BOMBARDIER CUSTOMER SERVICES BUSINESS AIRCRAFT

ADVISORY WIRE
AW700-22-0209

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FROM: BOMBARDIER CUSTOMER SERVICES BUSINESS AIRCRAFT

ADVISORY WIRE

REFERENCE NO: AW700-22-0209

SUBJECT: Auto Flight Control System - "LOC" and "BC" Flight Director Modes Inoperative when coupled to reverted PFD

EFFECTIVITY: BD700-1A10 (9002 - 9999)
BD700-1A11 (9127 - 9999)

ATA: 22-11

This Advisory Wire contains Operational and Maintenance Information

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1.0 INTRODUCTION:

This Advisory Wire is to inform Operators of a specific condition that exists with the Localizer (LOC) and Back Course (BC) Flight Director (FD) modes, which could result in inadequate FD guidance.

2.0 DESCRIPTION:

Honeywell have informed Bombardier that during Auto Flight Control System (AFCS) development testing for a future software upgrade, they discovered a software issue with the LOC and BC lateral FD modes when coupled to a reverted Primary Flight Display (PFD).

Two scenarios are possible. A description of each scenario and their respective symptoms are as follows:

Scenario 1 (AFCS coupled Left with Symbol Generator (SG) 1 Reverted): The FD mode (LOC or BC) will arm and activate as expected, but the FD will not provide guidance to capture the localizer beam. Instead, the FD mode will continuously over-shoot from one side to the other creating very large divergent S-turns.

Scenario 2 (AFCS coupled Right with SG2 Reverted): The FD mode (LOC or BC) will arm, activate and provide the proper guidance to capture and track the localizer beam. However, after several minutes, divergent S-turning will slowly develop.

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3.0 ACTION:

Operators should be familiar with the condition. A simple work-around has been identified, where the condition can be rectified immediately by coupling the FD to the non-reverted PFD.

As an example, for Scenario 1, once the FD is coupled right, the FD no longer has any difficulty providing guidance to capture and track the localizer beam. LOC and GS will need to be rearmed since selecting the couple button will drop both modes.

While taking this into consideration, when executing an ILS approach, ideally operators should couple the FD to the non-reverted PFD immediately with SG reversion. If the ILS approach has already been initiated using the reverted PFD, then after coupling to the non-reverted PFD and re-arming LOC/GS, the FD will capture and track the localizer with the next subsequent pass.

This anomaly is presently under investigation and we will keep you informed of any progress. There is no evidence that other FD modes are affected beyond LOC and BC.

Take note that an AFM Temporary Revision will be released shortly providing procedures during PFD SG reversion and FD coupling.

For any questions or assistance, please contact your Bombardier Field Service Representative or Customer Response Center.

For future references, please consider inserting this AW in your AFM "Supplements not approved by Regulatory Authorities" section under the Advisory Wires tab.