



Airworthiness Directive

AD No.: 2020-0285

Issued: 18 December 2020

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:

AIRBUS

Type/Model designation(s):

A380 aeroplanes

Effective Date: 01 January 2021

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2012-0010 dated 18 January 2012.

ATA 31 – Indicating / Recording Systems – Flight Data Recording System – Modification (Software Update)

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-31-8103

Affected SW: Flight Data Recording System (FDRS) software (SW) having Part Number (P/N) SFI52S0002S0387 or P/N SFI54S0002S0486, or earlier SW.

Serviceable SW: FDRS SW having P/N SFI55S0002S0487.

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

Group 2 aeroplanes are those that do not have affected SW installed. An aeroplane on which Airbus modification (mod) 76363 and mod 77945 have been embodied in production is a Group 2 aeroplane, provided the aeroplane remains in that configuration.



Reason:

A partial loss of flight data recording function was discovered during an A350 flight test when maximum acquisition rate for both aircraft condition monitoring system (ACMS) and digital FDRS (DFDRS) was exceeded. The FDRS manufacturer identified that this event was due to a software error and confirmed that, due to design similarities, this behaviour is also possible on A380 aeroplanes.

This condition, if not corrected, could lead to deficiency in systems used to assist in the enquiry following an accident or serious incident, preventing them to perform their intended functions.

To address this potential unsafe condition, Airbus developed the serviceable SW, embodied in production through Airbus mod 76363 and mod 77945, and published the SB to provide in-service modification instructions to ensure improved segregation between ACMS and DFDRS acquisition.

For the reasons described above, this AD supersedes EASA AD 2012-0010, the requirements of which have become redundant, and requires installation of serviceable SW.

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

Required as indicated, unless accomplished previously:

Modification:

- (1) Within 12 months after the effective date of this AD, modify the aeroplane by installing serviceable SW in accordance with the instructions of the SB.

SW Installation Prohibition:

- (2) Do not install affected SW on any aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.

(2.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (1) of this AD.

(2.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

Airbus SB A380-31-8103 original issue dated 15 May 2019.

The use of later approved revisions of the above-mentioned document 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. This AD was posted on 02 December 2020 as PAD 20-192 for consultation until 16 December 2020. No comments were received during the consultation period.



3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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: AIRBUS SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.

