

Advisory Wire

| | | | |
|---------------|---|-------------------|---|
| REFERENCE NO: | AW700-34-0604, 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: | Flight Management System (FMS) – Incorrect distance calculation for Equal Time Point (ETP) | | |

1. REFERENCES:

- 1.1. Honeywell Service Information Letter (SIL) D201704000011R002, Incorrect Distance Calculation for Equal Time Point (ETP), dated 16 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 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 might result in incorrect calculation of distance to the Equal Time Point (ETP).

All Honeywell FMS software versions NZ5.8 and earlier, 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:

A situation is described in the Honeywell SIL (Ref. 1.1), where flight crew reported an anomaly resulting in an incorrect ETP calculation after entering airport identifiers in WPT1 and WPT2 on the EQUAL TIME POINT page that were NOT in the original flight plan.

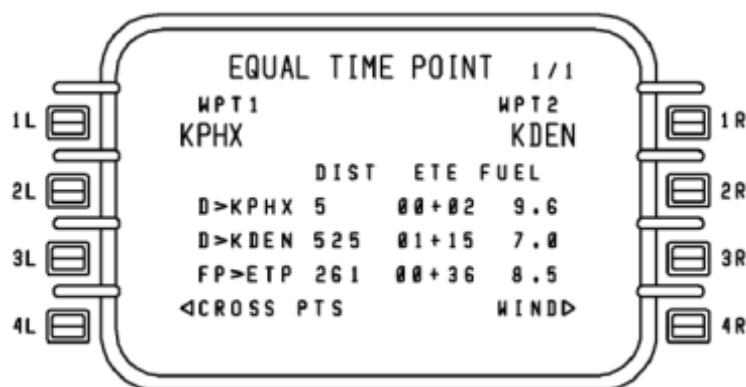
Advisory Wire

ETP between any two (2) given waypoints can be calculated by selecting 3L from the ETP page (Figure 1). The option of calculating ETP will only be available when the Flight Management System (FMS) is in FULL PERF mode. Per design, default waypoints are the origin and destination of the active flight plan.

Per normal operation any waypoints can be entered at 1L and 1R;

- If WPT1 and WPT2 are the origin/destination, the ETP is the physical point along the flight plan where time-to-go back to the origin is the same as the time-to-continue to the destination.
- If WPT1 and/or WPT2 are not the origin/destination, the ETP is the physical point along the flight plan between the two (2) waypoints, where the time-to-go back to WPT1 is the same as the time-to-go to WPT2.

Figure 1 – FMS CDU Equal Time Point Page



However due to the FMS software anomaly, if WPT1 and/or WPT2 are NOT part of the original flight plan, distance to the ETP will be incorrectly calculated; ETP prediction could be beyond or before WPT2.

4. ACTION:

Operators should be familiar with the condition detailed in the Honeywell SIL (Ref. 1.1) and flight crew need to take appropriate action to ensure the resulting ETP calculations are correct and reasonable.

Correction to this condition will be considered as a part a future software change to the IAC/FMS.

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).