

Advisory Wire

REFERENCE NO: AW700-27-0785, Rev 01

INFORMATION
TYPE:

Maintenance
Operational

ATA: 27-51

EFFECTIVITY: Global 7500

**SUBJECT: Slat Flap Control System
(SFCS) Power up Faults - Reset
procedures**

1. REFERENCES:

- 1.1. Flight Operation Notification Manual (FONM): [FCTL-008-NC, Slat / Flap System CAS / INFO message at power up](#)
- 1.2. AMP task: [BD700-A-J27-80-00-10AAA-343A-A Slat/Flap IBIT](#)
- 1.3. AMP task: [BD700-A-J27-51-00-07AAA-913A-A Slat/Flap electronic-control-unit clear faults](#)
- 1.4. Advisory Wire: [AW700-27-0834: Slat / Flap Control System \(SFCS\) Power Down Sequence](#)
- 1.5. Flight Operation Notification Manual (FONM) [FCTL-011-A: Slat / Flap Control System \(SFCS\) Power Down Sequence](#)
- 1.6. Service Bulletin: [SB700-27-7505 Rev. 01: Modification – Control and Indication System – Slats and Flaps Electronic Control Unit \(SFECU\) Power-Up Electrical Configuration File Update](#)

2. INTRODUCTION:

As part of the Slat/Flap Electronic Control Unit (SFECU) power up investigation, Bombardier have identified different nuisance conditions that may occur at power up. This Advisory wire provides the reset procedures for those conditions.

The revision 1 of this Advisory Wire provides simplified reset procedures based on CAS/ INFO Messages and Flight Deck Effect (FDE) instead of using OMS active fault message(s).

3. DESCRIPTION:

Back in September 2021, Bombardier released AW700-27-0834 (Ref.1.4) describing a condition induced by the electrical system, causing some of the faults latching at aircraft power down. These faults were observed by the flight crew at the subsequent power up as described in FON FCTL-008 (ref 1.1) and AW700-27-0785 (September 2020).

The AW700-27-0834 was providing instructions to pull SFECU breakers before aircraft power down to reduce fault latching occurrences.

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In February 2022, the SB700-27-7505 (ref.1.6) was released, introducing a new Electrical System Config file that automates the SFECU circuit breaker pull procedure prior to aircraft power down, thus reducing the flight crew work load.

With the introduction of the SB700-27-7505 (ref.1.6), there is no requirement to follow AW700-27-0834 (Nov 2022) and/or the FCTL-011-A (ref.1.5.) which will be closed.

Bombardier have received in-service reports that there are still some nuisance conditions occurring post SB700-27-7505 incorporation. Bombardier and the Supplier (Collins) continue the investigation in order to identify the root cause of the reported cases.

While the root cause is still under investigation, should any of the following CAS / INFO message(s) or FDE be posted at aircraft power up, please refer to the Section 4 - ACTION below to identify and apply the proper reset procedure.

4. ACTION:

For customers that have not yet incorporated SB700-27-7505 (ref 1.6), Bombardier recommend incorporating it at the earliest convenience to reduce the power up nuisance occurrences.

If the below-mentioned CAS/ INFO messages or Flight Deck Effect (FDE) show at power up, refer to steps 1-4 to reset the condition.

- SLAT FAIL (CAUTION)
- FLAP FAIL (CAUTION)
- SLAT HALFSPEED (ADVISORY)
- FLAP HALFSPEED (ADVISORY)
- SLAT-FLAP HALFSPEED (ADVISORY)
- 27 SLAT HALFSPEED - CH 1 INOP (INFO)
- 27 SLAT HALFSPEED - CH 2 INOP (INFO)
- 27 FLAP HALFSPEED - CH 1 INOP (INFO)
- 27 FLAP HALFSPEED - CH 2 INOP (INFO)
- 27 FLT CTRL - SLAT/FLAP FAULT (INFO)
- 27 FLT CTRL - PFCC 1 DEGRADED (INFO)
- 27 FLT CTRL - PFCC 2 DEGRADED (INFO)
- 27 FLT CTRL - PFCC 3 DEGRADED (INFO)
- White or Amber Slats on FLT CTRL Synoptic page

Note: Please make sure to wait at least 2 minutes between each reset attempts to allow the system to initialize.

- 1) If White or Amber Slats are shown on FLT CTRL Synoptic page.
 - a. Select Flaps from 0 to 2 and back to 0
- 2) If the PFCC degraded messages are posted:
 - a. With the Hydraulic Systems Off, on Primary Flight Controls panel select PFCC 1, PFCC 2 and PFCC 3 switches to OFF. Then, select them all back to normal. Wait until FLT CTRL in Test message disappears.
- 3) If the 27 FLT CTRL - SLAT/FLAP FAULT (INFO) message is posted:
 - a. Ensure the Aircraft Clock is set. When the Clock is set, wait 2 minutes; The IBIT will run automatically if overdue.
 - i. If the IBIT was not overdue, the 27 FLT CTRL - SLAT/FLAP FAULT (INFO) message will disappear as soon as the Clock is set.
 - ii. If the IBIT was overdue, the 27 FLT CTRL - SLAT/FLAP FAULT (INFO) message will disappear automatically after 2 minutes.
- 4) If SLAT HALFSPEED, FLAP HALFSPEED or SLAT-FLAP HALFSPEED is posted:
 - a. Perform aircraft power down (Black Cockpit) and power up the aircraft again. After 3 power up attempts, if the fault remains, continue with next step.
 - b. If SLAT-FLAP HALFSPEED remains posted, conduct the following procedures with reference to the OMS instructions below:
 - i. Perform Slat/Flap IBIT (ref.1.2) on the SFECU1S, SFECU2S, SFECU1F and SFECU2F.
 - ii. Perform Slat/Flap electronic-control-unit clear faults (ref.1.3) on SFECU1S, SFECU2S, SFECU1F and SFECU2F.
 - iii. Select Flaps from 0 to 2 and back to 0
 - c. If FLAP HALFSPEED remains posted, conduct the following procedures with reference to the OMS instructions below:
 - i. Perform Slat/Flap IBIT (ref.1.2) on the SFECU1F and SFECU2F.
 - ii. Perform Slat/Flap electronic-control-unit clear faults (ref.1.3) on SFECU1F and SFECU2F.
 - iii. Select Flaps from 0 to 2 and back to 0
 - d. If SLAT HALFSPEED remains posted, conduct the following procedures with reference to the OMS instructions below:
 - i. Perform Slat/Flap IBIT (ref.1.2) on the SFECU1S and SFECU2S.
 - ii. Perform Slat/Flap electronic-control-unit clear faults (ref.1.3) on SFECU1S and SFECU2S.
 - iii. Select Flaps from 0 to 2 and back to 0

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- e. If the fault remains after the above steps are completed, perform a last attempt of aircraft power down (Black Cockpit) and power up sequence. Then, access the Onboard Maintenance System (OMS) Active faults and perform the SmartFix Plus procedure associated to the active fault message(s).

All the applicable SmartFix Plus procedures have been recently revised to include the power up reset procedure and the reference to this Advisory Wire.

Operators will be kept informed of the root cause investigation via further revision to this AW. Should you have any questions pertaining to this AW or require additional information, please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center.