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REVERSION PANEL GROUND CHECKOUT PROCEDURE

The following procedure is used to identify if the reversion control panel is operating properly within the aircraft. The test procedure is design to operate with an MDT of -131. The first test is between the Reversion Panel and the MFD, the second is for the Reversion Panel and the VHF1 radio, and the third is between the Reversion Panel and the CDU, and the fourth is Reversion Panel selections to the MFD/PFD. If any verification step fails, note the result that is displayed or received in the margin and continue with the next verification or procedure step including radio communications. At the conclusion of the tests, the procedure includes returning the system to normal operation.

There are two verification boxes ☐ ☐ at the beginning of each verification step. If necessary, the procedure can be rerun on the pilot side and the second set of boxes can be used to record the results of this second run. When the procedure is rerun Pilot should be replaced for Co-Pilot, MFD1 for MFD2, CDU1 for CDU2, and LEFT Display for RIGHT Display.

As a guide, page names are in *BLUE ITALICS*, soft key selections are in MAGENTA UNDERLINE, and hard key/knob selections are in **BLACK BOLD**.

Please provide a/c and contact information:

A/C serial No.:_____

Submitters Name:_____

Phone Number: _____

Test 1: REVERSION Panel selections to the MFD

1. If IFIS is installed on the aircraft, on the Reversion Panel, set EICAS to BOTH PFDS.
2. On the Co-Pilot CDU, press **TUN**.

   ☐ ☐ Verify the "*TUNE*" page is displayed on the CDU.

3. On the Co-Pilot CCP, press the following 3 buttons at the same time: **A/ICE - ECS - FUEL**

☐ ☐ Verify the Co-Pilot MFD now displays the "*MAINTENANCE MAIN MENU*" on the upper section of the MFD.

Note: If rerunning from Pilot side and IFIS is not installed the "MAINTENANCE MAIN MENU" will only show up on the Co-Pilot MFD.

4. On the Co-Pilot CCP, use the Joystick up/down to select LRU INDEX/OPERATIONS on the Co-Pilot MFD.
5. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify on the Co-Pilot MFD the "*LRU INDEX 1/X*" page is displayed.

6. On the Co-Pilot CCP, use the Joystick left/right motion to navigate to the page that shows MFD 2 34-25.
7. Use Joystick up/down motion, to select MFD 2 34-25.
8. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify the Co-Pilot MFD now displays the "*LRU OPERATIONS ATA 34-25 EFIS MFD2*" page on the upper section of the MFD.

☐ ☐ Verify the Co-Pilot MFD now displays Label 277 and others on the upper section of the MFD.

9. On the Co-Pilot CCP, press **SKIP**.
10. Use the Joystick up/down motion to select 277.
11. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify the "*DATA READER*" page is displayed on the Co-Pilot MFD.

☐ ☐ Verify the bit names and values for Label #277 AFD INPUT DISCRETE WD are displayed on the Co-Pilot MFD.

12. On the Reversion Panel, rotate the TUNE reversion knob to **CDU ONLY**
13. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 12 "MFD TUNE DISABLE" is set to 1.

☐ ☐ Bit 28 "CDU TUNE DISABLE" is set to 0.

☐ ☐ Tuning info is blanked at the bottom of Co-Pilot MFD

☐ ☐ Tuning info is blanked at the bottom of Pilot MFD

14. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.
15. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 12 "MFD TUNE DISABLE" is set to 0

☐ ☐ Bit 28 "CDU TUNE DISABLE" is set to 0.

☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.

☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

16. On the Reversion Panel, rotate the TUNE reversion knob to **MFD ONLY**.
17. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 12 “MFD TUNE DISABLE” is set to 0
☐ ☐ Bit 28 “CDU TUNE DISABLE” is set to 1.
☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.
☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

18. On the Co-Pilot CDU.

☐ ☐ Verify, “EXTERNAL CONTROL ONLY” is displayed.

19. On the Reversion Panel, rotate the TUNE reversion knob to **COM1 121.50**.
20. On the Co-Pilot MFD, verify the following:

☐ ☐ Bit 11 “121.50 ENABLE” is set to 1.

Bit 13 “ARINC/CDSB CTRL SLCT” is set to 1.
☐ ☐ Bit 12 “MFD TUNE DISABLE” is set to 0.
☐ ☐ Bit 28 “CDU TUNE DISABLE” is set to 0.
☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.
☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

21. On the Co-Pilot CCP, press **TR/WX**, three (3) times to return to the “*MAINTENANCE MAIN MENU”*page.
22. On the Co-Pilot CCP, press **TFC** to exit the “*MAINTENANCE MAIN MENU”*page.
23. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.

Test 2: REVERSION Panel selections to the VHF1 Radio

1. On the Co-Pilot CDU, press **TUN**.

☐ ☐ Verify the “*TUNE*” page is displayed on the CDU.

2. On the Co-Pilot CCP, press the following 3 buttons at the same time:

A/ICE - ECS - FUEL

☐ ☐ Verify the Co-Pilot MFD now displays the “*MAINTENANCE MAIN MENU*” on the upper section of the MFD.

3. On the Co-Pilot CCP, use the Joystick up/down to select LRU INDEX/OPERATIONS on the Co-Pilot MFD.
4. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify on the Co-Pilot MFD the “*LRU INDEX 1/X”* page is displayed.

5. On the Co-Pilot CCP, use the Joystick left/right motion to navigate to the page that shows VHF 1 23-11.
6. Use Joystick up/down motion, to select VHF 1 23-11.
7. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify the Co-Pilot MFD now displays the "*LRU OPERATIONS ATA 23-11 VHF COMMUNICATION VHF2*" page on the upper section of the MFD.

☐ ☐ Verify the Co-Pilot MFD now displays at least Label 060 on the upper section of the MFD.

8. On the Co-Pilot CCP, press **SKIP**.
9. Use the Joystick up/down motion to select 060.
10. On the Co-Pilot CCP, press **ENTER**.

☐ ☐ Verify the "*DATA READER*" page is displayed on the Co-Pilot MFD.

☐ ☐ Verify the bit names and values for Label 060 VHF DIAGNOSTICS WD 2 are displayed on the Co-Pilot MFD.

11. On the Reversion Panel, rotate the TUNE reversion knob to **CDU ONLY.**
12. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 16 "PORT C SLCT DISC STATUS" is set to 1

☐ ☐ Tuning info is blanked at the bottom of the Co-Pilot MFD

☐ ☐ Tuning info is blanked at the bottom of the Pilot MFD

13. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.
14. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 16 "PORT C SLCT DISC STATUS" is set to 0.

☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.

☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

15. On the Reversion Panel, rotate the TUNE reversion knob to **MFD ONLY**.
16. On the Co-Pilot MFD verify the following:

☐ ☐ Bit 16 "PORT C SLCT DISC STATUS" is set to 0.

☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.

☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

17. On the Co-Pilot CDU.

☐ ☐ Verify, "EXTERNAL CONTROL ONLY" is displayed.

18. On the Reversion Panel, rotate the TUNE reversion knob to **COM 121.50**.
19. On the Co-Pilot MFD, verify the following:

☐ ☐ Bit 13 "ARINC/CDSB CTRL SLCT" is set to 1.

☐ ☐ Bit 16 “PORT C SLCT DISC STATUS” is set to 0.
☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD.
☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD.

20. On the Co-Pilot CCP, press **TR/WX**, three (3) times to return to the “*MAINTENANCE MAIN MENU”*page.
21. On the Co-Pilot CCP, press **TFC** to exit the “*MAINTENANCE MAIN MENU”*page.
22. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.

Test 3: REVERSION Panel selections to the CDU

1. On the Co-Pilot CDU, press and hold IDX for 3 seconds.

☐ ☐ Verify on the Co-Pilot CDU, the “*MCDU Menu”* is displayed.

2. On the Co-Pilot CDU, type **TEST**.

☐ ☐ Verify on the Co-Pilot CDU, the “*TEST MENU”* page is displayed.

3. On the Co-Pilot CDU, press the **D** key.

☐ ☐ Verify on the Co-Pilot CDU, the “*INPUT DISCRETES ½”* page is displayed.

4. On the Reversion Panel, rotate the TUNE reversion knob to **CDU ONLY.**
5. On the Co-Pilot CDU, verify the following:

☐ ☐ REM TUNE: is set to 1.
☐ ☐ CTL/121.5 is set to 0.
☐ ☐ Under 51, a 0 is displayed.
☐ ☐ Tuning info is blanked at the bottom of the Co-Pilot MFD
☐ ☐ Tuning info is blanked at the bottom of the Pilot MFD

6. On the Reversion Panel, rotate the TUNE reversion knob to **NORM.**
7. On the Co-Pilot CDU, verify the following:

☐ ☐ REM TUNE: is set to 0.
☐ ☐ CTL/121.5 is set to 0.
☐ ☐ Under 51, a 0 is displayed.
☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD
☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD

8. On the Reversion Panel, rotate the TUNE reversion knob to **MFD ONLY.**
9. On the Co-Pilot CDU, verify the following:

☐ ☐ REM TUNE: is set to 0.
☐ ☐ CTL/121.5 is set to 0.

☐ ☐ Under 51, a 1 is displayed.

☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD

☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD

10. On the Reversion Panel, rotate the TUNE reversion knob to **COM1 121.50.**
11. On the Co-Pilot CDU, verify the following:

☐ ☐ REM TUNE: is set to 0.

☐ ☐ CTL/121.5 is set to 1.

☐ ☐ Under 51, a 0 is displayed.

☐ ☐ Tuning info is displayed at the bottom of the Co-Pilot MFD

☐ ☐ Tuning info is displayed at the bottom of the Pilot MFD

12. On the Co-Pilot CDU, press **IDX** repeatedly until the *INDEX* page is displayed.
13. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.

Test 4: REVERSION Panel selections to the MFD/PFD

1. Select two frequencies that can be used to verify VHF communications outside the aircraft and enter them below. To minimize transmissions you may choose to use the local ATIS frequency as one of the two frequencies.

   FREQ 1: _____ FREQ 2:_____

   NOTE: When entering the above frequencies on the CDU, type in the frequency into the scratchpad and do not use the recall function.

2. On the Co-Pilot CDU, press **TUN**.

   ☐ ☐ Verify on the Co-Pilot CDU, the "*TUNE*" page is displayed.

3. On the Reversion Panel, rotate the RIGHT DISPLAY reversion knob to **NORM.**
4. On the DCP, tune VHF1 to FREQ 2.

   ☐ ☐ After 5 seconds, verify on the Co-Pilot MFD, FREQ 2 is displayed in GREEN for COM1.

   ☐ ☐ After 5 seconds, verify on the Co-Pilot CDU, FREQ 2 is displayed in GREEN for COM1.

   ☐ ☐ Verify communications on COM1 FREQ 2.

5. On the Reversion Panel, rotate the TUNE reversion knob to **CDU ONLY.**

   ☐ ☐ Verify on the Co-Pilot MFD, tuning info is blanked at the bottom of the MFD

6. On the Co-Pilot CDU, enter by typing FREQ 1 into the scratch pad and press COM1.

☐ ☐ Verify on the Co-Pilot CDU, COM1 is tuned to FREQ1.
☐ ☐ Verify on the Co-Pilot CDU, FREQ 1 is displayed in GREEN for COM1.
☐ ☐ Verify communications on COM1 FREQ 1.

7. On the Reversion Panel, rotate the Right Display reversion knob to **PFD REV.**

☐ ☐ Verify the Co-Pilot MFD is blank.
☐ ☐ Verify the Co-Pilot PFD is NOT blank.

8. On the Co-Pilot CDU, enter FREQ 2 into the scratch pad and press COM1.

☐ ☐ Verify on the Co-Pilot CDU, COM1 is tuned to FREQ 2.
☐ ☐ Verify on the Co-Pilot CDU, FREQ 2 is displayed in GREEN for COM1.
☐ ☐ Verify communications on COM1 FREQ 2.

9. On the Reversion Panel, rotate the Right Display reversion knob to **MFD REV.**

☐ ☐ Verify the Co-Pilot PFD is blank.
☐ ☐ Verify the Co-Pilot MFD is NOT blank.

10. On the Co-Pilot CDU, enter FREQ 1 into the scratch pad and press COM1.

☐ ☐ Verify on the Co-Pilot CDU, COM1 is tuned to FREQ 1.
☐ ☐ Verify on the Co-Pilot CDU, FREQ 1 is displayed in GREEN for COM1.
☐ ☐ Verify communications on COM1 FREQ 1.

11. On the Reversion Panel, rotate the TUNE reversion knob to **NORM**.
12. On the Reversion Panel, rotate the RIGHT DISPLAY reversion knob to **NORM.**

Test Completion: Return System to Normal Operation

Note: At the completion of these tests perform the following to return to normal operations:

1. If IFIS is installed on the aircraft, on the Reversion Panel, set EICAS to LEFT MFD.