

ADVISORY WIRE

AW700-34-0190

DATE: February 15, 2006**PAGE:** 1 OF 3**FROM:** BOMBARDIER BUSINESS AIRCRAFT CUSTOMER SUPPORT

ADVISORY WIRE

REFERENCE NO: AW700-34-0190**SUBJECT:** FMS Warm Start during VNAV Glide Path
Angle Changes**EFFECTIVITY:** BD700-1A10 (9002 & Subs)
BD700-1A11 (9127 & Subs)**ATA:** 34-61

This Advisory Wire contains Operational information.

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1.0 INTRODUCTION:

This Advisory Wire is to inform Flight Crews of a Flight Management System (FMS), Vertical Navigation (VNAV) nuisance condition uncovered during the Integrated Avionics Computer (IAC) Batch 2+ field evaluation program. The condition could be present on aircraft with Batch 1 and Batch 2 configurations as well.

2.0 DESCRIPTION:

During the IAC Batch 2+ evaluation, some nuisances were noted. The issues occurred in a configuration where, during descent with VNAV captured and FMS in dual 1-2, the crew decided to alter the vertical path angle value using FMS Control Display Unit (CDU) 2.

The following observations were made:

- FMS CDU 1 went blank for 2-3 seconds (warm start), it eventually came back to normal.
- Auto-throttle (A/T) disconnected along with an aural warning. **The A/T could be manually re-engaged.**
- Loss of Lateral and Vertical modes and Auto-Pilot (AP) reverted to Pitch and Roll only. **The Lateral and Vertical modes could be manually re-engaged.**
- FMS CDU scratch pad message SINGLE OPERATION was blinking. On the FMS MAINTENANCE page, the active mode was toggling between SINGLE / DUAL, consistent with the message. **Re-selecting DUAL as active mode restored the DUAL operation.**

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Note that in cruise, no anomaly would be observed if changing the vertical path angle while operating in dual FMS 1-2 (or 1-3 or 2-3) mode. This is the first report of such nuisance. Honeywell has managed to reproduce this condition on the bench and confirmed that it is present in IAC software Batch 2+, Batch 1 and Batch 2 configurations.

The root cause investigation into this issue is on-going. When the corrective action is identified, a software fix will be implemented in the future IAC upgrade.

3.0 ACTION:

It is recommended that Flight Crews be familiar with this FMS - VNAV nuisance issue and associated procedures to restore normal operation highlighted above in bold.