



Airworthiness Directive

AD No.: 2021-0272

Issued: 06 December 2021

Note: This Airworthiness Directive (AD) 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.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

DASSAULT AVIATION

Type/Model designation(s):

Falcon 7X aeroplanes

Effective Date: 20 December 2021

TCDS Number(s): EASA.A.155

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2021-0202R1 dated 10 September 2021.

ATA – Aeroplane Flight Manual – Amendment

ATA 35 – Oxygen – Crew Oxygen System / O₂ Saver Function – Deactivation

Manufacturer(s):

Dassault Aviation (Dassault)

Applicability:

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

Definitions:

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

Affected part: SAFRAN crew oxygen mask Part Number (P/N) MLD40-45-005 having serial number (s/n) B150451 thru B172005 (inclusive) without the letter "R" after the s/n.

The applicable AFM CP: Dassault Aeroplane Flight Manual (AFM) Change Project (CP) as specified in Table 1 of this AD, as applicable.

The SB: Dassault Service Bulletin (SB) 7X-560.

Groups: Group 1 aeroplanes are those that have an affected part installed.



Group 2 aeroplanes are those that do not have an affected part installed.

Reason:

An occurrence was reported of finding plastic molding burrs and defects located on the piston hole associated to the oxygen (O₂) saver feature, on the production line of certain SAFRAN flight crew oxygen masks. The O₂ saver function allows wearing the oxygen mask with a limited oxygen consumption and saves oxygen by delivering it only when needed, either automatically in case of depressurization, or manually by switching the 100% or EMERG mode button by a pilot. The burrs and/or defects on the piston hole may prevent efficient deactivation of the O₂ saver function.

This condition, if not detected or corrected, could lead to blocked or erratic oxygen supply to a flight crew member in case of decompression or smoke/fire in the cockpit.

To address this potential unsafe condition, Dassault developed a specific check, to be performed by the flight crew, ensuring that the O₂ saver function is not activated and an operating limitation preventing the use of the O₂ saver function. This flight crew procedure was published in the applicable AFM CP. Consequently, EASA issued Emergency AD 2021-0202-E (later revised) to require amendment of the applicable AFM by incorporating the applicable AFM CP.

Since that AD was issued, SAFRAN (the mask manufacturer) and Dassault identified the batch of crew oxygen masks affected by the manufacturing deficiency. Additional safety analysis determined that the AFM update may not be sufficient to mitigate the risk of failed deactivation of the O₂ saver function on a long term. Consequently, Dassault issued the SB providing instructions to mechanically deactivate the O₂ saver function of affected parts.

For the reasons described above, this AD retains the requirements of EASA AD 2021-0202R1, which is superseded and requires physical deactivation of O₂ saver function of affected parts. This AD also introduces installation restrictions for the affected parts.

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

Required as indicated, unless accomplished previously:

AFM amendment:

- (1) For Group 1 aeroplanes: Before next flight after 13 September 2021 [the effective date of EASA AD 2021-0202-E], amend the applicable AFM to incorporate the applicable AFM CP, as defined in Table 1 of this AD, inform all flight crews and, thereafter, operate the aeroplane accordingly.

Table 1 - Applicable AFM / AFM CP

Aeroplane / Configuration	Applicable AFM	Applicable AFM CP
Falcon 7X pre-mod M1000	DGT105608	CP0183-PUB
Falcon 7X post-mod M1000 (Falcon 8X)	DGT147681	CP0183-PUB

- (2) For Group 1 aeroplanes, amending the applicable AFM by incorporating a later revision, which includes the AFM change as required by this AD, is an acceptable method to comply with the requirements of paragraph (1) of this AD.



Note: For Group 2 aeroplanes: If the AFM of an aeroplane was amended to incorporate the applicable AFM CP to comply with the superseded EASA AD 2021-0202R1, the applicable AFM CP can be removed from the AFM of that aeroplane.

Deactivation:

- (3) For Group 1 aeroplanes: Within 3 months after the effective date of this AD, mechanically block in deactivated mode the O₂ saver function of each affected part in accordance with the instructions of the SB.

Part Installation:

- (4) For Group 1 and 2 aeroplanes: Installation of an affected part on an aeroplane is allowed, provided that it is accomplished in accordance with approved maintenance data and, concurrently with an installation, the O₂ saver function of the affected part is deactivated as required by paragraph (3) of this AD and the applicable AFM is updated as required by paragraph (1) of this AD or as specified by paragraph (2) of this AD.

Ref. Publications:

Dassault Falcon 7X AFM DGT105608 CP0183-PUB dated 03 September 2021.

Dassault Falcon 8X AFM DGT147681 CP0183-PUB dated 03 September 2021.

Dassault SB 7X-560 original issue dated 20 October 2021.

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

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, 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 AD 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.
5. For any question concerning the technical content of the requirements in this AD, please contact: 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.

