European Union Aviation Safety Agency

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-085

Issued: 27 June 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: This AD supersedes EASA AD 2021-0197 dated 23 August 2021.

ATA 34 – Navigation – EASy Avionics Architecture / Modification

Aircraft Flight Manual – Amendment

Master Minimum Equipment List – Amendment / Implementation

Operational Suitability Manual – Flight Crew – Amendment / Implementation

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Manufacturer(s):
Dassault Aviation (Dassault)

Applicability:
Falcon 7X aeroplanes, all manufacturer serial numbers (MSN), including those that have embodied Dassault modification (mod) M1000 (commercially known as Falcon 8X) in production, except aeroplanes having Dassault mod M2091 embodied in production.

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

The MMEL-CP: Dassault Master Minimum Equipment List (MMEL) Change Project (CP) CP0299-PUB.

The OSM-FC: Dassault 7X Operational Suitability Manual (OSM) Flight Crew (FC) DGT 148654 Revision 06.

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The SB: Dassault Service Bulletin (SB) 7X-590.

Groups: Group 1 aeroplanes are all MSN, except Group 2 aeroplanes.
Group 2 aeroplanes are those having MSN 402 and subsequent which were modified in service in accordance with the instructions of Dassault SB 7X-550 or on which Dassault mod M1925 has been embodied in production (known as "EASy III – 3rd CERT"); or which were modified in service in accordance with the instructions of Dassault SB 7X-430 or on which Dassault mod M1745 has been embodied in production (known as "EASy III – 2nd CERT").

Reason:

A weak point has been identified in the Falcon 7X 'EASy' avionics architecture which, coupled with theoretical Generic IO (Input/Output) card failure, may lead to misleading data on display units.

This condition, if not corrected, could reduce the safety margins and lead to increased pilot workload, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Dassault issued Airplane Flight Manual (AFM) AFM-CP0177-PUB, the MMEL-CP and the OSM-FC, as defined in this AD, and EASA issued AD 2021-0197 to require amendment of the applicable AFM, implementation of the MMEL-CP and implementation of the OSM-FC.

Since that AD was issued, Dassault developed mod M2091, for certain MSN, upgrading the aeroplane avionics to the "EASY III – 4th CERT" standard that improves the Falcon 7X EASy avionics architecture. Additionally, Dassault issued the SB, as defined in this AD, providing modification instructions for in-service aeroplanes.

For the reasons described above, this AD retains the requirement of EASA AD 2021-0197, which is superseded, and requires modification and amendment of the applicable AFM for Group 2 aeroplanes.

This AD is still considered to be interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

AFM Amendment / MMEL Implementation / OSM-FC Implementation:

(1) For all aeroplanes: Within 2 months after 06 September 2021 [the effective date of EASA AD 2021-0197], accomplish the actions as required by paragraph (1.1) of this AD, or as specified in paragraph (1.2) of this AD, and the actions as required by paragraphs (1.3) and (1.4) of this AD, inform all flight crews, and, thereafter, ensure that each pilot has performed the training and operate the aeroplane accordingly.

(1.1) Amend the applicable AFM to incorporate the Dassault AFM-CP0177-PUB.

(1.2) Amending the applicable AFM to incorporate a later revision, which includes the Dassault AFM-CP0177-PUB, is an acceptable method to comply with the requirements of paragraph (1.1) of this AD.

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(1.3) Implement the instructions of the MMEL-CP, on the basis of which the operator's MEL must be amended.

(1.4) Implement the instructions of the OSM-FC.

Modification:

(2) For Group 2 aeroplanes: Within 12 months after the effective date of this AD, accomplish the actions as required by paragraphs (2.1) and (2.2) of this AD

(2.1) Modify the aeroplane in accordance with the instructions of the SB.

(2.2) Before next flight after modification as required by paragraph (2.1) of this AD, amend the applicable AFM to incorporate Dassault AFM-CP0178-PUB, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

(3) Amending the applicable AFM to incorporate a later revision which includes the Dassault AFM-CP0178-PUB is an acceptable method to comply with the requirements of paragraph (2.2) of this AD.

Ref. Publications:

Dassault AFM-CP0177-PUB dated 28 June 2021.

Dassault AFM-CP0178-PUB dated 07 April 2022.

Dassault MMEL-CP 0299-PUB dated 14 April 2021.

Dassault OSM-FC DGT 148654 Revision 06 dated 02 July 2021.

Dassault SB 7X-590 original issue dated 19 April 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 07 July 2022.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: 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.

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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) 5 56 18 47 47.
   - For USA, Canada and Mexico based operators: Help Desk: (1) 800-2FALCON (2325266).
   - All other areas: Help Desk: (1) 201 541 4747.

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