



## AIRCRAFT MAINTENANCE MANUAL

### EXTENDED QUICK ACCESS RECORDER (EQAR) SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: AIRCRAFT WITH EQAR

#### 1. General

- A. This section gives the procedures to do the operational test of the Extended Quick Access Recorder (EQAR).
- B. The function of the EQAR is to acquire and record the flight parameters sent by DAU 1 and DAU 2 to the SSFDR and CMC.
- C. The data are recorded on a 3" 1/2 removable magnetic optical disk.
- D. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
31-33-00-700-801-A	EXTENDED QUICK ACCESS RECORDER (EQAR) - OPERATIONAL TEST	AIRCRAFT WITH EQAR



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 31-33-00-700-801-A

EFFECTIVITY: AIRCRAFT WITH EQAR

2. EXTENDED QUICK ACCESS RECORDER (EQAR) - OPERATIONAL TEST

A. General

- (1) This task gives the procedures for the EQAR operational test.
- (2) When 28 V DC is applied to the EQAR, it automatically does its self-tests.
- (3) The self-tests include:
  - Power supply check
  - I/O logic check
  - CPU resource check
  - Optical disk drive and interface checks
- (4) The EQAR is installed in the rear electronic compartment.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Fuselage rear section I - right side

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
1	Magnetic Optical Disk	For the check of the Status function	1
1	A full Magnetic Optical Disk	For the check of the Disk Low function	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment

I. Preparation

**SUBTASK 841-006-B**

- (1) Energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) On the circuit breaker panel, make sure that the QAR circuit breaker is closed.

J. EQAR - Operational Test Procedures ([Figure 501](#))

**SUBTASK 710-006-B**

- (1) Open door 272DR to get access to the rear electronic compartment.
- (2) **NOTE:** If the STATUS LED is off, open the EQAR front door and push the EJECT pushbutton to eject the optical disk. The STATUS LED will come on.  
On the EQAR front panel, make sure that the ON LED (green LED) and the STATUS LED are on.
- (3) Open the EQAR front door and insert an optical disk.
- (4) **NOTE:** Fault conditions can cause the STATUS LED to stay on. These incorrect conditions can cause the STATUS LED to come on:
  1. No disk inserted
  2. Disk not formatted
  3. Disk write protected
  4. Corrupted disk
  5. Full disk
  6. Overheating
  7. Internal buffer overflow
  8. Internal battery low voltage detection
  9. Disk drive defect
  10. Fault detection

Make sure that the STATUS LED goes off after a few seconds.

- (5) For the test of the Full Disk function, do as follows:

**NOTE:** The DISK LOW LED comes on when the disk is more than 70% full.

- (a) Insert a full disk into the drive.

Result:

- 1 After a few seconds, the STATUS LED must be off and the DISK LOW LED must be on.

- (b) On the front face of the disk drive, push the EJECT button and wait for the optical disk ejection.

Result:

- 1 The DISK LOW LED must be off and the STATUS LED must be on.



## AIRCRAFT MAINTENANCE MANUAL

### K. Follow-on

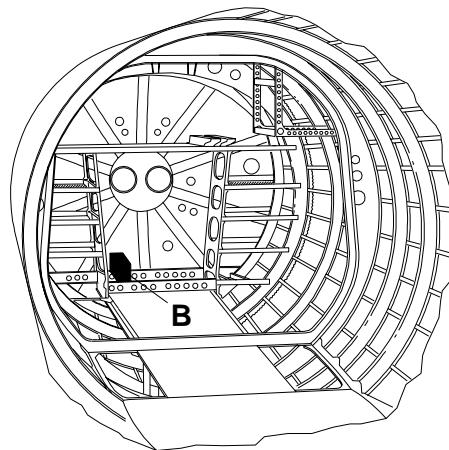
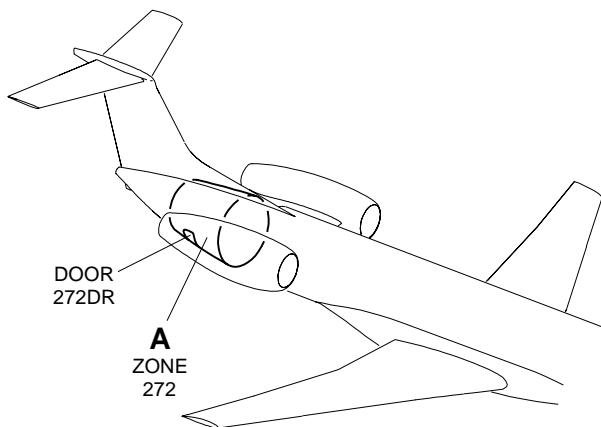
#### SUBTASK 842-006-B

- (1) Make sure that the recorded data disk is installed (STATUS LED is off).
- (2) Close and lock the EQAR front door.
- (3) Close door 272DR (rear electronic compartment door).
- (4) Deenergize the aircraft.

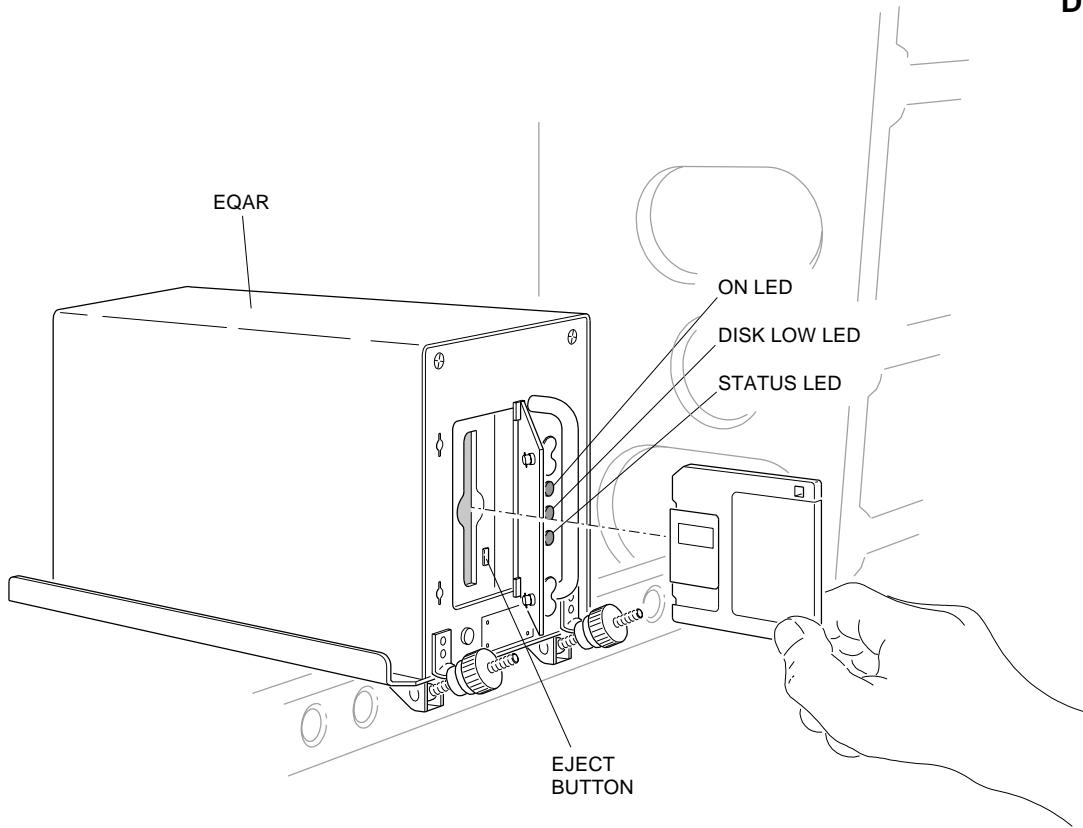
**EFFECTIVITY: AIRCRAFT WITH EQAR**

Extended Quick Access Recorder (EQAR) - Operational Test

Figure 501



**DET. A**



**DET. B**

EM145AMM310630A.DGN

