

# Advisory Wire

REFERENCE NO:	AW700-34-0539, Rev 02	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:	<b>Flight Management System (FMS) – Lateral Guidance (LNAV) early intercept capture while in Heading (HDG) mode</b>		

## 1. REFERENCES:

- 1.1. Honeywell Service Information Letter (SIL) D201506000015R002, Flight Management System (FMS) – Lateral Guidance (LNAV) Early Intercept Capture While in Heading Mode, dated 28 Aug 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, 1.2, 1.3 and 1.4 are available on the Bombardier Customer Portal: [my.businessaircraft.bombardier.com](http://my.businessaircraft.bombardier.com) > Library > Search by Keyword

## 2. INTRODUCTION:

Revision 2 of this Advisory Wire (AW) is to advise operators of an anomaly where the FMS may attempt an early capture of an intercept leg while in Heading (HDG) mode and Lateral Navigation (LNAV) is armed.

All Honeywell FMS software versions NZ5.8 and earlier, software version NZ6.1 post Batch 3 (Ref. 1.2, IC-810, IAC PN: 7017300-61010), post Batch 3.3 (Ref. 1.3, IC-810, IAC PN: 7017300-61013) and post Batch 3.4 (Ref. 1.4, IC-810, IAC 7017300-61014) currently installed on the Global Express/5000/XRS are affected by this condition.

## 3. DESCRIPTION:

A situation is described in the Honeywell SIL (Ref. 1.1), where while attempting to intercept the next lateral leg at an angle less than 45 degrees, the FMS may switch to a 45 degrees intercept unexpectedly when the aircraft is approximately one (1) NM from the leg. If at approximately one (1) NM the anomaly is not observed, the aircraft will continue along the flight plan and capture the path as expected. This FMS anomaly will only occur if LNAV is armed and the operator attempts to intercept the active lateral leg.

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Honeywell has determined this to be a software issue of not properly setting the right capture gains with LNAV in the armed mode.

#### 4. ACTION:

Operators should be familiar with this condition detailed in the Honeywell SIL (Ref. 1.1) and flight crews are encouraged to monitor aircraft behavior as appropriate during all phases of flight.

To prevent this situation from occurring during shallow intercepts (less than 45 degrees), flight crew can select HDG mode but delay arming LNAV until the aircraft is within one (1) NM from the leg to force the FMS to use current heading track to intercept active lateral leg. The distance from the leg may be monitored via lateral track offset displayed on the MFD map.

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).