



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.:** 22-035

**Issued:** 28 March 2022

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

DASSAULT AVIATION

**Type/Model designation(s):**

Falcon 7X aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.A.155

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 24 – Electrical Power – Direct Current Load Distribution / Right-Hand Front Secondary Power Distribution Box Feeder – Inspection / Modification

### Manufacturer(s):

Dassault Aviation (Dassault)

### Applicability:

Falcon 7X aeroplanes, including those that have embodied Dassault modification (mod) M1000 (commercially known as Falcon 8X) in production, having serial number 2 to 43 inclusive, 45 to 53 inclusive, 55 to 71 inclusive, 73, 76 to 80 inclusive, 82 to 85 inclusive, 88, 91, 93, 97, 98, 100, 105, 106, 108, 109, 112, 113, 120, 124, 126, 129, 132, 139, 146, 149, 156, 167, 181, 408, 427 and 428.

### Definitions:

For the purpose of this AD, the following definitions apply:

**The inspection SB:** Dassault Service Bulletin (SB) 7X-584.

**The modification SB:** Dassault SB 7X-585.

**The feeder:** Secondary Power Distribution Box (SPDB) electrical power feeder.



**Reason:**

An occurrence of smoke in cockpit and loss of right-hand (RH) Primary Display Unit (PDU) and Secondary Flight Display (SFD) was reported. Subsequent investigation determined that chafing and arcing of the feeders with forward lavatory bulkhead led to smoke and loss of the RH front SPDB power supply, which caused the loss of RH PDU and SFD.

This condition, if not detected and corrected, could lead to smoke in cockpit, loss of systems supporting flight automation and flight displays and reduced situational awareness, possibly resulting in a significant increase of crew workload and injury to occupants.

To address this potential unsafe condition, Dassault published the inspection SB to provide inspection and corrective action instructions, and the modification SB providing instructions for modification of the forward lavatory bulkhead.

For the reasons described above, this AD requires a one-time inspection of the two electrical power feeders and, depending on findings, accomplishment of corrective action(s).

**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Inspection:**

- (1) Within 12 months or 800 flight hours, whichever occurs first after the effective date of this AD, inspect the two electrical power feeders in accordance with the instructions of the inspection SB.

**Measurement:**

- (2) If, during the inspection as required by paragraph (1) of this AD, no feeder damage is detected, before next flight, measure the clearance between the two electrical power feeders and the forward lavatory bulkhead in accordance with the instructions of the inspection SB.
- (3) Within 96 months or 4 000 flight cycles, whichever occurs first after the effective date of this AD, measure the clearance between the two electrical power feeders and the forward lavatory bulkhead in accordance with the instructions of the modification SB.

**Corrective Action(s):**

- (4) If, during the inspection as required by paragraph (1) of this AD, an electrical power feeder with deterioration of type "A" is detected (as defined in the inspection SB), before next flight, contact Dassault for approved repair instructions, in accordance with the instructions of the inspection SB, accomplish those instructions accordingly and modify the forward lavatory bulkhead in accordance with the instructions of the modification SB.
- (5) If, during the inspection as required by paragraph (1) of this AD, an electrical power feeder with deterioration of type "B" is detected (as defined in the inspection SB), before next flight, accomplish the repair in accordance with the instructions of the inspection SB and modify the forward lavatory bulkhead in accordance with the instructions of the modification SB.



- (6) If, during the measurement as required by paragraph (2) of this AD, a contact is detected between an electrical power feeder and the forward lavatory bulkhead, before next flight modify the forward lavatory bulkhead in accordance with the instructions of the modification SB.
- (7) If, during the measurement as required by paragraph (1) of this AD, a clearance of more than 1 mm but equal to or less than 13 mm is detected, before next flight install ROUNDIT2000NX sheath using white binding braid in accordance with the instructions of the inspection SB.
- (8) If, during the measurement as required by paragraph (3) of this AD, clearance of more than 13 mm is detected, before next flight, check the presence of a blue cable grip, as defined in the modification SB, and depending on findings, before next flight accomplish the applicable corrective action in accordance with the instructions of the modification SB.

**Modification:**

- (9) If, during the measurement as required by paragraph (3) of this AD, clearance of equal to or less than 13 mm is detected, unless already accomplished as required by paragraph (4), (5) or (6) of this AD, as applicable, before next flight, modify the forward lavatory bulkhead in accordance with the instructions of the modification SB.

**Ref. Publications:**

Dassault SB 7X-584 original issue dated 28 February 2022.

Dassault SB 7X-585 original issue dated 28 February 2022.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 25 April 2022.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU Aviation Safety Reporting System](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA parts manufacturer approval (PMA), Supplemental Type Certificate (STC) or other modification.
4. For any question concerning the technical content of the requirements in this PAD, please contact your Dassault Falcon Technical Assistance:
  - For Europe, Middle East and Africa based operators: Hot Line: (33) 1 47 11 37 37
  - For USA, Canada and Mexico based operators: Help Desk: (1) 800-2FALCON (2325266)



- All other areas: Help Desk: (1) 201 541 4747.

