

## OQAR Line Maintenance Troubleshooting Guide

All buttons, lamps and displays referenced below are located on the OQAR front panel. To use this guide, follow each step in the order listed, unless indicated otherwise by "go to" instructions.

This document is intended for guidance and training purposes only and does not supersede the Aircraft Maintenance Manual, Component Maintenance Manual or Installation Manual.

(1) Is POWER ON lamp illuminated?

- If lamp is lit, go to (2).
- If lamp is not lit, check power supply to OQAR. If electrical power supply is confirmed, replace OQAR.

(2) Is FAIL lamp illuminated? If not, then go to (3).

- If FAIL and LOW CAPACITY lamps are both lit, **insert or replace MO disk**.
- If only FAIL lamp is lit, reset electrical power to OQAR. If FAIL lamp still remains lit, **replace OQAR**.

(3) Press & release EXIT button, then check the 8-character display. If 01 OPERATOR is displayed, go to (4).

- If DRIVE TOO HOT is displayed, switch off electrical power to OQAR for 20 minutes, then start again at check (1). If problem persists, **replace OQAR**.
- If DRIVE TOO COLD is displayed and does not clear within 20 minutes, **replace OQAR**.

(4) Press & release ENTER button. The 8-character display should show ARQ with either ":", "E" or "-" after each letter.

- A = A573/717, R = RS422, Q = A429.
- ":" = active (data present), "E" = error (unable to sync), "-" = inactive (no data present).
- **Investigate DMU and/or other equipment on aircraft for any that are indicating "E" or "-".**

NOTE: If OQAR is not configured for A429 or RS422 recording, ignore the R & Q indications.

(4a) Does display show "A\*R\*Q\*?"

- If "A\*R\*Q\*" is displayed, all data is being received from the DMU. Go to (9).

- If no "\*\*\*\*" are displayed, the OQAR is not receiving data from DMU. Go to (5).

(5) Continue pressing & releasing EXIT button until 01 OPERATOR is displayed.

(6) Continue pressing & releasing "+" button until 02 STATUS is displayed.

(7) Continue pressing & releasing ENTER button until AD\_TFS is displayed.

- Number shown in lower display indicates total number of A573 subframes recorded previously.
- Note the number displayed, then go to (8).

(8) Continue pressing & releasing "+" button until AD\_BFS is displayed.

- Number shown in lower display indicates total number of **bad** A573 subframes recorded previously.
- Good previous OQAR operation will be indicated by AD\_BFS total less than 2 and AD\_TFS total of many. If this is not indicated, **check that DMU is transmitting data to OQAR**.

(9) Open access door on OQAR front panel.

(10) Press & release EJECT button.

- Message FLUSHING XXX% will display, with XXX incrementing from 0 to 100.
- If disk ejects within 20 seconds, go to (13).
- If disk fails to eject within 20 seconds, go to (11).

(11) Is DRIVE TOO HOT/PLEASE WAIT displayed?

- If no, then go to (12)
- If yes, then wait 10 minutes and try (10) again. If DRIVE TOO HOT/PLEASE WAIT is still displayed after trying again, the **OQAR or the aircraft installation may have a fault**.

(12) Is DRIVE TOO COLD/PLEASE WAIT displayed?

- If no, then the **OQAR or the aircraft installation may have a fault**.
- If yes, then wait 20 minutes and try (10) again. If DRIVE TOO COLD/PLEASE WAIT is still displayed after trying again, the **OQAR or the aircraft installation may have a fault**.

(13) Did disk eject within 20 seconds when doing (10)?

- If no, go back to (11).
- If yes, the display should now indicate INSERT DISK. Insert the disk and close the access door.
- Display will indicate CHECKING DISK and PLEASE WAIT.

- Wait 1 minute.

(14) Is TIME and DATE displayed?

- Reset OQAR clock if incorrect TIME or DATE are displayed.
- Remove electrical power for 1 minute after resetting OQAR clock, then restore power. If TIME & DATE are incorrect **replace OQAR**.
- **If correct TIME and DATE are displayed, then OQAR is serviceable and no further checks are necessary.**
- If TIME and DATE are not displayed, then go to (15).

(15) Is DRIVE TOO HOT/PLEASE WAIT displayed?

- If no, then go to (16)
- If yes, then switch off electrical power to OQAR, wait 10 minutes, then restore power.
- Wait 1 minute.
- If TIME and DATE is not displayed, the **OQAR or the aircraft installation may have a fault**.

(16) Is DRIVE TOO COLD/PLEASE WAIT displayed?

- If no, then go to (17).
- If yes, then wait 20 minutes and check display again.
- If TIME and DATE is not displayed, the **OQAR or the aircraft installation may have a fault**.

(17) Is WRITE PROTECT/PRESS EJECT displayed?

- If no, then go to (18).
- If yes, remove disk and check that it is not write-protected.
- If disk is not write-protected, the **OQAR may have a fault**.

(18) Is BAD MEDIA/PRESS EJECT displayed?

- If no, then go to (19).
- Check that MO disk capacity is compatible with OQAR (see Penny & Giles SIL D52000-06).
- If disk has not been used before, perform a Low-Level Format on it. Software for this is normally provided by the manufacturer of the MO drive on your PC.

(19) Is LOAD CONFIG displayed?

- If no, then go to (20).
- If yes, then **replace disk**.

(20) Is LOAD PROGRAM displayed?

- **If no, then OQAR is serviceable and no further checks are necessary.**
- If yes, then **replace disk**.

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Optical Quick Access Recorder (OQAR)  
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