Customer Services

Advisory Wire

REFERENCE NO:	AW700-24-0598, Rev 7	INFORMATION TYPE:	Maintenance Operational
ATA:	24-21	EFFECTIVITY:	Global Express / XRS (9002 - 9312, 9314 - 9380, 9384 - 9429) Global 5000 (9127 to 9383, 9389 to 9400, 9404 to 9431 and 9998) Global 5000 feat. Vision Flight Deck (9386, 9401, 9445 - 9997) Global 6000 (9313, 9381, 9432 -9997)
SUBJECT:	**Variable Frequency Generator (VFG) GL511-1103-9 – Failure**		

1. REFERENCES:

   1.1. Advisory Wire AW700-24-0305, Rev. 9 released January 27, 2015 - Variable Frequency Generator (VFG) – Failures

   1.2. Bombardier Service Bulletins (SBs) 700-24-087 / 700-1A11-24-026 / 700-24-5012 / 700-24-6012: Special Check/Modification - Inspection of the Variable Frequency Generator (VFG) Housing Wall Thickness

2. INTRODUCTION:

The purpose of this Advisory Wire (AW) revision is to promote the incorporation of the VFG sump wall thickness inspection service bulletin (SB) (ref 1.2)

3. DESCRIPTION:

In earlier revisions of this AW, Bombardier informed Operators of four (4) -9 VFG oil sump ruptures. In the four events, the flight continued with one generator inoperative, with normal operation during all phases of flight (descent, approach, landing, and taxiing).

The teardown of the four (4) GL511-1103-9 failed units revealed that rotor / stator contact had occurred resulting in an increase in temperature and finally an over pressure of the VFG housing. There was also evidence in the first two (2) ruptures that the resulting sump rupture was linked with the wall thickness of the sump, which was below the current drawing specification. This quality escape occurred during the VFG housing casting manufacturing process.

In order to mitigate the potential of a VFG having a reduced sump wall thickness, Bombardier has issued a Service Bulletin (Ref 1.2) which provides instructions to measure the VFG sump housing using Ultrasonic non-destructive testing (NDT). The NDT inspection can be carried out on-wing. This SB (Ref 1.2) is a dedicated campaign to ensure that parts are available in sufficient quantities. The results of the initial VFG measurements have revealed that a low percentage of sump housing are below limits and therefore current stock levels has allowed for the compliance time of this SB to be reduced to Six (6) months.

Current statistics show that the incorporation rate of this SB (Ref 1.2) is lower than expected. Bombardier encourages Operators to schedule the incorporation of the SB (Ref 1.2) by contacting ISIT within six (6)

months of the basic issue release date. Operators are reminded to submit the clamp torque values, as well as the NDT results, if required, to the email addresses contained within the SB (Ref 1.2).

Calibration Reference Standards (CRS) are required to calibrate the equipment used for the Ultrasonic NDT. The availability of the CRS has been expanded to include Authorized Service Facilities (ASF) to allow the incorporation of the SB to be more convenient for Operators. Please contact Bombardier In-Service Implementation Team (ISIT) with any questions regarding the CRS.

ACTION:

Bombardier recommends Operators schedule the incorporation of the SB (Ref 1.2) by contacting ISIT within six (6) months of the basic issue release date.

Should you have any queries pertaining to this Advisory Wire, please contact your local Field Service Representative or the Customer Response Center (CRC).