

# Advisory Wire

REFERENCE NO:	AW700-31-0647, Rev 02	INFORMATION TYPE:	Maintenance Operational
ATA:	31-41	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>Batch 3.4 Software Upgrade – Availability and Update</b>		

## 1. REFERENCES:

- 1.1. Bombardier Service Bulletin (SB) 700-31-034 / 700-1A11-31-017, Modification – Integrated Avionics Computer (IAC) System – Batch 3.3 Software Upgrade
- 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) 700-34-053 / 700-1A11-34-027, Modification – Future Air Navigation System (FANS) – Introduction of FANS 1/A+ and RNP 4 30/30 Functionality
- 1.4. Bombardier Advisory Wire (AW) 700-23-0532 – FAA Data Comm DCL (Departure Clearances) using CPDLC messaging
- 1.5. Bombardier Advisory Wire (AW) 700-23-0578 – FMS CDU ‘ACARS DMU FAILED’ message observed Post Batch 3.3
- 1.6. Bombardier Advisory Wire (AW) 700-23-0642 – CPDLC Uplink Latency Time Monitor Function
- 1.7. Bombardier Advisory Wire (AW) 700-31-0563 – Batch 3.3 Software Upgrade – In-Service Observations
- 1.8. Bombardier Advisory Wire (AW) 700-34-0487 – FMS - Duplicate Waypoints in Airway Portion of Aeronautical Operation Control (AOC) and Future Air Navigation System (FANS) Uplink Not Properly Defined
- 1.9. Bombardier Service Bulletin (SB) 700-31-039 / 700-1A11-31-021, Modification – Integrated Avionics Computer (IAC) System – Batch 3.4 Software Upgrade
- 1.10. Bombardier Advisory Wire (AW) 700-23-0632 – FAA Operational Authorization A056 Data Link Communication Revision

References are available on the Bombardier Customer Portal:  
([my.businessaircraft.bombardier.com](http://my.businessaircraft.bombardier.com)) > Library > Search by Keyword

1.11. Federal Aviation Administration (FAA) Bombardier Aircraft Services (BAS) Learjet Supplemental Type Certificate (STC) No. ST01920WI dated May 10, 2019

(<http://rql.faa.gov/>) > Supplemental Type Certificate

## 2. INTRODUCTION:

Revision 2 of this Advisory Wire (AW) is to inform operators and flight crews of the release of the Bombardier SB 700-31-039 / 700-1A11-31-021 – Batch 3.4 Software Upgrade (Ref. 1.9). This SB is supported by the approved FAA STC (Ref. 1.11) received on May 10, 2019, while European Aviation Safety Agency (EASA) and Transport Canada (TC) regulatory authorities' approval will follow. This revision also provides the latest status on the Batch 3.4 software upgrade, associated policy, and load content (Table 1) as well as a revised Table 2 for different milestones, STC and SB availability.

## 3. DESCRIPTION:

This Integrated Avionics Computer (IAC) software change became necessary when Honeywell notified Bombardier that the FMS software version NZ6.1 latency timer monitor function part of the FANS 1/A+ (Ref. 1.3) functionality to meet the DO-258A (Interoperability Requirements for ATS Applications using ARINC 622 Data Communications) was not implemented per specification as indicated in the AW700-23-0642 (Ref. 1.6). Bombardier and Honeywell had worked together to correct this condition as well as the 'ACARS DMU FAILED' message (Ref. 1.5) affecting some aircraft post Batch 3.3 (Ref. 1.1). Additional fixes to Batch 3.3 (Ref. 1.1) & Batch 3 (Ref. 1.2) are also included as can be seen in Table 1.

Batch 3.4 software upgrade is available through a Free of Charge (FOC) STC (Ref. 1.11) with a Bombardier cover SB (Ref. 1.10) to operators who incorporated Batch 3 (Ref. 1.2) and Batch 3.3 software upgrade (Ref. 1.1).

Table 1 – Summary of Batch 3.4 Fixes	Advisory Wire
CPDLC message element DCL [REQUEST CLEARANCE] is not sent as expected for DCL FANS (Future Air Navigation System) datalink departure clearance	AW700-23-0532 (Ref. 1.4)
'ACARS DMU FAILED' CDU scratchpad message observed post Batch 3.3	AW700-23-0578 (Ref. 1.5)
Logic change for CPDLC uplink message latency delay timer & update user interface page on the CDU for latency timer function (seconds)	AW700-23-0642 (Ref. 1.6)
FMS reset upon flight plan winds update when large uplinks are sent from Ground Service Providers (GSP)	AW700-31-0563 (Ref. 1.7)
Duplicate Waypoints in Future Air Navigation System (FANS) uplink not properly defined	AW700-34-0487 (Ref. 1.8)

# Advisory Wire

BAS Learjet STC (Ref. 1.11) is presently FAA approved (Table 2), so US registered aircraft are eligible to perform Batch 3.4 software upgrade (Ref. 1.9), while the EASA and TC STC approval will follow. Some Authorities may accept the FAA, EASA or TC approved STC without their own validation process, but Bombardier recommends that customers contact their Aviation Authority to validate if this is the case before scheduling Batch 3.4 software upgrade (Ref. 1.9).

Pay particular attention that only IAC P/N 7017300-61013 (IAC with FMS) will be modified with this software change and that a quantity of one (1) Honeywell Customer Software Kit Part No. KS7025350-61014 is issued per IAC. Therefore, the number of kits customer must order depends on the number of IAC P/N 7017300-61013 (IAC with FMS) the aircraft has.

NOTE that IAC P/N 7017300-62013 (non-FMS) is installed in position 3 on aircraft with two (2) Flight Management System (FMS) Control Display Unit (CDU) and therefore, will not be modified.

Table 2 – Timeline / Milestones	Target Date
SOW (Scope of Work) definition	Complete
Honeywell selection of STC owner	Complete
FAA TSO	Complete
Regulatory STC Approval & Validations <ul style="list-style-type: none"> <li>- FAA STC ST01920WI Approval</li> <li>- EASA STC Validation (Estimated 3 to 6 months, Authority dependent)</li> <li>- TCCA STC Validation (Estimated 3 to 6 months, Authority dependent)</li> <li>- Others Regulatory Authorities (as required)</li> </ul>	May 10/2019 Q3/2019 Q3/2019 Q3/2019
STC with Bombardier cover SB release (FAA approval initially, followed by other Authorities STC Validation approval)	May 24/2019

#### 4. ACTION:

Operators and flight crew should be familiar with the summary of Batch 3.4 fixes per Table 1.

Batch 3.3 software (Ref. 1.1) is a prerequisite to Batch 3.4 software upgrade and must be done before, or at the same time.

This SB is covered by a dedicated schedule therefore advance part scheduling with our In-Service Implementation Team (ISIT) is recommended prior to a maintenance visit. Please contact your Regional Manager (RM), Field Service Representative (FSR) or Customer Service Representative (CSR) to schedule your aircraft. This Service Bulletin can be embodied at customer's most convenience place: Bombardier Business Aircraft Services (BBAS), Authorized Service Facilities (ASF), or any other certified service center.

The FAA was contacted by BAS Learjet to provide the endorsement to the EASA and TC authorities and Bombardier will keep customers updated on any developments through revision of the Table 2 – Timeline / Milestones of this Advisory Wire. Customers of aircraft registered with regulatory authorities other than FAA, EASA or TC, should approach their authorities to establish if separate validation is required by them.

# Advisory Wire

Note that operators with existing FAA A056 Data Link authorization (Ref. 1.10) will have to coordinate with their local FAA inspector in order to obtain a revised A056 following Batch 3.4 software upgrade (Ref. 1.9).

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).