Customer Services

Advisory Wire

REFERENCE NO:	AW700-34-0590, Rev 01	INFORMATION TYPE:	Operational
ATA:	34-61	EFFECTIVITY:	Global Express / XRS (9002 - 9312, 9314 - 9380, 9384 - 9429) Global 5000 (9127 to 9383, 9389 to 9400, 9404 to 9431 and 9998)
SUBJECT:	**Post Batch 3, Batch 3.3 and Batch 3.4 Software upgrade – Flight Management System (FMS) – Incorrect ceiling altitude displayed on FMS**		

1. REFERENCES:

1.1. Honeywell Service Information Letter (SIL) D201509000068R002, NZ-2000/NZ-2010/IC-810 Flight Management System (FMS) Incorrect Ceiling Altitude Displayed on FMS, dated 6 May 2019

1.2. Bombardier Service Bulletin (SB) 700-31-030 / 700-1A11-31-014, Modification – Integrated Avionics Computer (IAC) System – Batch 3 Software Upgrade

1.3. Bombardier Service Bulletin (SB) 700-31-034 / 700-1A11-31-017, Modification – Integrated Avionics Computer (IAC) System – Batch 3.3 Software Upgrade

1.4. Bombardier Service Bulletin (SB) 700-31-039 / 700-1A11-31-021, Modification – Integrated Avionics Computer (IAC) System – Batch 3.4 Software Upgrade

References 1.1 to 1.4 are available on the Bombardier Customer Portal: (my.businessaircraft.bombardier.com) > Library > Search by Keyword

2. INTRODUCTION:

Revision 1 of this Advisory Wire (AW) provides an update following the release of the revised Honeywell SIL (Ref. 1.1) and of the Bombardier SB Batch 3.4 Software Upgrade (Ref. 1.4). It also advises operators and flight crew of an anomaly that result in incorrect ceiling altitude displayed on the Flight Management System (FMS) Control Display Unit (CDU).

Honeywell FMS software version NZ6.1 post Batch 3 upgrade (Ref. 1.2, IC-810, IAC PN 7017300-61010), post Batch 3.3 upgrade (Ref. 1.3, IC-810, IAC PN 7017300-61013) and post Batch 3.4 upgrade (Ref. 1.4, IC-810, IAC PN 7017300-61014) currently installed on the Global Express/5000/XRS are affected by this condition.

3. DESCRIPTION:

An anomaly was reported to Honeywell that when the aircraft was near the planned cruise altitude, an incorrect optimum or ceiling altitude might be predicted and displayed on the FMS CDU. Honeywell determined that this issue was associated with an incorrect processing of a performance maximum altitude algorithm in the FMS that could results in the following:

- In some cases, FMS may not attain the optimum altitude in vertical navigation (VNAV) mode.
- There is an increase of optimum or ceiling altitude when in climb or nearing cruise altitude. When trying to climb to this ceiling altitude, the aircraft is unable to attain this altitude.

4. ACTION:

Operators and flight crew should be familiar with the details, figures in the Honeywell SIL (Ref. 1.1). Flight crews are reminded that the Airplane Flight Manual (AFM) performance section and the Flight and Planning Cruise Control Manual (FPCCM) is the final authority and should be used to confirm the cruise altitude for the aircraft.

Use of VNAV will result in the FMS commanding a level off to the FMS cruise altitude. Other vertical modes may be utilized to climb to the desired altitude if the FMS predicted altitude is less than allowed per the AFM performance or the FPCCM.

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