
28−00−009−01 **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.
28−00−011−01 **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.
28−00−015−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
28−00−021−01 **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.
28−00−023−01 **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.
28−00−027−01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT − FUELING DOOR OPEN	C	(O) May be displayed provided fueling door is verified closed before each flight.
28−00−031−01 **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.
28−00−035−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
28−00−035−01 **FUEL FAULT** (ADVISORY) 28 FUEL FAULT − R WING RDC REDUND LOSS (Cont'd)		28 FUEL FAULT − CTR WING RDC REDUND LOSS 28 FUEL FAULT − COMPUTER REDUND LOSS, and (c) FMS FUEL USED is operative.
28−00−053−01 **R BOOST PUMP FAIL** (ADVISORY)		Item Deleted at MMEL Issue 015.
29−00−031−01 **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.
29−00−031−02 **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.
29−00−033−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
29−00−033−01 **HYD PUMP 3B FAIL** (CAUTION) (Cont'd)		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.
29−00−033−02 **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.
30−00−001−01 **L ICE DET FAIL** (CAUTION)	C	(O) May be displayed provided wing and cowl anti-ice systems are operative.
30−00−003−01 **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 to OFF, (b) Crossbleed Valve (CBV) is verified operative before each flight, (c) Flight is conducted 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.

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−005−01 **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 to OFF, (b) Crossbleed Valve (CBV) is verified operative before each flight, (c) Flight is conducted 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.
30−00−007−01 **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 (WAI) system is selected OFF, (b) Associated wing anti-ice valve is verified closed, (c) 30 WING A/ICE FAULT - L WING A/ICE PRESS SNSR INOP (Info) is not displayed, (d) Airplane is not operated into known or forecast icing conditions, (e) L ICE DET FAIL (Caution) message is not displayed, (f) R ICE DET FAIL (Caution) message is not displayed, and (g) Repairs are made within one flight.
30−00−007−03 **L WING A/ICE LO HEAT** (CAUTION) 30 L WING A/ICE LO HEAT − L WING A/ICE TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti Ice (WAI) system is selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) CBV is verified closed, (d) Left Wing Anti-Ice Valve (WAIV) is verified closed, (e) L ICE DET FAIL (Caution) is not displayed, (f) R ICE DET FAIL (Caution) is not displayed, (g) Left bleed and left pack are selected off, (h) Left PRSOV is verified closed, (i) Aircraft is not operated in known or forecast icing conditions, (j) Flight is conducted at or below FL 310, (k) Both avionics bay smoke detectors are operative, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−007−03 **L WING A/ICE LO HEAT** (CAUTION) 30 L WING A/ICE LO HEAT − L WING A/ICE TEMP SNSR INOP (Cont'd)		(l) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (m) Operations with steep approach are not conducted. NOTE: If APU bleed air is used during takeoff or in-flight, operation is conducted in accordance with AFM Chapter 2, APU BLEED AIR limitations.
30−00−011−01 **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 (WAI) system is selected OFF, (b) Associated wing anti-ice valve is verified closed, (c) 30 WING A/ICE FAULT - L WING A/ICE PRESS SNSR INOP (Info) is not displayed, (d) Airplane is not operated into known or forecast icing conditions, (e) L ICE DET FAIL (Caution) message is not displayed, (f) R ICE DET FAIL (Caution) message is not displayed, and (g) Repairs are made within one flight.
30−00−011−03 **L WING A/ICE OVHT** (CAUTION) 30 L WING A/ICE OVHT − L WING A/ICE TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti Ice (WAI) system is selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) CBV is verified closed, (d) Left Wing Anti-Ice Valve (WAIV) is verified closed, (e) L ICE DET FAIL (Caution) is not displayed, (f) R ICE DET FAIL (Caution) is not displayed, (g) Left bleed and left pack are selected off, (h) Left PRSOV is verified closed, (i) Aircraft is not operated in known or forecast icing conditions, (j) Flight is conducted at or below FL 310, (k) Both avionics bay smoke detectors are operative, (l) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−011−03 **L WING A/ICE OVHT** (CAUTION) 30 L WING A/ICE OVHT − L WING A/ICE TEMP SNSR INOP (Cont'd)		(m) Operations with steep approach are not conducted. NOTE: If APU bleed air is used during takeoff or in-flight, operation is conducted in accordance with AFM Chapter 2, APU BLEED AIR limitations.
30−00−013−01 **L WING A/ICE OVHT** (CAUTION)		Item deleted at MMEL Issue 013.
30−00−015−01 **R ICE DET FAIL** (CAUTION)	C	(O) May be displayed provided wing and engine anti−ice systems are operative.
30−00−017−01 **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 to OFF (b) Crossbleed Valve (CBV) is verified operative before each flight, (c) Flight is conducted 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.
30−00−019−01 **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 to OFF, (b) Crossbleed Valve (CBV) is verified operative before each flight, (c) Flight is conducted 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.

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−021−01 **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 (WAI) system is selected OFF, (b) Associated wing anti-ice valve is verified closed, (c) 30 WING A/ICE FAULT - R WING A/ICE PRESS SNSR INOP (Info) is not displayed, (d) Airplane is not operated into known or forecast icing conditions, (e) L ICE DET FAIL (Caution) message is not displayed, (f) R ICE DET FAIL (Caution) message is not displayed, and (g) Repairs are made within one flight.
30−00−021−03 **R WING A/ICE LO HEAT** (CAUTION) 30 R WING A/ICE LO HEAT − R WING A/ICE TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti Ice (WAI) system is selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) CBV is verified closed, (d) Right Wing Anti-Ice Valve (WAIV) is verified closed, (e) L ICE DET FAIL (Caution) is not displayed, (f) R ICE DET FAIL (Caution) is not displayed, (g) Right bleed and right pack are selected off, (h) Right PRSOV is verified closed, (i) Aircraft is not operated in known or forecast icing conditions, (j) Flight is conducted at or below FL 310, (k) Both avionics bay smoke detectors are operative, (l) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (m) Operations with steep approach are not conducted. NOTE: If APU bleed air is used during takeoff or in-flight, operation is conducted in accordance with AFM Chapter 2, APU BLEED AIR limitations.

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−025−01 **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 (WAI) system is selected OFF, (b) Associated wing anti-ice valve is verified closed, (c) 30 WING A/ICE FAULT - R WING A/ICE PRESS SNSR INOP (Info) is not displayed, (d) Airplane is not operated into known or forecast icing conditions, (e) L ICE DET FAIL (Caution) message is not displayed, (f) R ICE DET FAIL (Caution) message is not displayed, and (g) Repairs are made within one flight.
30−00−025−03 **R WING A/ICE OVHT** (CAUTION) 30 R WING A/ICE OVHT − R WING A/ICE TEMP SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti Ice (WAI) system is selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) CBV is verified closed, (d) Right Wing Anti-Ice Valve (WAIV) is verified closed, (e) L ICE DET FAIL (Caution) is not displayed, (f) R ICE DET FAIL (Caution) is not displayed, (g) Right bleed and right pack are selected off, (h) Right PRSOV is verified closed, (i) Aircraft is not operated in known or forecast icing conditions, (j) Flight is conducted at or below FL 310, (k) Both avionics bay smoke detectors are operative, (l) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), and (m) Operations with steep approach are not conducted. NOTE: If APU bleed air is used during takeoff or in-flight, operation is conducted in accordance with AFM Chapter 2, APU BLEED AIR limitations.
30−00−027−01 **R WING A/ICE OVHT** (CAUTION)		Item deleted at MMEL Issue 013.

CAS Message Indication	1.	2. Remarks and Exceptions
30−00−037−01 **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.
30−00−039−01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − WING A/ICE TEMP SNSR REDUND LOSS	C	May be displayed.
30−12−001−01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − L WING A/ICE PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti-Ice (WAI) system is selected OFF, (b) Associated Wing Anti-Ice Valve (WAIV) is verified closed, (c) L ICE DET FAIL (Caution) is not displayed, (d) R ICE DET FAIL (Caution) is not displayed, (e) Left wing anti-ice temperature sensor is verified operative, and (f) Aircraft is not operated in known or forecast icing conditions.
30−12−003−01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − R WING A/ICE PRESS SNSR INOP	C	(O) Except for extended operations, may be displayed provided: (a) Wing Anti-Ice (WAI) system is selected OFF, (b) Associated Wing Anti-Ice Valve (WAIV) is verified closed, (c) L ICE DET FAIL (Caution) is not displayed, (d) R ICE DET FAIL (Caution) is not displayed, (e) Right wing anti-ice temperature sensor is verified operative, and (f) Aircraft is not operated in known or forecast icing conditions.
30−12−005−01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − L WING A/ICE VLV LEAK	B	(O) Except for extended operations, may be displayed provided: (a) Left bleed and left pack are selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) APU bleed is selected OFF, (d) Wing Anti-Ice (WAI) system is selected OFF, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
30−12−005−01 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − L WING A/ICE VLV LEAK (Cont'd)		(e) Flight is conducted at or below FL 310, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) Operations with steep approach are not conducted, and (h) Aircraft is not operated in known or forecast icing conditions.
30−12−005−03 **WING A/ICE FAULT** (ADVISORY) 30 WING A/ICE FAULT − R WING A/ICE VLV LEAK	B	(O) Except for extended operations, may be displayed provided: (a) Right bleed and right pack are selected OFF, (b) Except for engine start, Crossbleed Valve (CBV) is selected MAN CLSD, (c) Wing Anti-Ice (WAI) system is selected OFF, (d) Flight is conducted at or below FL 310, (e) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (f) Operations with steep approach are not conducted, and (g) Aircraft is not operated in known or forecast icing conditions.
30−22−001−01 **L ENGINE FAULT** (ADVISORY) 30 L ENGINE FAULT − COWL A/ICE REDUND LOSS	B	May be displayed provided 30 R ENGINE FAULT − COWL A/ICE REDUND LOSS (Info) is not displayed.
30−22−001−03 **R ENGINE FAULT** (ADVISORY) 30 R ENGINE FAULT − COWL A/ICE REDUND LOSS	B	May be displayed provided 30 L ENGINE FAULT − COWL A/ICE REDUND LOSS (Info) is not displayed.
31−00−001−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
31−00−001−01 **AVIONIC FAN FAULT** (ADVISORY) 31 AVIONIC FAN FAULT − DMC 1A FAN INOP (Cont'd)		(b) Ground ambient temperature is less than ISA + 10 deg C.
31−00−003−01 **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.
31−00−005−01 **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.
31−00−007−01 **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.
31−00−009−01 **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

CAS Message Indication	1.	2. Remarks and Exceptions
31−00−011−01 **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
31−00−013−01 **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
31−00−015−01 **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
31−00−017−01 **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.
31−00−019−01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT − APM 2 INOP	C	May be displayed provided 31 AVIONIC FAULT − APM 1 INOP is not displayed.
31−00−049−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
31−00−049−01 **CTRL PANEL FAULT** (ADVISORY) 31 CTRL PANEL FAULT − OVRHD PIM 1 INOP (Cont'd)		31 CTRL PANEL FAULT − OVRHD R INBD 2 OF 3 CHAN INOP 31 CTRL PANEL FAULT − OVRHD EYEBROW 2 OF 3 CHAN INOP
31−00−051−01 **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
31−00−053−01 **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
31−00−055−01 **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

CAS Message Indication	1.	2. Remarks and Exceptions
31−00−057−01 **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
31−00−059−01 **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
31−00−061−01 **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.
31−00−065−01 **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
31−00−067−01 **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
31−00−069−01 **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
32−00−001−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − LGCL REDUND LOSS	C	(O) Except for extended operations, may be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−003−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − L GEAR DNLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.
32−00−005−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − L GEAR UPLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.
32−00−007−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − R GEAR DNLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.
32−00−009−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − R GEAR UPLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.
32−00−011−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − NOSE GEAR DNLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−013−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − NOSE GEAR UPLK REDUND LOSS (A/C pre SB BD500−314002 or without Production Modsum RC500T101030)	C	May be displayed.
32−00−015−01 **WOW FAULT** (ADVISORY) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (A/C equipped with at least one radio altimeter P/N 822-0615-206)	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS 32 WOW FAULT − R GEAR WOFFW REDUND LOSS 32 BRAKE FAULT − BDCU 1 NORM INOP 32 BRAKE FAULT − BDCU 2 NORM INOP (b) At least two RAD ALT are operative,and (c) Operations are not conducted in the contiguous US airspace. NOTE: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−015−02 **WOW FAULT** (ADVISORY) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (A/C equipped with any radio altimeter except for P/N 822-0615-206)	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS 32 WOW FAULT − R GEAR WOFFW REDUND LOSS 32 BRAKE FAULT − BDCU 1 NORM INOP 32 BRAKE FAULT − BDCU 2 NORM INOP (b) At least two RAD ALT are operative,and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−015−02 **WOW FAULT** (ADVISORY) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (A/C equipped with any radio altimeter except for P/N 822-0615-206) (Cont'd)		(c) Dispatch is not conducted from/to a contiguous U.S. airport unless identified as a 5G C−Band mitigated airport (5G CMA). NOTE 1: List of U.S 5G CMA airports are identified in an FAA Domestic Notice. NOTE 2: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−017−01 **WOW FAULT** (ADVISORY) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (A/C equipped with at least one radio altimeter P/N 822-0615-206)	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS 32 WOW FAULT − L GEAR WOFFW REDUND LOSS 32 BRAKE FAULT − BDCU 1 NORM INOP 32 BRAKE FAULT − BDCU 2 NORM INOP (b) At least two RAD ALT are operative,and (c) Operations are not conducted in the contiguous US airspace. NOTE: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−017−02 **WOW FAULT** (ADVISORY) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (A/C equipped with any radio altimeter except for P/N 822-0615-206)	C	(O) May be displayed provided: (a) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS 32 WOW FAULT − L GEAR WOFFW REDUND LOSS 32 BRAKE FAULT − BDCU 1 NORM INOP 32 BRAKE FAULT − BDCU 2 NORM INOP (b) At least two RAD ALT are operative,and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−017−02 **WOW FAULT** (ADVISORY) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (A/C equipped with any radio altimeter except for P/N 822-0615-206) (Cont'd)		(c) Dispatch is not conducted from/to a contiguous U.S. airport unless identified as a 5G C−Banad mitigated airport (5G CMA). NOTE 1: List of U.S 5G CMA airports are identified in an FAA Domestic Notice. NOTE 2: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−019−01 **WOW FAULT** (ADVISORY) 32 WOW FAULT − NOSE GEAR WOFFW REDUND LOSS	C	May be displayed.
32−00−021−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − 28V ESS REDUND LOSS	C	May be displayed.
32−00−023−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − 28V NORM REDUND LOSS	C	May be displayed.
32−00−025−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − LGCV REDUND LOSS	C	May be displayed.
32−00−029−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − TPMU INOP	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−029−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − TPMU INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−031−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L NOSE TPIS INOP	C	May be displayed.
32−00−031−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L NOSE TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−033−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R NOSE TPIS INOP	C	May be displayed.
32−00−033−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R NOSE TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−035−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L MLG INBD TPIS INOP	C	May be displayed.
32−00−035−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L MLG INBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−037−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R MLG INBD TPIS INOP	C	May be displayed.
32−00−037−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R MLG INBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−039−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L MLG OUTBD TPIS INOP	C	May be displayed.
32−00−039−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − L MLG OUTBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−041−01 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R MLG OUTBD TPIS INOP	C	May be displayed.
32−00−041−03 **TIRE PRESS FAULT** (ADVISORY) 32 TIRE PRESS FAULT − R MLG OUTBD TPIS INOP	D	(O) May be displayed provided TPIS is deactivated.
32−00−043−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 ALTN INOP	C	(O) May be displayed provided none of the following messages are displayed: 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−043−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Cont'd)		32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info)
32−00−045−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 2 ALTN INOP	C	(O) May be displayed provided none of the following messages are displayed: 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info)
32−00−047−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 NORM INOP (A/C equipped with at least one radio altimeter P/N 822-0615-206)	B	(O) May be displayed provided: (a) Operations are not conducted in the contiguous U.S. airspace, (b) BDCU 1 normal brake channel is deactivated, (c) Autobrake system is considered inoperative, (d) Alternate and normal brake is verified available, (e) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED (Info) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − L CO−PILOT PEDAL SENSOR REDUND LOSS (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−047−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 NORM INOP (A/C equipped with at least one radio altimeter P/N 822-0615-206) (Cont'd)		32 BRAKE FAULT − R CO−PILOT PEDAL SENSOR REDUND LOSS (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (f) At least two radio altimeters are operative. NOTE 1: For Auto Brake System (ABS) considered inoperative, refer to Section 1 item 32-43-15. NOTE 2: The contiguous US airport limitation also apply when considering diversion airports.
32−00−047−02 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 NORM INOP (A/C equipped with any radio altimeter except for P/N 822-0615-206)	B	(O) May be displayed provided: (a) Dispatch is not conducted from/to a contiguous U.S. airport unless identified as a 5G C-Band mitigated airport (5G CMA), (b) BDCU 1 normal brake channel is deactivated, (c) Alternate and normal brake is verified available, (d) None of the following messages are displayed: 27 FLT CTRL FAULT - PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT - BDCU 2 NORM INOP (Info) 32 BRAKE FAULT - BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT - BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT - L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - R CO-PILOT PEDAL SENSOR REDUND LOSS (Info), 32 WOW FAULT - L GEAR WOFFW REDUND LOSS (Info), 32 WOW FAULT - R GEAR WOFFW REDUND LOSS (Info), (e) At least two radio altimeters are operative, and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−047−02 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 1 NORM INOP (A/C equipped with any radio altimeter except for P/N 822-0615-206) (Cont'd)		(f) Autobrake system is considered inoperative. NOTE 1: For Auto Brake System (ABS) considered inoperative, refer to Section 1 item 32-43-15. NOTE 2: List of U.S. 5G CMA aiports are identified in an FAA Domestic Notice. NOTE 3: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−049−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 2 NORM INOP (A/C equipped with at least one radio altimeter P/N 822-0615-206)	B	(O) May be displayed provided: (a) Operations are not conducted in the contiguous U.S. airspace, (b) Autobrake system is considered inoperative, (c) BDCU 2 normal brake channel is deactivated, (d) Alternate and normal brake is verified available, (e) None of the following messages are displayed: 27 FLT CTRL FAULT − PFCC RAD ALT INPUT DEGRADED (Info) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info), and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−049−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 2 NORM INOP (A/C equipped with at least one radio altimeter P/N 822-0615-206) (Cont'd)		(f) At least two radio altimeters are operative. NOTE 1: For Auto Brake System (ABS) considered inoperative, refer to Section 1 item 32-43-15. NOTE 2: The Contiguous US airport limitation also apply when considering diversion airports.
32−00−049−02 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 2 NORM INOP (A/C equipped with any radio altimeter except for P/N 822-0615-206)	B	(O) May be displayed provided: (a) Dispatch is not conducted from/to a contiguous U.S. airport unless identified as a 5G C-Band mitigated airport (5G CMA). (b) BDCU 2 normal brake channel is deactivated, (c) Alternate and normal brake is verified available, (d) None of the following messages are displayed: 27 FLT CTRL FAULT - PFCC RAD ALT INPUT DEGRADED (Info) 27 FLT CTRL FAULT - PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT - PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT - BDCU 1 NORM INOP (Info) 32 BRAKE FAULT - BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT - BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT - L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - R PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT - R CO-PILOT PEDAL SENSOR REDUND LOSS (Info), 32 WOW FAULT - L GEAR WOFFW REDUND LOSS (Info), 32 WOW FAULT - R GEAR WOFFW REDUND LOSS (Info), (e) At least two radio altimeters are operative, and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−049−02 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BDCU 2 NORM INOP (A/C equipped with any radio altimeter except for P/N 822-0615-206) (Cont'd)		(f) Autobrake system is considered inoperative. NOTE 1: For Auto Brake System (ABS) considered inoperative, refer to Section 1 item 32-43-15. NOTE 2: List of U.S. 5G CMA aiports are identified in an FAA Domestic Notice. NOTE 3: The contiguous U.S. airport limitation also apply when considering diversion airports.
32−00−053−01 **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.
32−00−057−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − IFT INOP	C	May be displayed.
32−00−059−01 **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 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info), and (b) RH pilot is in command for takeoff and landing.
32−00−061−01 **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 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−061−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Cont'd)		32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info), and (b) RH pilot is in command for takeoff and landing.
32−00−063−01 **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 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info), and (b) LH pilot is in command for takeoff and landing.
32−00−065−01 **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 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info), and (b) LH pilot is in command for takeoff and landing.
32−00−067−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BRAKE CODE 2 INOP	C	(O) May be displayed provided none of the following messages are displayed: 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 BRAKE FAULT − BDCU 1 ALTN INOP (Info) 32 BRAKE FAULT − BDCU 2 ALTN INOP (Info) 32 BRAKE FAULT − R PILOT PEDAL SENSOR REDUND LOSS (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−067−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − BRAKE CODE 2 INOP (Cont'd)		32 BRAKE FAULT − L PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − R CO-PILOT PEDAL SENSOR REDUND LOSS (Info) 32 BRAKE FAULT − L CO-PILOT PEDAL SENSOR REDUND LOSS (Info) NOTE: Main battery may deplete when aircraft is de-powered for more than 10 hours.
32−00−069−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − GEAR RETRACT INOP	D	May be displayed.
32−00−071−01 **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. NOTE: For Auto Brake System (ABS) considered inoperative, refer to Section 1 item 32-43-15.
32−00−073−01 **BRAKE FAULT** (ADVISORY) 32 BRAKE FAULT − THROTTLE RVDT INOP	C	May be displayed provided Autobrake system is considered inoperative. NOTE: For AutoBrake System (ABS) considered inoperative, refer to Section 1 item 32-43-15.
32−00−075−01 **AUTOBRAKE FAIL** (CAUTION)	C	(O) May be displayed provided AUTOBRAKE selector switch is selected OFF.
32−00−081−01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT − R TILLER INOP ***	C	May be displayed provided left Tiller is operative.

CAS Message Indication	1.	2. Remarks and Exceptions
32−00−082−01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT − L TILLER INOP	C	May be displayed provided right Tiller is installed and operative.
32−00−084−01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT − TILLER DEGRADED	C	May be displayed.
32−00−085−01 **NOSE STEER FAULT** (ADVISORY) 32 NOSE STEER FAULT − STEER REDUND LOSS	C	May be displayed.
32−61−005−01 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − GEAR DNLK REDUND LOSS (A/C post SB BD500−314002 or with Production Modsum RC500T101030)	C	May be displayed.
32−61−005−03 **GEAR FAULT** (ADVISORY) 32 GEAR FAULT − GEAR UPLK REDUND LOSS (A/C post SB BD500−314002 or with Production Modsum RC500T101030)	C	May be displayed.
34−00−001−01 **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), and (d) Autoland Operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−003−01 **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), and (d) Autoland Operations are not conducted.
34−00−009−01 **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.
34−00−011−01 **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.
34−00−013−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−015−01 **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.
34−00−019−01 **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.
34−00−021−01 **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.
34−00−035−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS 1 TAT ELEMENT INOP	C	May be displayed provided none of the following info 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
34−00−037−01 **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 (Info) provided none of the following info 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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−037−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS 1 TAT ELEMENT INOP (Cont'd)		73 L ENGINE FAULT − FADEC FAULT 2 73 R ENGINE FAULT − FADEC FAULT 2
34−00−039−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS 2 TAT ELEMENT INOP	C	May be displayed provided none of the following info 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.
34−00−040−01 **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 (Info) provided none of the following info 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.
34−00−041−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS 3 TAT ELEMENT INOP	C	May be displayed provided none of the following info 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.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−042−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS 4 TAT ELEMENT INOP	C	May be displayed provided none of the following info 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.
34−00−043−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − L TAT HEATER INOP	C	May be displayed provided none of the following info 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
34−00−044−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − R TAT HEATER INOP	C	May be displayed provided none of the following info 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.
34−00−045−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS HEATER 1 REDUND LOSS	C	May be displayed.
34−00−046−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS HEATER 2 REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−047−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS HEATER 3 REDUND LOSS	C	May be displayed.
34−00−048−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS HEATER 4 REDUND LOSS	C	May be displayed.
34−00−049−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS SENSE LINE HEATER 1 INOP	C	May be displayed.
34−00−050−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS SENSE LINE HEATER 2 INOP	C	May be displayed.
34−00−051−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS SENSE LINE HEATER 3 INOP	C	May be displayed.
34−00−053−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − ADS SENSE LINE HEATER 4 INOP	C	May be displayed.
34−00−054−01 **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 (Info) ADS 1 FAIL (Advisory) ADS 2 FAIL (Advisory) ADS 1 SLIPCOMP FAIL (Caution) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−054−01 **ADS FAULT** (ADVISORY) 34 ADS FAULT − L AOA VANE INOP (Cont'd)		ADS 2 SLIPCOMP FAIL (Caution)
34−00−054−02 **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 (Info) ADS 1 FAIL (Advisory) ADS 2 FAIL (Advisory) ADS 1 SLIPCOMP FAIL (Caution) ADS 2 SLIPCOMP FAIL (Caution)
34−00−054−03 **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. NOTE: For left Angle of Attack (AOA) Vane considered inoperative refer to Section 2 item 34−00−054−01.
34−00−054−05 **ADS FAULT** (ADVISORY) 34 ADS FAULT − L AOA CASE HEATER INOP	C	May be displayed.
34−00−054−06 **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. NOTE: For right Angle of Attack (AOA) Vane considered inoperative refer to Section 2 item 34−00−054−02.
34−00−054−07 **ADS FAULT** (ADVISORY) 34 ADS FAULT − R AOA CASE HEATER INOP	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−055−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − XPDR 1 INOP (XPDR required for operations)	D	(O) May be displayed provided the following info message is not displayed: 34 AVIONIC FAULT − XPDR 2 INOP
34−00−056−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − XPDR 1 INOP (XPDR, ADS-B and TCAS not required by regulations)	B	(O) May be displayed in combination with 34 AVIONIC FAULT − XPDR 2 INOP (Info) provided: (a) Regulations do not require XPDR 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. NOTE 1: For ADS−B OUT considered inoperative, refer to Section 1 Item 34−54−00−3−B or Section 2 Item 34−00−061−02. NOTE 2: For TCAS/ACAS considered inoperative, refer to Section 1 Item 34−43−01−1.
34−00−057−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − XPDR 2 INOP	D	(O) May be displayed provided the following info message is not displayed: 34 AVIONIC FAULT − XPDR 1 INOP
34−00−058−01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT −TSS FAN INOP	C	May be displayed.
34−00−061−02 **ADS−B OUT FAIL (ADS−B NOT REQUIRED FOR OPERATIONS)** (CAUTION)	A	May be displayed provided: (a) Operations do not require ADS−B use, and (b) Repairs are made prior to completion of the next heavy maintenance visit.
34−00−061−03 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−061−04 **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.
34−00−061−11 **ADS−B 1 OUT FAIL** (CAUTION)	D	(O) May be displayed provided that transponder #2 is selected active for flight.
34−00−061−12 **ADS−B 2 OUT FAIL** (CAUTION)	D	(O) May be displayed provided that transponder #1 is selected active for flight.
34−00−061−13 **ADS−B OUT FAIL (ADS−B REQUIRED FOR OPERATIONS)** (CAUTION)	C	May be displayed where routine procedures require its use, provided that alternate procedures are established and used.
34−00−063−01 **RAD ALT 1 FAIL (ONE RADIO ALTIMETER INOPERATIVE ON AIRCRAFT WITH TWO 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) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) (c) Approach minimums do not require its use, (d) Operations with steep approach are not conducted, (e) Autoland operations are not conducted, and (f) RNP AR Approach Operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−064−01 **RAD ALT 1 FAIL (ONE RADIO ALTIMETER INOPERATIVE ON 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) Approach minimums do not require its use, (d) LAND 3 Operations (CAT III − fail operational) are not conducted, and (e) Operations with steep approach require to check STEEP APPR in the ARRIVALS dialog box, on ground, prior to flight.
34−00−065−01 **RAD ALT 1 FAIL (TWO RADIO ALTIMETERS INOPERATIVE ON AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 1 is deactivated, (b) No more than one of the following messages is displayed: RAD ALT 2 FAIL (Advisory) RAD ALT 3 FAIL (Advisory, (c) None of the following messages are displayed: AT RETARD INHIBIT (Caution) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (d) Approach minimums do not require its use, (e) Operations with steep approach are not conducted, (f) Autoland operations are not conducted, and (g) RNP AR approach operations are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−067−01 **RAD ALT 2 FAIL (ONE RADIO ALTIMETER INOPERATIVE ON 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) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (c) Approach minimums do not require its use, (d) Operations with steep approach are not conducted, (e) Autoland operations are not conducted, and (f) RNP AR approach operations are not conducted.
34−00−068−01 **RAD ALT 2 FAIL (ONE RADIO ALTIMETER INOPERATIVE ON 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) Approach minimums do not require its use, (d) LAND 3 operations (CAT III − fail operational) are not conducted, and (e) Operations with steep approach require to check STEEP APPR in the ARRIVALS dialog box, on ground, prior to flight.
34−00−069−01 **RAD ALT 2 FAIL (TWO RADIO ALTIMETERS INOPERATIVE ON AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY)	C	(O) May be displayed provided: (a) RAD ALT 2 is deactivated, (b) No more than one of the following messages is displayed: RAD ALT 1 FAIL (Advisory) RAD ALT 3 FAIL (Advisory, (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−069−01 **RAD ALT 2 FAIL (TWO RADIO ALTIMETERS INOPERATIVE ON AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY) (Cont'd)		(c) None of the following messages are displayed: AT RETARD INHIBIT (Caution) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (d) Approach minimums do not require its use, (e) Operations with steep approach are not conducted, (f) Autoland operations are not conducted, and (g) RNP AR approach operations are not conducted.
34−00−070−01 **RAD ALT 3 FAIL (ONE RADIO ALTIMETER INOPERATIVE ON 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) Approach minimums do not require its use, (d) LAND 3 Operations (CAT III − fail operational) are not conducted, and (e) Operations with steep approach require to check STEEP APPR in the ARRIVALS dialog box, on ground, prior to flight.
34−00−071−01 **RAD ALT 3 FAIL (TWO RADIO ALTIMETERS INOPERATIVE ON 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) 27 FLT CTRL FAULT − PFCC INPUT REDUND LOSS (Info) (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−071−01 **RAD ALT 3 FAIL (TWO RADIO ALTIMETERS INOPERATIVE ON AIRCRAFT WITH THIRD RADIO ALTIMETER) ***** (ADVISORY) (Cont'd)		27 FLT CTRL FAULT − PFCC BDCU INPUT REDUND LOSS (Info) 27 FLT CTRL FAULT − PFCC LGSCU INPUT REDUND LOSS (Info) 32 BRAKE FAULT − BDCU 1 NORM INOP (Info) 32 BRAKE FAULT − BDCU 2 NORM INOP (Info) 32 WOW FAULT − L GEAR WOFFW REDUND LOSS (Info) 32 WOW FAULT − R GEAR WOFFW REDUND LOSS (Info) (d) Approach minimums do not require its use, (e) Operations with steep approach are not conducted, (f) Autoland operations are not conducted, and (g) RNP AR approach operations are not conducted.
34−00−073−01 **IRS 2 FAIL** (ADVISORY)		Item deleted at MMEL Issue 015.
34−00−075−01 **IRS 3 FAIL** (ADVISORY)		Item deleted at MMEL Issue 015.
34−00−077−01 **SMS FAIL (SMS NOT USED DURING ROUTINE PROCEDURES)***** (ADVISORY)	D	May be displayed provided routine procedures do not require SMS.
34−00−079−01 **SMS FAIL (SMS USED DURING ROUTINE PROCEDURES)***** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.
34−00−081−01 **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 dual FMS use, (c) RNP AR approach operations are not conducted, and (d) NAV SRC is selected to FMS 2.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−083−01 **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 dual FMS use, (c) RNP AR approach operations are not conducted, and (d) NAV SRC is selected to FMS 1.
34−00−087−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − GPS 1 INOP	C	(O) May be displayed provided: (a) One GPS is required for routine procedures, (b) Enroute operations do not require dual GPS, (c) Approach minimums do not require dual GPS, (d) GNSS NOT AVAIL (Caution) is not displayed, (e) 34 AVIONIC FAULT − GPS 2 INOP (Info) is not displayed, and (f) GPS 1 is deactivated. NOTE: If GPS is not required during routine procedures use Section 2 MMEL relief 34−00−089−01.
34−00−089−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − GPS 1 INOP	D	(O) May be displayed, provided: (a) GPS is not routinely used, and (b) GPS 1 is deactivated. NOTE: If GPS is required during routine procedures use Section 2 MMEL relief 34−00−087−01.
34−00−091−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − GPS 2 INOP	C	(O) May be displayed provided: (a) One GPS is required for routine procedures, (b) Enroute operations do not require dual GPS, (c) Approach minimums do not require dual GPS, (d) GNSS NOT AVAIL (Caution) is not displayed, (e) 34 AVIONIC FAULT − GPS 1 INOP (Info) is not displayed, and (f) GPS 2 is deactivated. NOTE: If GPS is not required during routine procedures use Section 2 MMEL relief 34−00−093−01.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−093−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − GPS 2 INOP	D	(O) May be displayed provided: (a) GPS is not routinely used, and (b) GPS 2 is deactivated. NOTE: If GPS is required during routine procedures use Section 2 MMEL relief 34−00−091−01.
34−00−095−01 **GNSS NOT AVAIL** (CAUTION)	C	(O) May be displayed, provided: (a) GPS is used during routine procedures, (b) Enroute operations do not require dual GPS, (c) Approach minimums do not require dual GPS , and (d) Alternate procedures are established and used. NOTE: If GPS is not required during routine procedures, use Section 2 MMEL relief 34−00−095−03.
34−00−095−03 **GNSS NOT AVAIL** (CAUTION)	D	May be displayed, provided GPS is not routinely used. NOTE: If GPS is required during routine procedures, use Section 2 MMEL Relief 34−00−095−01.
34−00−095−04 **UNABLE RNP** (CAUTION)	C	(O) May be displayed provided: (a) Operations are not performed in RNP airspace, (b) RNP approaches are not performed, and (c) RNP AR approaches are not performed.
34−00−099−01 **WXR FAIL** (ADVISORY)	C	Except for extended operations beyond 120 minutes, may be displayed provided weather radar is not required by regulations.
34−00−101−01 **WXR AUTO FAULT** (ADVISORY)	C	(O) May be displayed provided the manual tilt function is verified operative.
34−00−103−01 **WXR CTRL FAULT** (ADVISORY)	C	Except for extended operations beyond 120 minutes, may be displayed provided weather radar is not required by regulations.
34−00−105−01 **WXR FAULT** (ADVISORY)	C	May be displayed. NOTE: Any mode which is operative may be used.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−107−01 **WXR TURB FAULT** (ADVISORY)	C	May be displayed. NOTE: Any WXR modes which are operative may be used.
34−00−109−01 **WXR PWS FAIL ***** (ADVISORY)	B	(O) May be inoperative provided alternate procedures are established and used.
34−00−110−01 **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.
34−00−112−01 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − WXR L DSPL INOP	D	May be displayed provided 34 AVIONIC FAULT − WXR R DSPL INOP (Info) is not displayed.
34−00−112−02 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − WXR R DSPL INOP	D	May be displayed provided 34 AVIONIC FAULT − WXR L DSPL INOP (Info) is not displayed.
34−00−112−03 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − WXR−4 BUS INOP	C	Except for extended operations, may be displayed provided weather radar is not required by regulations. NOTE: Any WXR modes which are operative may be used.
34−00−112−04 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − WXR L CTRL INOP	D	May be displayed provided 34 AVIONIC FAULT − WXR R CTRL INOP (Info) is not displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−112−05 **AVIONIC FAULT** (ADVISORY) 34 AVIONIC FAULT − WXR R CTRL INOP	D	May be displayed provided 34 AVIONIC FAULT − WXR L CTRL INOP (Info) is not displayed.
34−00−113−01 **HUD FAIL (ONE HUD NOT REQUIRED BY PROCEDURES)***** (ADVISORY)	D	May be displayed provided: (a) Procedure do not require one HUD 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).
34−00−114−01 **HUD FAIL (ONE HUD REQUIRED BY PROCEDURES)***** (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).
34−00−115−01 **L HUD FAIL (BOTH HUD REQUIRED BY PROCEDURES)***** (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).
34−00−116−01 **L HUD FAIL (BOTH HUD NOT REQUIRED BY PROCEDURES)***** (ADVISORY)	D	May be displayed provided: (a) Procedures do not require dual HUD 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).
34−00−117−01 **R HUD FAIL (BOTH HUD REQUIRED BY PROCEDURES)***** (ADVISORY)	C	May be displayed provided: (a) Alternate procedures are established and used, (b) Operations with steep approach are not conducted, and (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−117−01 **R HUD FAIL (BOTH HUD REQUIRED BY PROCEDURES)***** (ADVISORY) (Cont'd)		(c) APPR 2 Operations (CAT II) are conducted in accordance with AFM Supplement 8 (Category II, Category III and Autoland Operations).
34−00−118−01 **R HUD FAIL (BOTH HUD NOT REQUIRED BY PROCEDURES)***** (ADVISORY)	D	May be displayed provided: (a) Procedures do not require dual HUD 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)
34−00−121−01 **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.
34−00−123−01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − L HUD FAN INOP ***	C	May be displayed provided: (a) Operations doe not require dual HUD use, and (b) Operations with steep approach are not conducted.
34−00−125−01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − R HUD FAN INOP ***	C	May be displayed provided: (a) Operations do not require dual HUD use, and (b) Operations with steep approach are not conducted.
34−00−160−01 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − L INBD DSPL L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − L INBD DSPL R FAN INOP 34 AVIONIC FAN FAULT − L OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L OUTBD DSPL R FAN INOP

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−160−02 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − L INBD DSPL R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − L INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L OUTBD DSPL R FAN INOP
34−00−160−03 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − L OUTBD DSPL L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − L OUTBD DSPL R FAN INOP 34 AVIONIC FAN FAULT − L INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L INBD DSPL R FAN INOP
34−00−160−04 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − L OUTBD DSPL R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − L OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − L INBD DSPL R FAN INOP
34−00−160−05 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − LWR DSPL L FAN INOP	C	May be displayed provided 34 AVIONIC FAN FAULT − LWR DSPL R FAN INOP (Info) is not displayed.
34−00−160−06 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − LWR DSPL R FAN INOP	C	May be displayed provided 34 AVIONIC FAN FAULT − LWR DSPL L FAN INOP (Info) is not displayed.
34−00−160−07 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − R INBD DSPL L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − R INBD DSPL R FAN INOP 34 AVIONIC FAN FAULT − R OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R OUTBD DSPL R FAN INOP

CAS Message Indication	1.	2. Remarks and Exceptions
34−00−160−08 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − R INBD DSPL R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − R INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R OUTBD DSPL R FAN INOP
34−00−160−09 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − R OUTBD DSPL L FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − R OUTBD DSPL R FAN INOP 34 AVIONIC FAN FAULT − R INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R INBD DSPL R FAN INOP
34−00−160−10 **AVIONIC FAN FAULT** (ADVISORY) 34 AVIONIC FAN FAULT − R OUTBD DSPL R FAN INOP	C	May be displayed provided the following info messages are not displayed: 34 AVIONIC FAN FAULT − R OUTBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R INBD DSPL L FAN INOP 34 AVIONIC FAN FAULT − R INBD DSPL R FAN INOP
35−00−001−01 **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.
35−00−001−02 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
35−00−001−02 **CREW OXY LO PRESS** (CAUTION) (Cont'd)		(e) Observer seat is not occupied.
36−00−001−01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − L BLEED MON PRESS SNSR INOP (A/C pre SB BD500−219002 or without Production Modsum 500T103085)	C	May be displayed.
36−00−001−03 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − L BLEED MON PRESS SNSR INOP (A/C post SB BD500−219002 or with Production Modsum 500T103085)	C	Except for extended operations, may be displayed provided that left bleed system is considered inoperative.
36−00−003−01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − L BLEED TEMP SNSR REDUND LOSS	C	May be displayed.
36−00−005−01 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − R BLEED MON PRESS SNSR INOP (A/C pre SB BD500−219002 or without Production Modsum 500T103085)	C	May be displayed.
36−00−005−03 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − R BLEED TEMP SNSR REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
36−00−005−05 **AIR SYSTEM FAULT** (ADVISORY) 36 AIR SYSTEM FAULT − R BLEED MON PRESS SNSR INOP (A/C post SB BD500−219002 or with Production Modsum 500T103085)	C	Except for extended operations, may be displayed provided that right bleed system is considered inoperative.
36−00−009−01 **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 to OFF, (b) Opposite Bleed System is operative, (c) Crossbleed Valve (CBV) is verified operative, (d) Flight is conducted at or below FL 310, (e) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.
36−00−011−03 **L BLEED FAIL** (CAUTION) 36 L BLEED FAIL − L HPV FAIL CLSD	C	(O) Except for extended operations, may be displayed provided: (a) Left Engine EGT variation on ground is verified operative, (b) Left bleed system is selected to OFF, (c) Opposite Bleed System is operative, (d) Crossbleed Valve (CBV) is verified operative before each flight, (e) Flight is conducted at or below FL 310, (f) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (g) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (h) FLAP 4 landings are prohibited in icing conditions, and. (i) Operations with steep approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
36−00−013−01 **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 to OFF, (b) Opposite Bleed System is operative, (c) Crossbleed Valve (CBV) is verified operative, (d) Flight is conducted at or below FL 310, (e) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with Steep Approach are not conducted.
36−00−017−01 **LEAK DET FAULT** (ADVISORY) 36 LEAK DET FAULT − LOOP REDUND LOSS (Applicability: 50019, 50060, 50062−54999, 55017, 55089, 55101, 55104, 55106−55108, 55110−59999 and 50010−50018, 50020−50059, 50061, 55003−55016, 55018−55088, 55090−55100, 55102−55103, 55105, 55109 post SB BD500−362002 and BD500−362003)	C	May be displayed.
36−00−031−01 **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 to OFF, (b) Opposite Bleed System is operative, (c) Crossbleed Valve (CBV) is verified operative, (d) Flight is conducted at or below FL 310, (e) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.

CAS Message Indication	1.	2. Remarks and Exceptions
36−00−035−03 **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 to OFF, (b) Opposite Bleed System is operative, (c) Crossbleed Valve (CBV) is verified operative before each flight, (d) Flight is conducted at or below FL 310, (e) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.
36−00−037−01 **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 to OFF, (b) Opposite Bleed System is operative, (c) Crossbleed Valve (CBV) is verified operative, (d) Flight is conducted at or below FL 310, (e) 26 FIRE SYSTEM FAULT − EQUIP BAY SMOKE DET REDUND LOSS (Info) is not displayed, (f) Operations are conducted in accordance with AFM Supplement 5 (Operations with Airplane Systems Inoperative), (g) FLAP 4 landings are prohibited in icing conditions, and (h) Operations with steep approach are not conducted.
45−00−003−01 **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.
45−00−005−01 **AVIONIC FAULT** (ADVISORY) 31 AVIONIC FAULT − OMS INOP	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
46−00−001−01 **HEALTH MGMT FAULT** (ADVISORY) 46 HEALTH MGMT FAULT − HMU DEGRADED	C	(O) May be displayed provided alternate procedures are established and used.
46−00−002−01 **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.
46−00−003−01 **HI LOAD MONITOR FAIL ***** (ADVISORY)	C	(O) May be displayed provided alternate procedures are established and used.
46−00−004−01 **HI LOAD MONITOR FAIL ***** (ADVISORY)	D	May be displayed provided procedures do not require its use.
47−00−001−01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT − FUEL INERTING DEGRADED	C	May be displayed.
47−00−003−01 **FUEL INERTING FAULT** (ADVISORY) 47 FUEL INERTING FAULT − FUEL INERTING REDUND LOSS	C	May be displayed.
47−00−005−01 **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

CAS Message Indication	1.	2. Remarks and Exceptions
47−00−007−01 **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
47−00−013−01 **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
47−00−015−01 **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
49−00−001−01 **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.
49−00−007−01 **APU FAULT** (ADVISORY) 49 APU FAULT – APU INOP	C	(O) Except for extended operations, may be displayed.
49−00−009−01 **APU FAULT** (ADVISORY) 49 APU FAULT – APU REDUND LOSS	C	May be displayed and APU used.
49−00−011−01 **APU OIL LO QTY** (ADVISORY)	A	Except for extended operations, may be displayed provided: (a) APU is only operated for ground operations, (b) APU is considered inoperative for flight, and (c) APU oil level is serviced within 10 APU hours.

CAS Message Indication	1.	2. Remarks and Exceptions
49−00−013−01 **APU SHUTDOWN** (ADVISORY)	C	Except for extended operations, may be displayed, provided APU is considered inoperative.
52−00−001−01 **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.
52−00−003−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − FWD PAX DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−005−01 **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.
52−00−007−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − FWD SERV DOOR TRGT INOP		Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
52−00−009−01 **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.
52−00−011−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − AFT PAX DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−013−01 **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.
52−00−015−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − AFT SERV DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−017−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
52−00−019−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − L OVERWING DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−021−01 **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.
52−00−023−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − R OVERWING DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−025−01 **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.
52−00−027−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − L OVERWING AFT DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−029−01 **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.
52−00−031−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − R OVERWING AFT DOOR TRGT INOP		Item deleted at MMEL Issue 015.

CAS Message Indication	1.	2. Remarks and Exceptions
52−00−033−01 **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.
52−00−035−01 **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.
52−00−037−01 **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.
52−00−039−01 **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.
52−00−041−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − FWD CARGO DOOR TRGT INOP		Item deleted at MMEL Issue 015.
52−00−043−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
52−00−045−01 **DOOR FAULT** (ADVISORY) 52 DOOR FAULT − AFT CARGO DOOR TRGT INOP		Item deleted at MMEL Issue 015.
73−00−009−01 **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.
73−00−015−01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT − HEALTH MON DEGRADED	C	May be displayed.
73−00−017−01 **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.
73−00−019−01 **L ENGINE FAULT** (ADVISORY) 73 L ENGINE FAULT − T3 SNSR INOP	C	May be displayed.
73−00−021−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
73−00−023−01 **INFO NOTE** (INFO) 73 INFO NOTE − L ENG CTRL SYS REDUND LOSS	D	May be displayed.
73−00−025−01 **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.
73−00−027−01 **INFO NOTE** (INFO) 73 INFO NOTE − R ENG CTRL SYS REDUND LOSS	D	May be displayed.
73−00−029−01 **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.
73−00−039−01 **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.
73−00−045−01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT − HEALTH MON DEGRADED	C	May be displayed.
73−00−047−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
73−00−049−01 **R ENGINE FAULT** (ADVISORY) 73 R ENGINE FAULT − T3 SNSR INOP	C	May be displayed.
73−00−051−01 **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.
73−34−001−01 **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).
73−34−003−01 **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).
74−00−001−01 **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.

CAS Message Indication	1.	2. Remarks and Exceptions
74−00−002−01 **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
75−42−001−01 **L ENG PCE DOOR OPEN** (ADVISORY)	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.
75−42−003−01 **R ENG PCE DOOR OPEN** (ADVISORY)	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.
76−00−001−01 **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).
76−00−002−01 **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).
78−00−001−01 **L ENGINE FAULT** (ADVISORY) 78 L ENGINE FAULT − REVERSER REDUND LOSS	C	May be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
78−00−002−01 **R ENGINE FAULT** (ADVISORY) 78 R ENGINE FAULT − REVERSER REDUND LOSS	C	May be displayed.
79−00−001−01 **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
79−00−007−01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT − VORV OPER DEGRADED	C	May be displayed.
79−00−009−01 **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
79−00−015−01 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT − VORV OPER DEGRADED	C	May be displayed.
79−34−001−01 **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 (Cont’d)

CAS Message Indication	1.	2. Remarks and Exceptions
79−34−001−01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT − OIL FILTER IMPENDING BYPASS (Cont'd)		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.
79−34−003−01 **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.
79−35−001−01 **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 (Cont'd)

CAS Message Indication	1.	2. Remarks and Exceptions
79−35−001−01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT − OIL DEBRIS ABOVE LIMIT (Cont'd)		(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.
79−35−003−01 **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.
79−35−021−01 **L ENGINE FAULT** (ADVISORY) 79 L ENGINE FAULT − OIL DEBRIS MON INOP	C	Except for extended operations, may be displayed.
79−35−021−03 **R ENGINE FAULT** (ADVISORY) 79 R ENGINE FAULT − OIL DEBRIS MON INOP	C	Except for extended operations, may be displayed.

CAS Message Indication	1.	2. Remarks and Exceptions
79−35−021−05 **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.
79−35−021−07 **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.