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SERVICE BULLETIN NO. 23-35-116

INTRODUCTION OF WINDOWS 10 BASED GROUND SUPPORT SOFTWARE FOR USE WITH DE HAVILLAND DASH 8 SERIES REGIONAL AIRCRAFT

GROUND SUPPORT SOFTWARE PART NO. 8-800-07-047 ISSUE 1

TRANSMITTAL SHEET

TO: Holders of SB 23-35-116 For the Introduction of Windows 10 Based Ground Support Software for Use With De Havilland Dash 8 Regional Aircraft.

This Page transmits Revision 1 Dated 26 November 2021 to SB 23-35-116.

Pages which have been added or revised are outlined in the section below together with the description of each change. The changes are designated as follows:

R= Revised (Data Replaced) D= Deleted (Data Removed) N= New (New Data Incorporated)

All Revisions which affect the content of the SB are highlighted by revision bars Transmittal Page added without Revision Bars

Chapter/Section and Page Number	Designation	Description of Change
Page 1	Ν	Addition of Transmittal Page
Page 2	Ν	Note Added
1.F Page 4	R	DOA Approval from EASA to CAA
5.A.6 Page 7	R	Wording Change

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NOTE: On fulfilment of the Service Bulletin, an ANVS Maintenance Terminal Session must be carried out before a PBMS download is attempted to prevent a database mismatch within the PBMS system preventing a PBMS balance solution being determined.

1. PLANNING INFORMATION:

A. Effectivity:

De Havilland Dash 8 Aircraft.

This Service Bulletin introduces Ground Support Software (GSS) Part No. 8-800-07-047 Issue 1 for Windows 10, which contains:

- (1) Version 1 of the Ultra Precision Control Systems Windows Based Active Noise and Vibration Control System Maintenance Terminal (ANVS MT) Software.
- (2) Version 2 of the Ultra Precision Control Systems Windows Based Event Log Extraction Tool. (Store Event Log)
- (3) Version 5 of the Advanced Maintenance Terminal (AMT) Software.
- (4) Version 1 of the Ultra Precision Control Systems Windows Based Propeller Balance Monitor System (PBMS) Software.
- (5) Latest Versions of the applicable De Havilland Dash 8 Aircraft databases.

Note: Ground Support Software (GSS) Part Number. 8-800-07-047 Issue 1 is for use with Windows 10 Operating Systems only and is an upgrade for the existing Licences using Part No. 8-800-07-040, Part No.8-800-07-030 or Part No. 8-800-07-024.

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B. Concurrent Requirements:

Not Applicable.

C. Reason:

(1) Microsoft Support for Windows 7 Operating Systems (OS) ended in January 2020 with Windows 10 OS being the latest supported version. Therefore a requirement for the Active Noise and Vibration System (ANVS) Ground Support Software (GSS) to be compatible with Windows10 OS version has been complied to allow the use of the Ground Support Software (GSS).

D. Description:

- (1) Ground support Software (GSS) Part No. 8-800-07-047 Issue 1 has been developed for use with 64-bit versions of Windows 10. DOSBox, an open source emulator, has been included to allow communication between the 64-bit version of Windows 10 and the AMT software operating at 16 bit.
- (2) The GSS has also been updated with the following changes.

Function	Changes
Display System Status	An Added Display of actuators and sensors that are missing from calibration data, unpressurised, pressurised or both that can result in invalid Calibration Data Error.
Automatic Actuator and Sensor Test Results	An Added Display of actuators and sensors that are missing from calibration data that can result in Failure of the ATVA or invalid Calibration Data Error.
Manual Actuator Test	An Added Display of Distortion levels for the channel being tested as per the Automatic Actuator and Sensor test.
Step-Through Actuator Test	An Added Display of Distortion levels for the channel being tested as per the Automatic Actuator and Sensor test.
Calibration	An Added Warning about distortion to the information screen shown before calibration starts.
ANCU Communications	The Error code 0x8000D30 for incorrect serial port or USB serial adaptor is not present has been replaced with the message, " The serial port requested does not exist or USB serial adaptor not found ".

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(3) New user Manuals for PBMS and ANVS MT Windows 10 will be available.

Ref: PBMS 23-35-49

Ref: ANVS MT 23-35-46

E. Compliance:

Not Applicable.

F. Approval:

The Technical content of this document is approved under the Authority of: CAA DOA No UK.21J.0092.

G. Manpower:

Time to install the software from the USB Flash Drive is no more than 20 Minutes.

H. Weight and Balance:

Not Affected.

I. Electrical Load:

Not Affected.

J. Affected Publications:

AMT 23-35-40 R1

K. References:

Not Applicable.

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2. MATERIAL INFORMATION:

A. Material – Price and Availability:

- (1) The Software will be supplied on a USB Flash Drive (GSS Part No. 8-800-07-047 Issue 1).
- (2) Price and availability is available on request from Ultra Precision Control Systems. (Ref Section 8)

B. Tooling – Price and Availability:

Tooling is not required.

3. INSTALLATION:

A. Installation Instructions.

- (1) Insert the USB Flash Drive (GSS Part No. 8-800-07-047 Issue 1) in to a suitable USB port. The software should run automatically.
- (2) If the Installation process does not start automatically.
 - (a) Select Start from the Windows Task Bar.
 - (b) Select File Explorer.
 - (c) Select USB Drive Typically E:
 - (d) Select Setup.
- (3) The Licence Agreement must be read and agreed to proceed.
- (4) After the set up progress has finished the Setup wizard will install the Ground Support Software 2.0.0.
- (5) The End User Licence Agreement must be read and agreed to proceed.
- (6) The default directory location where the software will be installed is C:\MT830.
- (7) The Default COM port allocation for the USB to Serial port adapter is COM port 2 Select the next button to continue.

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(8) When the installation is complete, Disconnect the USB drive safely, remove and store.

4. GETTING STARTED:

Figure 1 shows the four icons that will be installed on the desktop following installation of the Ground Support Software (GSS).





A. ANVS MT:

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ANVS MT is the Active Noise and Vibration Control System Maintenance Terminal Software to be used with 83x type controllers.

B. PBMS:

PBMS is the Propeller balance Monitoring System Software to be used with 832 type controllers on aircraft fitted with PBMS.

C. Store Event Log:

Store Event log is the Event Log Extraction Tool Which can be used to download an event log from 83x type controllers.

D. AMT:

AMT is the Advanced Maintenance Terminal Software to be used with a Type 81x or 82x controller. If the ANVS MT is used on a Type 81x or 82x controller, this will be recognised and the AMT will automatically start.

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5. REGISTRATION INSTRUCTIONS:

A. Registering the ANVS MT Software:

This process must be followed the first time the ANVS MT software is started after installation or after the ANVS MT Licence has expired.

- (1) Double click on the icon for ANVS MT.
- (2) After a few seconds, the Welcome screen will be shown followed by the Registration Check screen.
- (3) Call or Email Ultra Precision Control Systems (Ref Section 8 below for Contact Details) for your ANVS MT Authorisation Code. You will need to give the following information.
 - (a) Your name and Company Name.
 - (b) The Software Licence Number from the Identification tag on the USB Flash Drive.
 - (c) The Registration Number shown on the Registration Check Screen.
 - (d) A contact telephone number and Email address.

Note: Keep a record of the Expiration Date given with the ANVS MT Authorisation Code to enable a renewal to be scheduled.

- (4) Once you have obtained the Authorisation code, press <ENTER>. The Software Registration Screen will be shown.
- (5) Enter the Software Licence Number and use the cursor keys to select the Authorisation code field.
- (6) Enter the Authorisation Code as supplied by Ultra Precision Controls Systems, press the <ENTER> key.
- (7) If successful, a window will appear stating "Licence and Authorisation Code Accepted". If not connected to a controller, you may now exit the ANVS MT software.
- (8) The registration process is now complete and the ANVS MT software is ready for use.

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B. Registering the PBMS Software:

This process must be followed the first time the PBMS software is started after initial installation or after the PBMS Licence has expired.

- (1) Double click the icon for PBMS.
- (2) After a few seconds, the Welcome Screen will be shown followed by the Registration check screen.
- (3) Call or Email Ultra, Precision Control Systems (Ref Section 8 below for Contact Details) for your PBMS Authorisation Code. You will need to give the following information.
 - (a) Your name and Company Name.
 - (b) The Software Licence Number from the Identification tag on the USB Flash Drive.
 - (c) The Registration Number shown on the Registration Check Screen.
 - (d) A contact telephone number and Email Address.

Note: PBMS is a separate application from ANVS MT, which generates its own Registration Number and therefore requires a separate Authorisation Code. Keep a record of the expiration date given with the PBMS Authorisation Code to enable a renewal to be scheduled.

- (4) Once you have obtained an Authorisation Code press <ENTER>. The Software Registration Screen will be shown.
- (5) Enter the Software Licence Number into the Licence Number field and use the cursor keys to select the Authorisation code field.
- (6) Enter the Authorisation code as supplied by Ultra Precision Control Systems, press the <ENTER> key.
- (7) If successful, a window will appear stating "Licence and Authorisation Code Accepted". If not connected to a controller, you may now exit the PBMS software.
- (8) The Registration process is now complete and the PBMS software is ready for use.

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6. MODIFICATION STATUS:

This change does not affect the modification standard of any system component.

7. DOCUMENTATION:

Not applicable.

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8. FURTHER INFORMATION:

If you need more information about this Service Bulletin, please contact the Customer Support Manager at:

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