ELECTRONIC FLIGHT INSTRUMENT SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to do the test of the Integrated Display System.

   B. 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*
34-22-00-700-801-A ♦	ELECTRONIC FLIGHT INSTRUMENT SYSTEM - OPERATIONAL CHECK	ALL

TASK 34-22-00-700-801-A
EFFECTIVITY: ALL

2. ELECTRONIC FLIGHT INSTRUMENT SYSTEM - OPERATIONAL CHECK

A. General

(1) This task gives the procedure to do the Operational Check of the Electronic Flight Instrument System (EFIS).

B. References

REFERENCE	*DESIGNATION*
AMM SDS 23-12-00/1	
AMM SDS 23-51-00/1	
AMM SDS 23-81-00/1	
AMM SDS 31-41-00/1	
AMM SDS 31-42-00/1	
AMM SDS 32-30-00/1	
AMM SDS 34-15-00/1	
AMM SDS 34-21-00/1	
AMM SDS 34-22-00/1	
AMM SDS 34-27-00/1	
AMM SDS 34-31-00/1	
AMM SDS 34-32-00/1	
AMM SDS 34-43-00/1	
AMM SDS 34-51-00/1	
AMM SDS 34-52-00/1	
AMM SDS 34-53-00/1	
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*
223		Cockpit

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Cockpit

I. Preparation

SUBTASK 841-002-A

(1) Energize the aircraft with the DC Power Supply (AMM TASK 20-40-01-860-801-A/200).

(2) Make sure that the Systems below are operational and on:

– Air Data System (AMM SDS 34-15-00/1).

– VHF System (AMM SDS 23-12-00/1).

– Airborne Audio System (AMM SDS 23-51-00/1).

– Radio Management System (AMM SDS 23-81-00/1).

– EICAS (AMM SDS 31-41-00/1).

– Integrated Computer System (AMM SDS 31-42-00/1).

– EFIS (AMM SDS 34-22-00/1).

– Radio Altimeter System (AMM SDS 34-31-00/1).

– VOR/ILS System (AMM SDS 34-32-00/1).

– TCAS (AMM SDS 34-43-00/1).

– DME System (AMM SDS 34-51-00/1).

– Mode-S Transponder (AMM SDS 34-52-00/1).

– ADF System (AMM SDS 34-53-00/1).

– AHRS (AMM SDS 34-21-00/1) or IRS (AMM SDS 34-27-00/1).

(3) Put the aircraft in the ground configuration (AMM SDS 32-30-00/1).

J. Operationally Check Electronic Flight Instrument System Reversion Function (Figure 501) (Figure 502) (Figure 503) (Figure 504) (Figure 505) (Figure 506)

SUBTASK 710-002-A

(1) Do the test of the Display System as follows:

(a) Push and hold the RA test button on DC-550 1.

Result:

1 The test indications of PFD 1 (first level), MFD 1, and EICAS come into view.

2 After a short time, PFD 1 shows the Honeywell test page (second level), with the messages of IC-600 IBIT and their status.

NOTE: You must keep the RA test button on DC-550 pushed until the status message changes from FAIL to PASS (around 25 seconds). If the message status stays as FAIL, you must repair the failure.

(b) Release the RA test button on DC-550 1.

(c) Push and hold the RA test button on DC-550 2.

Result:

1 The test indications of PFD 2 (first level) and MFD 2 come into view.

2 After a short time, PFD 2 shows the Honeywell test page (second level), with the messages of IC-600 IBIT and their status.

NOTE: You must keep the RA test button on DC-550 pushed until the status message changes from FAIL to PASS (around 25 seconds). If the message status stays as FAIL, you must repair the failure.

(d) Release the RA test button on DC-550 2.

(2) Do a check of the EFIS display reversion function as follows:

(a) Turn the MFD rotate switch, on the left reversionary panel, to the PFD position.

Result:

1 MFD 1 is configured to operate, as a PFD 1.

(b) Turn the MFD rotate switch, on the left reversionary panel, to the NORM position.

Result:

1 PFD 1 goes back to the normal indication.

2 MFD 1 goes back to the normal indication.

(c) Turn the MFD rotate switch, on the left reversionary panel, to the EICAS position.

Result:

1 MFD 1 is configured to work as an EICAS.

(d) Turn the MFD rotate switch, on the left reversionary panel, to the NORM position.

Result:

1 The EICAS goes back to the normal indication.

2 MFD 1 goes back to the normal indication.

(e) Turn the MFD rotate switch, on the right reversionary panel, to the PFD position.

Result:

1 MFD 2 is configured to operate as a PFD 2.

(f) Turn the MFD rotate switch, on the right reversionary panel, to the NORM position.

Result:

1 PFD 2 goes back to the normal indication.

2 MFD 2 goes back to the normal indication.

(g) Turn the MFD rotate switch, on the right reversionary panel, to the EICAS position.

Result:

1 MFD 2 is configured to operate as an EICAS.

(h) Turn the MFD rotate switch, on the right reversionary panel, to the NORM position.

Result:

1 The EICAS goes back to the normal indication.

2 MFD 2 goes back to the normal indication.

(3) Do a check of the EFIS source reversion function as follows:

(a) Push the ADC pushbutton, on the pilot reversionary panel.

Result:

1 PFD 1 shows ADC 2 (amber).

(b) Push the ADC pushbutton, on the copilot reversionary panel.

Result:

1 PFD 2 shows ADC 1 (amber).

(c) Push the ADC pushbutton again, on the pilot and copilot reversionary panels.

Result:

1 The PFDs go back to the normal configuration.

(d) Push the SG pushbutton, on the pilot reversionary panel.

Result:

1 PFD 1 shows SG 2 (amber).

(e) Push the SG pushbutton again, on the pilot reversionary panel.

Result:

1 PFD 1 goes back to the normal configuration.

(f) Push the SG pushbutton, on the copilot reversionary panel.

Result:

1 PFD 2 shows SG 1 (amber).

(g) Push the SG pushbutton again, on the copilot reversionary panel.

Result:

1 The PFD 2 goes back to the normal configuration.

(h) Push the AHRS (or IRS) pushbutton, on the pilot reversionary panel.

Result:

1 (Aircraft with AHRS) PFD 1 shows MAG 2 or DG2 (amber) and ATT 2 (amber).

2 (Aircraft with Dual IRS) PFD 1 shows MAG 2 (amber) and ATT 2 (amber).

(i) Push the AHRS (or IRS) pushbutton, on the copilot reversionary panel.

Result:

1 (Aircraft with AHRS) PFD 2 shows MAG 1 or DG1 (amber) and ATT 1 (amber).

2 (Aircraft with Dual IRS) PFD 2 shows MAG 1 (amber) and ATT 1 (amber).

(j) Push the AHRS (or IRS) pushbutton again, on the pilot and copilot reversionary panel.

Result:

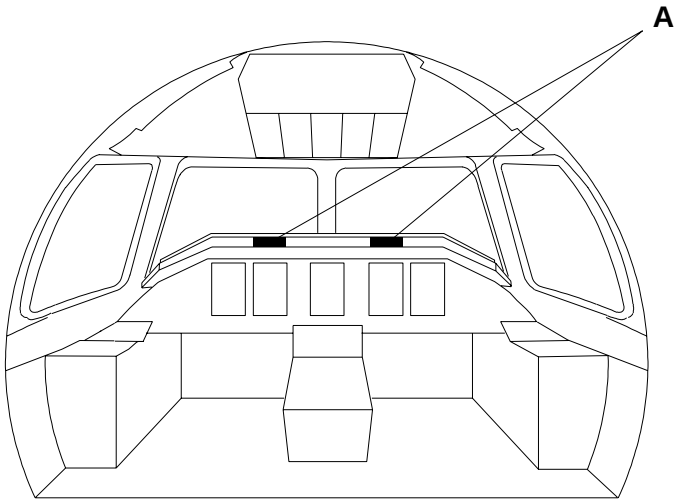
1 The PFDs go back to the normal configuration.

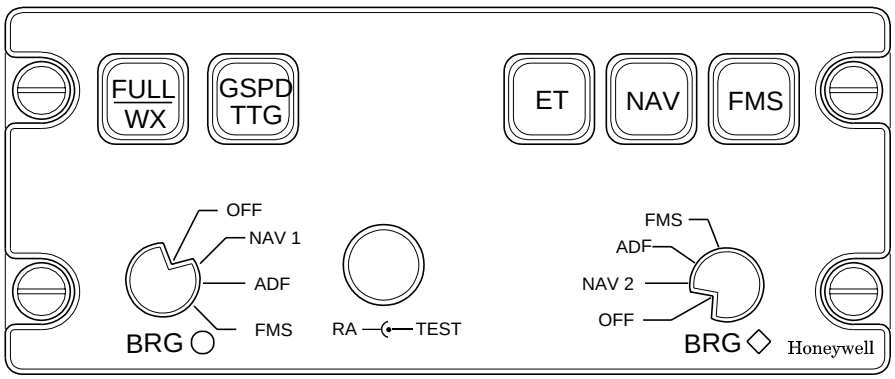
K. Follow-on

SUBTASK 842-002-A

(1) Deenergize the aircraft (AMM TASK 20-40-01-860-801-A/200).

EFFECTIVITY: ALL
DC-550
Figure 501



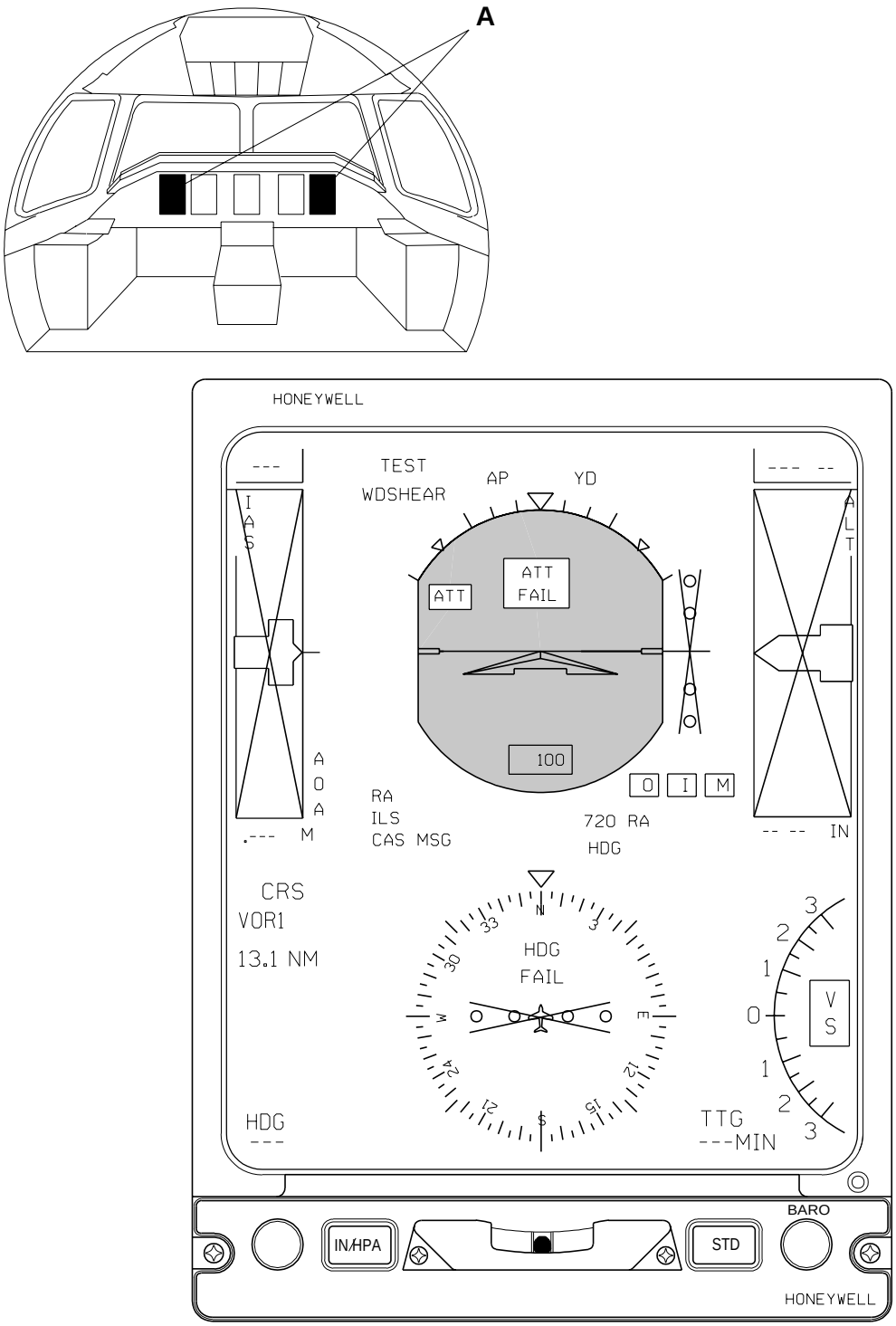


DET. A

145AMM340021.MCE A

EFFECTIVITY: ALL

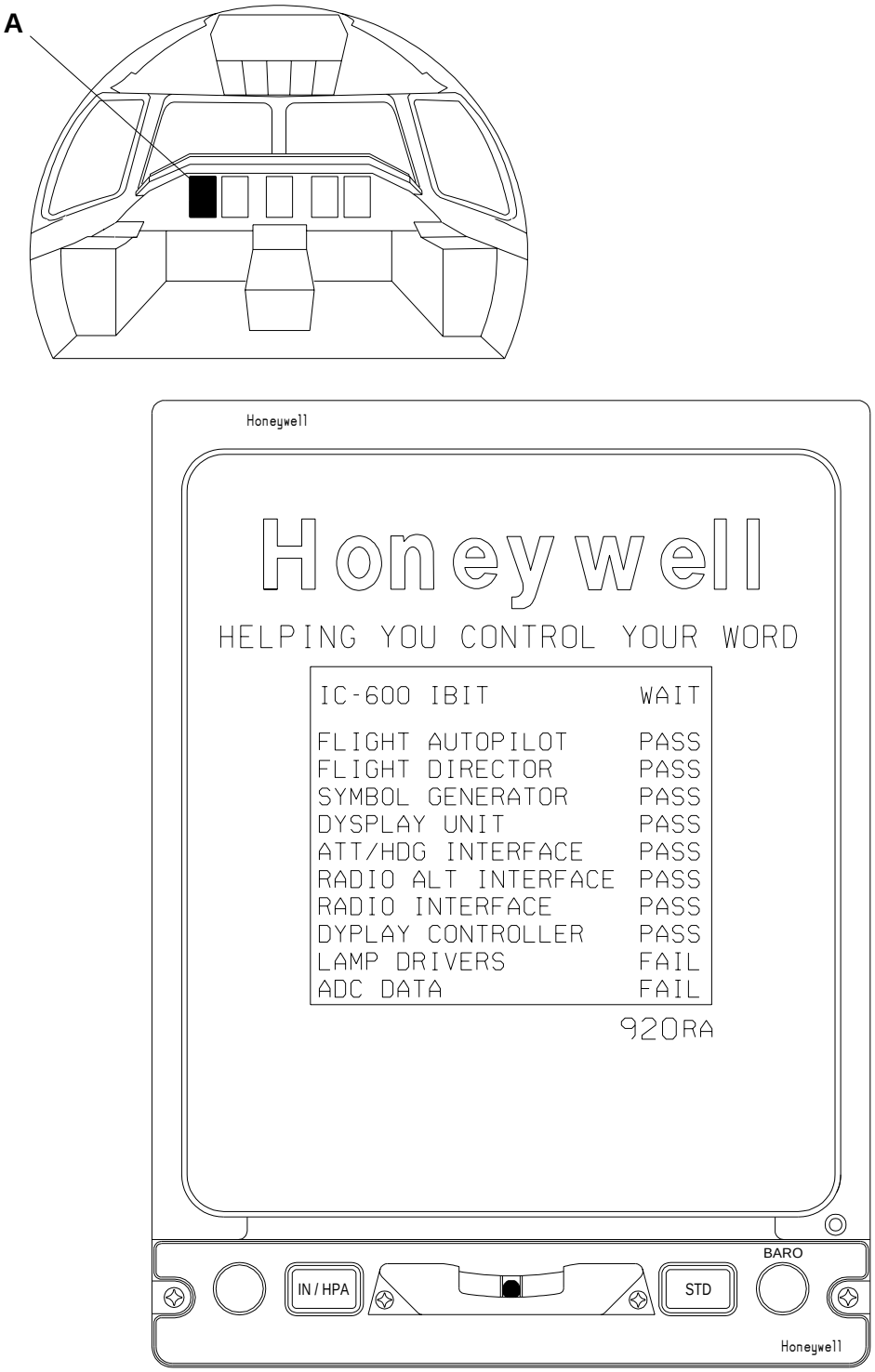
PFDs Test Indication - First Level
Figure 502



DET. A

145AMM310060.MCE A

EFFECTIVITY: ALL
PFD 1 Test Indication - Second Level
Figure 503

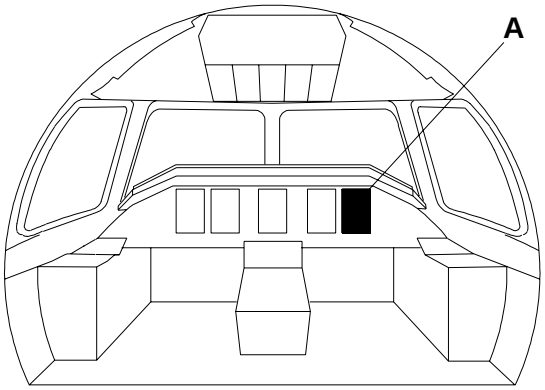


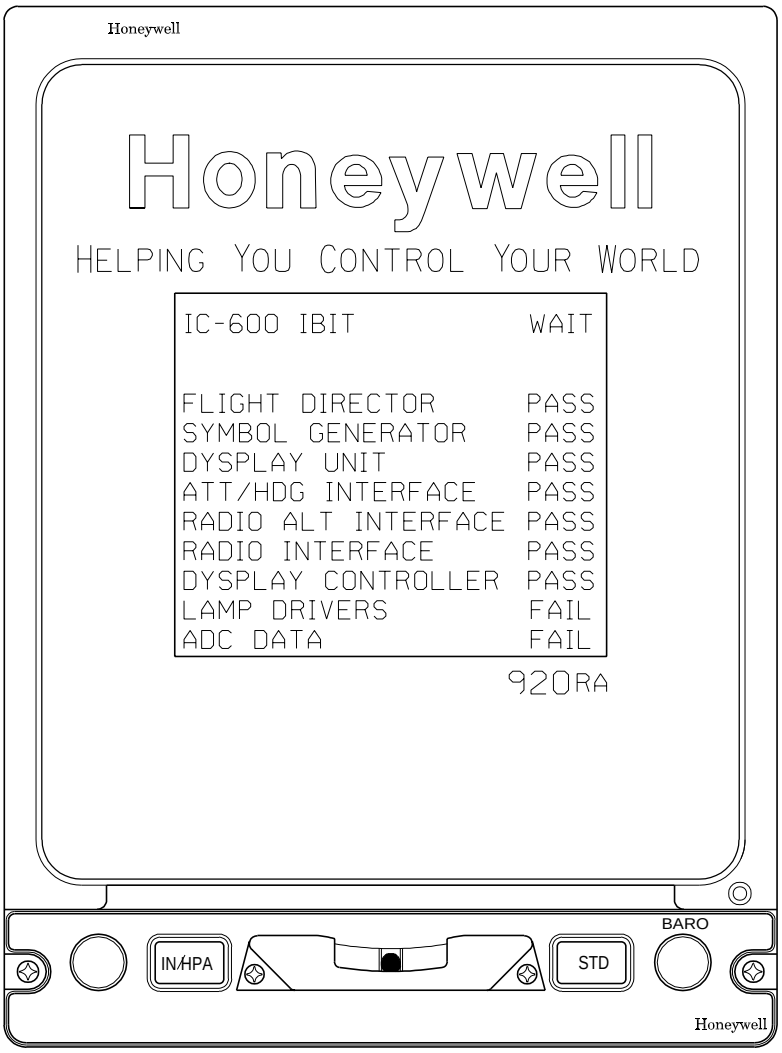
DET. A

EM145AMM310627A.DGN

EFFECTIVITY: ALL

PFD 2 Test Indication - Second Level
Figure 504

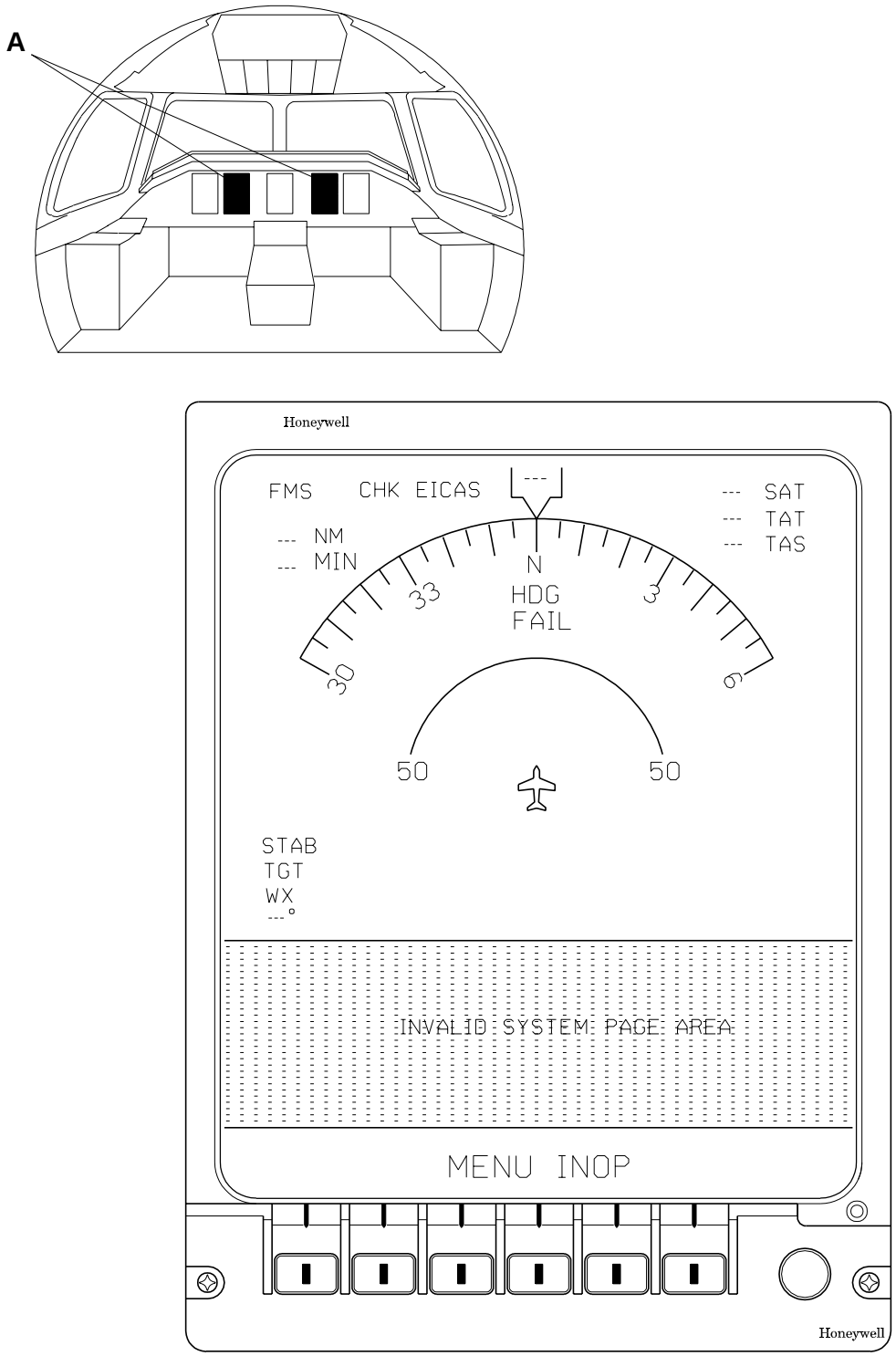




DET. A

145AMM310062.MCE A

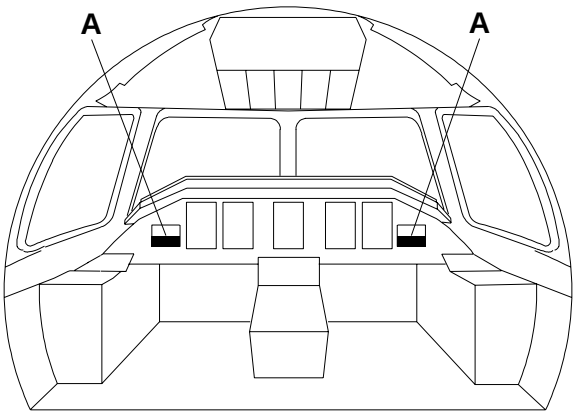
EFFECTIVITY: ALL
MFDs Test Indication
Figure 505

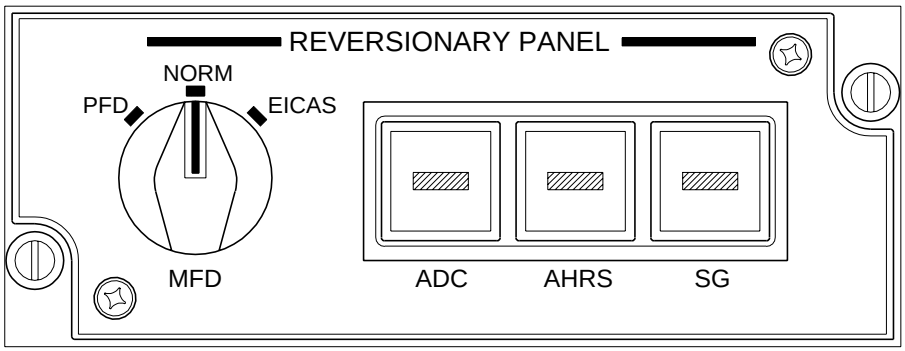


DET. A

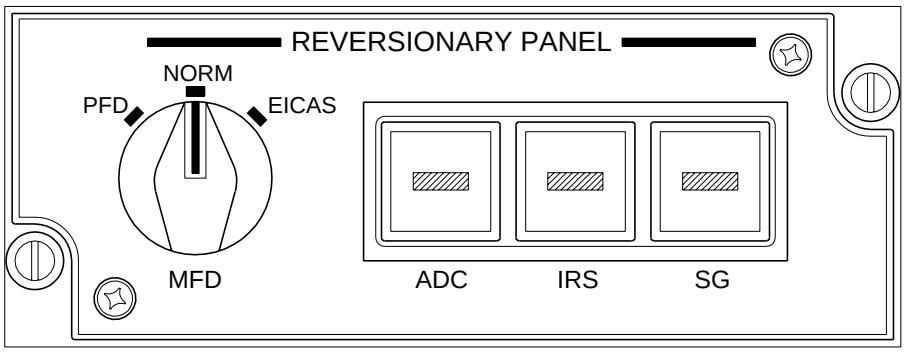
145AMM310063.MCE A

EFFECTIVITY: ALL
Reversionary Panel
Figure 506





DET. A 1



DET. A 2

1 AIRCRAFT WITH AHRS.

2 AIRCRAFT WITH DUAL IRS

145AMM340193.MCE A