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ADVISORY WIRE
GX700T-0006R1

DATE: 28 , MARCH 2000	**TIME/HEURE:**	**PAGE 1 OF 15**

ADDRESS TO:
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FAX NUMBER:
NUMÉRO DE FAX:

FROM/DE: **Bombardier Aerospace, Business Aircraft Division**

ADVISORY WIRE

REFERENCE NO: GX700T-0006 R1

SUBJECT: Revision 1 - WING A/ICE FAULT (Advisory)
EICAS Messages

EFFECTIVITY: BD700-1A10 (9005 AND SUBS)

Si vous ne recevez pas toutes les pages, veuillez rappeler **(514)-855-7469**
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If you require technical information concerning this wire, please call your Field Service Representative.

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1.0 REFERENCE:

1) **RSI-C-01005 A**
2) **APPENDIX A REV1:** PROCEDURE TO LOAD CAIMS LDI (loadable diagnostic information)

2.0 INTRODUCTION:

R1

The Revision 1 is introduced to replace Appendix A as the procedure given with the original Advisory Wire only works for loading an LDI that is more recent than the one already installed on the PMAT. This procedure is therefore not suitable for loading an older LDI such as necessitated by Section 4.0 B. Appendix A has been replaced in its entirety. The new procedure in the Appendix Rev.1 will work in all situations (new or old LDI loading with any version of PMAT). All other information in the original Advisory wire remains unchanged.

A recent condition was discovered on the GX where the WING A/ICE FAULT advisory message is intermittently posted on EICAS when the Wing Anti-Ice is selected ON. This message can occur both during engine ground run or in-flight.

3.0 DESCRIPTION

Troubleshooting, using CAIMS revealed that the LEFT and/or RIGHT OUTBD WAI TEMP SENSOR message was triggering the EICAS message. The BLEED MANAGEMENT CONTROLLER non-volatile memory was then downloaded and it was determined that the BMC had detected a sensor miscompare. The miscompare that is detected by the BMC is generated by a temperature difference, greater than 5 degrees Celsius between the two sensors within an OUTBD dual sensor assembly.

Because the output signal from the DAU, is compared to the output signal of the BMC and each is connected to a different sensor within the sensor assembly, nuisance WING A/ICE FAULT message may be triggered on some occasions because of a difference between the two output signals. This finding led to the conclusion that this does not prevent normal operation of the system other than a nuisance indication.

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4.0 ACTION:

A) Prior to flying into known icing conditions, do the following on the ground: Start both engines and select Wing Anti –Ice "ON" and verify the "WING A/ICE FAULT"EICAS message does not appears. If yes, do the CAIMS ACTIVE FAULTS CHECK as per this procedure, prior to departure.

On CAIMS, verify if the "WING A/ICE FAULT " EICAS message is caused by the "LEFT OUTBD WAI TEMP SENSOR / WRG" and/or "RIGHT OUTBD WAI TEMP SENSOR /WRG" as follow:

1) Start- up the PMAT
2) Start CAIMS
3) Select "ACTIVE FAULTS"
4) If "36-00 BLEED MANAGEMENT CONTROLLER #1" appears in amber:

a) Select INERNAL/INTERFACE or PROBE FAILURE under "36-00 BLEED MANAGEMENT CONTROLER #1.
b) Select "SHOW DETAIL"
c) Verify if the fault:" LEFT OUTBD WING AI TEMP SENSOR/WRG " is displayed.

5) If "36-00 BLEED MANAGEMENT CONTROLLER #2 " appears in amber:

a) Select INTERNAL/INTERFACE or PROBE FAILURE under "36-00 BLEED MANAGEMENT CONTROLLER #2"
b) Select "SHOW DETAIL"
c) Verify if the fault: "RIGHT OUTBD WAI TEMP SENSOR /WRG" is displayed.

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6) Exit CAIMS
7) Do the shutdown of the PMAT

B) If the "WING A/ICE FAULT " EICAS message was reported during the last flight, do the CAIMS FLIGHT FAULTS CHECK as per this procedure:

1) Start up the PMAT
2) Load SWAN .019 LDI (REFER APPENDIX A REV1) | **R1**
3) Start CAIMS
4) Select "SYSTEM DIAG "
5) Select "36-00 PNEUMATIC"
6) Select "BLEED MANAGEMENT CONTROLER #1"
7) Select "FLIGHT FAULTS"
8) Select "PREV FAULTS" until you get to the date and leg on which the CAS message occurred and verify if the "LEFT OUTBD WING AI TEMP SENSOR /WRG" fault is shown
9) Select "EXIT SUBSYS"
10) Select "BLEED MANAGEMENT CONTROLLER #2"
11) Select "FLIGHT FAULT"
12) Select"PREV FAULT " until you get to the date and leg on which the CAS message occurred and verify if the "RIGHT OUTBD WAI TEMP SENSOR /WRG " fault is shown
13) Exit CAIMS
14) Load Eagle .021 LDI (REFER APPENDIX A REV1) | **R1**
15) Do the shutdown of the PMAT

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It is permissible to dispatch in icing conditions with "WING A/ICE FAULT"EICAS message provided that the cause is a "LEFT OUTBD WAI TEMP SENSOR/WRG " and/or "RIGHT OUTBD WAI TEMP SENSOR /WRG " fault.

5.0 FUTURE ACTION

LDI TOUCAN .022 is scheduled for release second quarter of 2000, when this LDI will be install in the CAIMS, operators should disregard the APPENDIX " A REV1", and the requirement load SWAN .019 LDI.

LIEBHERR-AEROSPACE is in the process of releasing a new version of BMC p/n:GG546-1017–11, that new version will correct the nuisance CAS message.

If you have any further queries please contact your respective Field Service Representative. We shall keep you informed of the progress towards the release of the new BMC in service.

*Ensure that a copy of EAGLE .021 LDI is always with the aircraft..

The PMAT has an autoload program which compares the LDI version on the hard drive with the version on a CD placed in the CD-ROM drive and then guides the user through a few simple steps to automatically load the LDI version desired. This autoload program does not work correctly with CAIMS 6.0 (PMAT P/N -905) and has been fixed in CAIMS 6.1 (PMAT P/N -907). For PMATs with P/N -907, simply place the CD in the CD-ROM drive and follow the messages given by the autoload program. For PMATs with P/N -905, do the following procedure instead.

Procedure for LDI Loading with CAIMS 6.0

This procedure describes how to load Swan.019 for the purpose of carrying out Advisory Wire GX700T-0006. After doing the Advisory Wire, redo this procedure to load Eagle.021. To load Eagle.021 replace the terminology ”Swan.019” with “Eagle.021” and replace “Eagle.021” with “Swan.019”.

1. Make sure all applications and the CAIMS DLL Manager are not running. If any application is running, close it.
2. On the task bar, select “Start - Programs - File Manager”. See Figure 1.

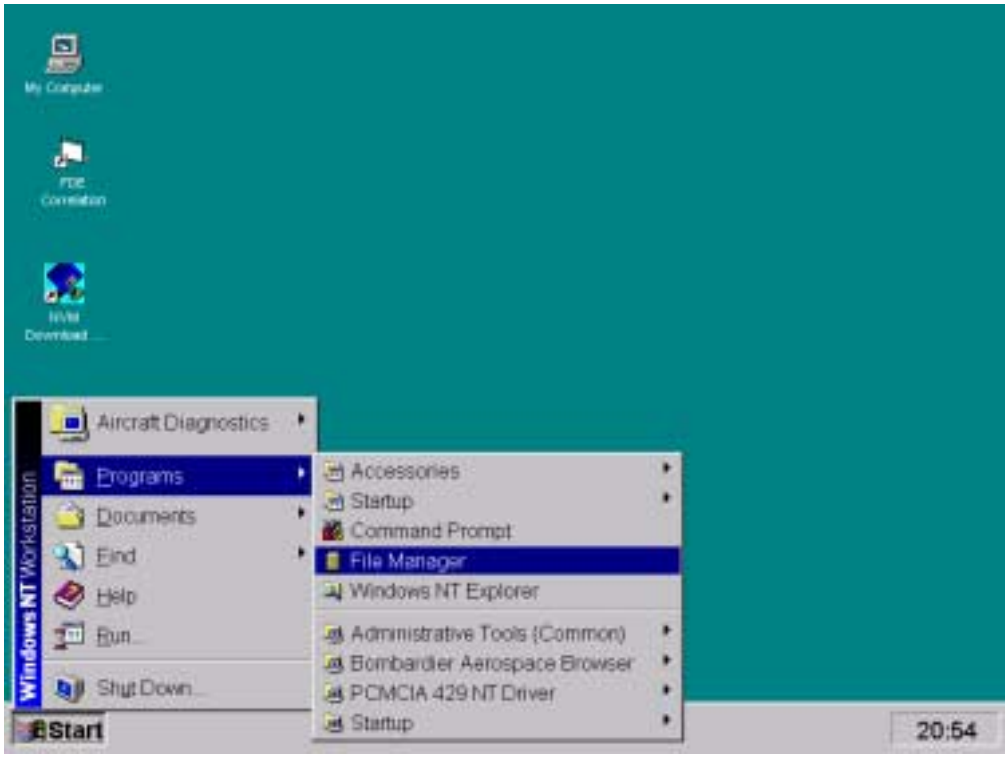

Figure 1 Start - Programs - File Manager

3. In the File Manager, select C:\CAIMS directory and the existing LDI. (e.g. Eagle.021) See Figure 2.

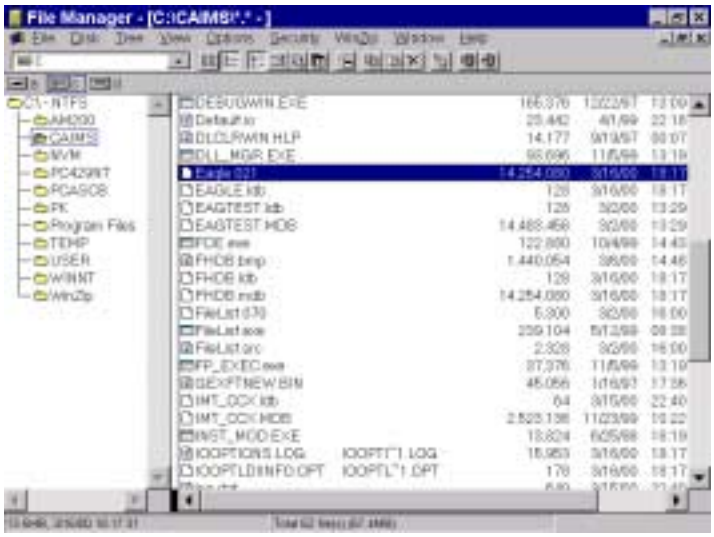

Figure 2 File Manager

CAUTION: Be very careful when you are working in the C:\CAIMS directory. Do only the steps described in this procedure. The files and executables in this directory are critical for the proper operation of the CAIMS PMAT applications.

4. In the File menu, select “Delete”. See Figure 3.

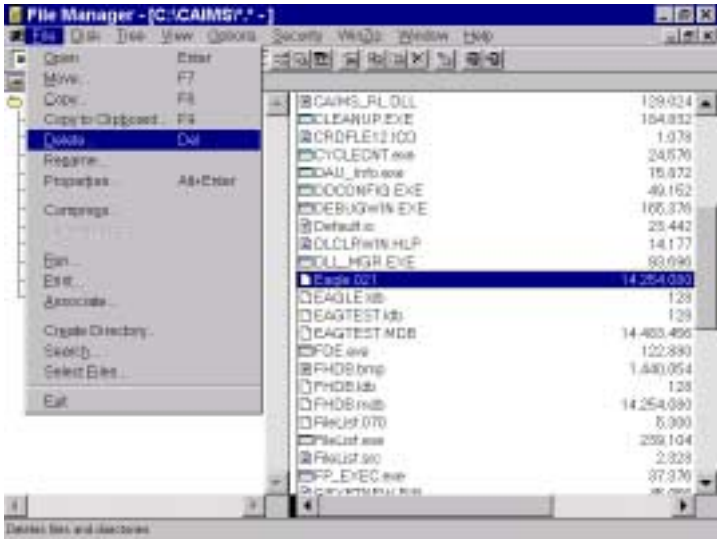

Figure 3 File Manager

5. Select the “OK” button. See Figure 4.

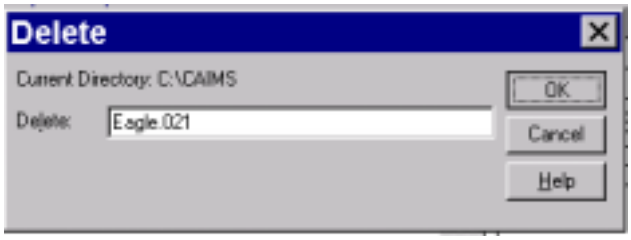

Figure 4 Delete Window

6. Select the “Yes” button to confirm delete. See Figure 5.

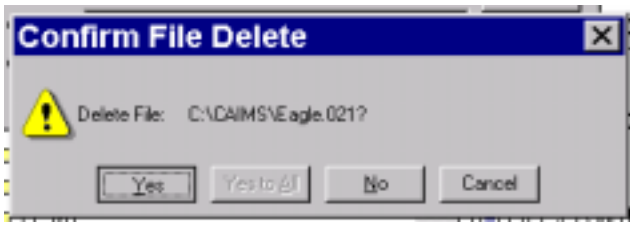

Figure 5 Confirm File Delete Window

7. Insert the CD which has the LDI that needs to be loaded. (e.g. Swan.019)

8. Select the D:\ drive icon, CAIMS directory and copy the LDI file from the CD-ROM CAIMS directory to the C:\CAIMS directory by dragging the file to the C:\ drive icon. (e.g. Swan.019). See Figure 6.

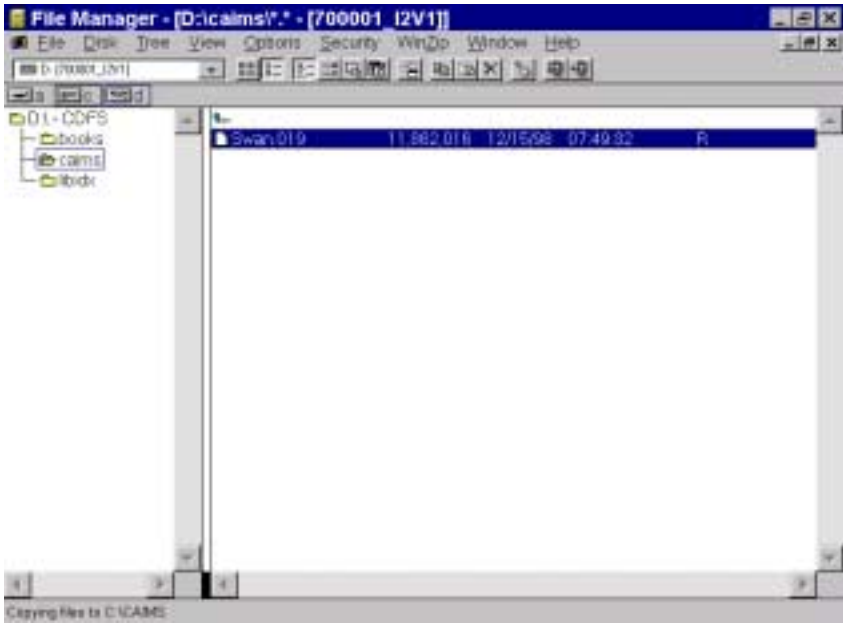

Figure 6 File Manager

9. In the “Confirm Mouse Operation” window, select the “YES” button. See Figure 7.

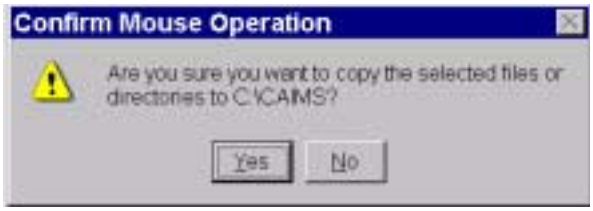

Figure 7 Confirm Mouse Operation

10. In the C\:CAIMS directory, select the LDI file you just copied. (e.g. Swan.019) See Figure 8.

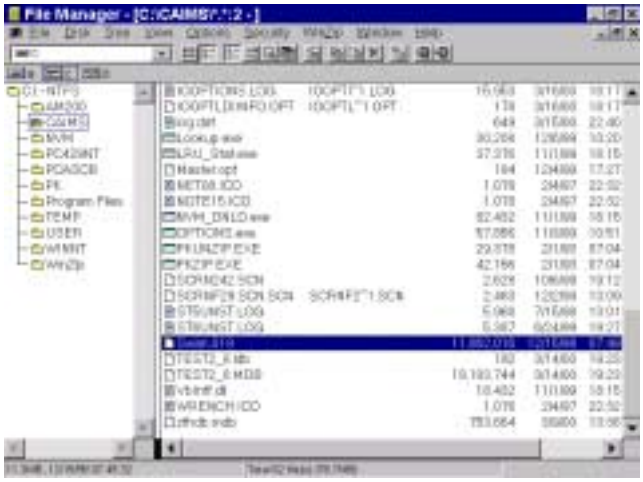

Figure 8 File Manager

11. In the menu, select “File - Properties”. See Figure 9.

Figure 9 File Manager

12. If the LDI file properties are “Read-Only”, deselect “Read-Only” so that there is no check mark displayed and select the “OK” button. See Figure 10.

Figure 10 Properties Window

13. In the menu, select “File - Exit”. See Figure 11.

Figure 11 File Manager

14. In the Start menu, select “Aircraft Diagnostics - ODBC Administrator”. See Figure 12.

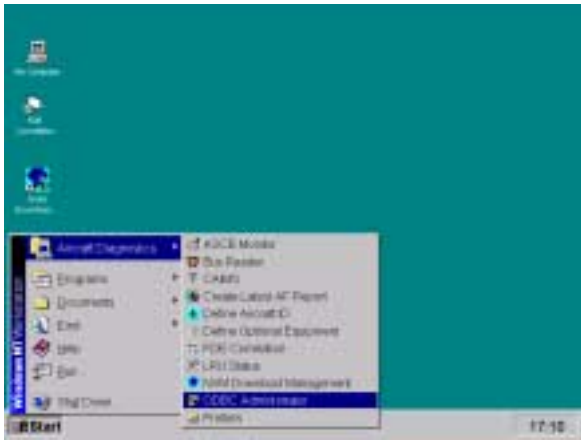

Figure 12 Start - ODBC Administrator

15. On the “Data Sources” window, Click on the “DCT_V6” data source. See Figure 13.

Figure 13 ODBC "Data Sources" Window

16. On the "Data Sources" window, select "Setup". See Figure 13.
17. On the "ODBC Microsoft Access 2.0 Setup" window, in the Database section, Select "Select...". See Figure 14.

Figure 14 "ODBC Microsoft Access 2.0 Setup" Window

18. On the "Select Database" window, to view all file names, select "All Files(*.*)" in the "List Files of Type" field and select the LDI (e.g. Swan.019) from the C:\CAIMS directory using the given browser. See Figure 15.

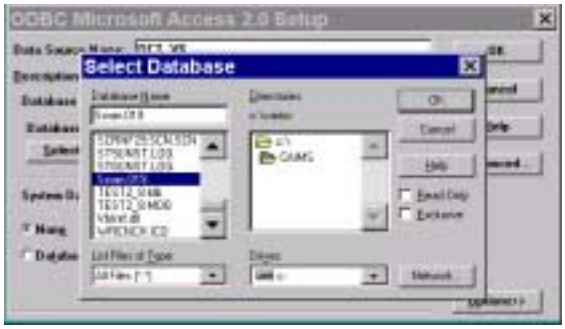

Figure 15 ODBC "Select Database" Window

19. On the "Select Database" window, Select "OK". See Figure 15.
20. On the "ODBC Microsoft Access 2.0 Setup" window, Select "OK". See Figure 14.
21. If an error message appears regarding the configuration process failing, select "Cancel" on the error message window. See Figure 16.

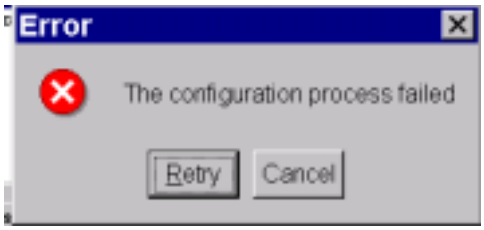

Figure 16 Error Message

22. On the “Data Sources” window select “Close” to exit the ODBC manager. See Figure 13.

23. Start CAIMS application. During the CAIMS application start-up, on the “WELCOME TO CAIMS Version....” window, confirm that the new LDI (e.g. Swan.019) is loading. The LDI is shown in the lower left-hand corner of the window at the end of the start-up process.

Note: If you missed the LDI identification on the “WELCOME TO CAIMS Version....” window, you can find which LDI is in use by selecting “About” in the CAIMS menu. See Figure 17.

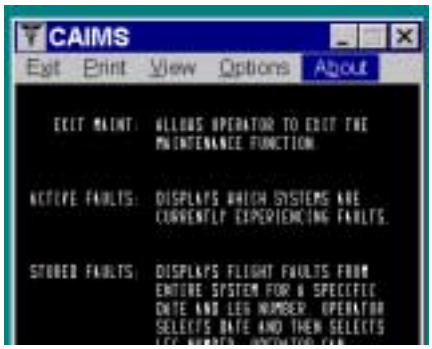

Figure 17 Selecting “About” in CAIMS

On the “About CAIMS” window, the LDI is the only file which terminates in a three digit extension (e.g. Swan.019). See Figure 18.

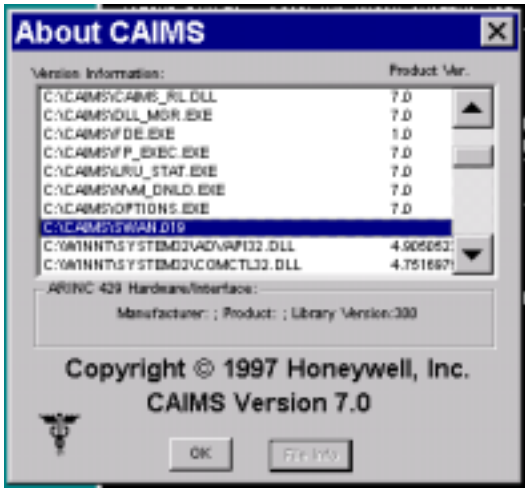

Figure 18 “About CAIMS” Window

Procedure for PMAT Shut Down

1. Close all opened windows.
2. On the task bar, select "CAIMS DLL..." - "Terminate Manager". See Figure 19.

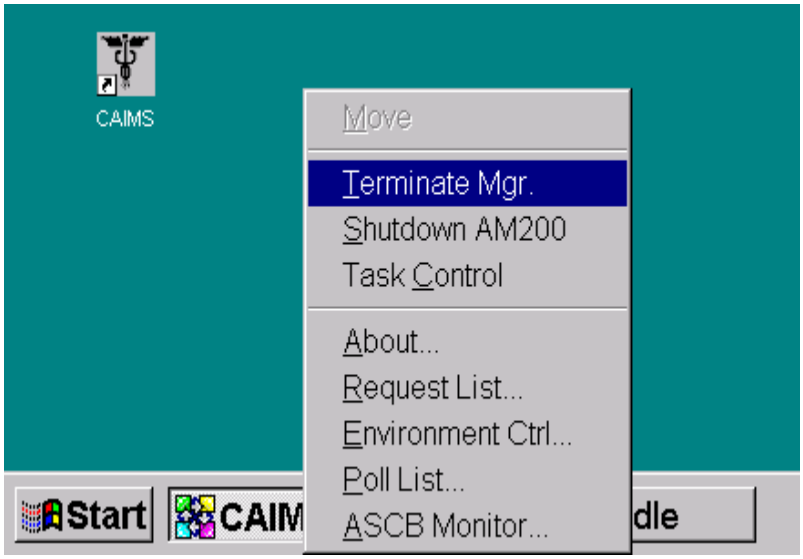

Figure 19 "CAIMS DLL..." - "Terminate Manager" Selection

3. On the task bar, select “Start - Shut Down”. See Figure 20.

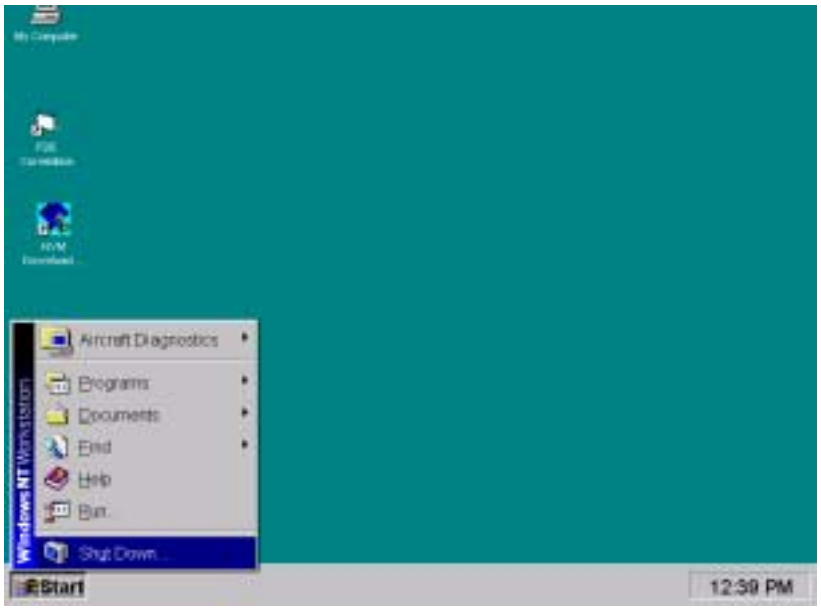

Figure 20 “Start - Shut Down” Menu Selection on Task Bar

4. On the “Shut Down Windows” window, select “Shut down the computer?” and select “Yes” . See Figure 21.

Figure 21 "Shut Down Windows" Window - Shut Down Computer Selection

5. Wait until the PMAT indicates "It is now safe to turn off your computer".
6. Remove external AC power from the aircraft.
7. When you are certain that the power is OFF, press the green button at the upper left corner of the PMAT, if the green button is accessible.

   Note: if the green button is not accessible, the PMAT will shut down approximately 2.5 minutes after the power is removed.