

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-040

Issued: 09 April 2024

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:

Type/Model designation(s): A380 aeroplanes

AIRBUS S.A.S.

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

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 25 – Equipment / Furnishings – Fuselage / Belly Fairing Mounted Emergency Evacuation Escape Slides – Replacement

Manufacturer(s):

Airbus

Applicability:

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

Definitions:

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

The AOT: Airbus Alert Operators Transmission (AOT) A25R031-24.

The SB: Collins Aerospace (Vendor) Alert Service Bulletin (SBA) 103004-7-8-25-A543.

Affected part(s): Fuselage and belly fairing mounted slides, having Part Number (P/N) 103004-xxx, P/N 103007-xxx or P/N 103008-xxx, where 'xxx' represents a numerical sequence as specified in the SB, and having a serial number (s/n) listed in Table 1 or Table 2 of the SB, as defined in this AD.



Note 1: Following replacement of the inflatable assembly with a new one, any fuselage and belly fairing mounted slide is reidentified with a new date of manufacture and a new s/n.

Serviceable part(s):

Fuselage and belly fairing mounted slides, eligible for installation in accordance with applicable Airbus instructions, which are not an affected part; or an affected part, having a s/n listed in Table 2 of the SB, which has not exceeded 36 months since last overhaul.

Groups:

'Community 1' affected parts are those identified as such in the AOT and which have a s/n listed in Table 1 of the SB.

'Community 2' affected parts are those identified as such in the AOT and which have a s/n listed in Table 2 of the SB.

Aeroplane date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.

Reason:

Occurrences were reported in 2022 where, during overhaul of Airbus A380 emergency slides after return to service following a longer parking / storage period, locally, seams opened during accomplished proof pressure testing (PPT) of the inflatable assemblies. Although the investigation is still on-going, it is suspected that the environmental conditions during parking / storage are the key contributing factors for the adhesive degradation of the seams of certain inflatable slides (door-mounted slides are not affected). In particular, extended exposure to a combination of moisture (from condensation during previous flight operations) and high temperatures, during parking / storage of the aeroplane or an individual emergency slide unit, is assumed to be the root cause for the adhesive degradation and opening of seams of the inflatable structure of certain slides, which increases with the parking / storage time.

This condition, if not corrected, could lead to a loss of air holding capability of a slide which, in case of an emergency, would prevent the timely evacuation of all passengers from the aeroplane, possibly resulting in injury to, or death of, occupants.

To address this potential unsafe condition, Airbus issued AOT A25R025-22, providing instructions for replacement of certain fuselage and belly fairing mounted slides, and consequently EASA issued AD 2022-0218, requiring replacement of certain affected slides and prohibiting (re)installation of affected parts.

Since this AD was issued, (again) separated seams were found during PPT (on unrepaired locations) on slides which had been previously repaired during accomplished overhaul after replacement in accordance with the instructions of AOT A25R025-22, respectively Collins Aerospace (Vendor) SB 103004-7-8-25-A527. Therefore, the accomplished repairs of separated seams during overhaul cannot any longer be considered an effective corrective action for the determined potential unsafe condition.

Consequently, Airbus published the AOT, as defined in this AD, referring to the SB (as defined in this AD) to give additional (renewed) instructions for replacement of certain affected parts, defined in



this AD as 'Community 1' affected parts, and to introduce a repetitive inspection, in combination with a reduced time between overhaul (TBO) of 36 months, for the other affected parts ('Community 2').

For the reason described above, this AD requires replacement of certain affected parts with a serviceable part, as defined in this AD, requires repetitive inspections for the other affected parts, and prohibits the installation of 'Community 1' affected parts.

This AD does not supersede EASA AD 2022-0218, and is considered to be an interim action and further AD action may follow.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Replacement:

(1) For aeroplanes which have a Community 1 affected part installed: Unless otherwise required by paragraph (2) of this AD, within the compliance time as identified in the AOT, as applicable, depending on aeroplane MSN, position of installation of the slide and the date of last accomplished overhaul, replace each Community 1 affected part with a serviceable part in accordance with the instructions of the AOT.
For the purpose of this AD, where the AOT refers for the compliance time to 'from AOT.

For the purpose of this AD, where the AOT refers for the compliance time to 'from AOT effectivity date', this must be read as 'from the effective date of this AD'.

(2) For aeroplanes which have a Community 1 affected part installed: When the original Airbus cabin layout / configuration is changed or modified since the aeroplane date of manufacture, as defined in this AD, within 1 month after the effective date of this AD, contact Airbus for approved instructions and, within the compliance time(s) specified in those instructions, replace each affected part with a serviceable part accordingly.

Inspection(s):

(3) For aeroplanes which have a Community 2 affected part installed: Within 4 months after the effective date of this AD, or within 36 months since last overhaul of that affected part, whichever occurs later, and, thereafter, at intervals not to exceed 36 months, accomplish a PPT and air retention test on each Community 2 affected part in accordance with the instructions of section 3. C. (2) (b) of the SB.

Corrective Action(s):

(4) If, during any test as required by paragraph (3) of this AD, any discrepancy, as defined in the SB, is detected, before next flight accomplish the applicable corrective action in accordance with the instructions of the SB.

Terminating Action(s):

(5) Replacement on an aeroplane of each Community 2 affected part with a serviceable part which is not a Community 2 affected part, constitutes terminating action for the repetitive inspections as required by paragraph (3) of this AD for that aeroplane, provided that, thereafter, no Community 2 affected parts are reinstalled on that aeroplane.



Part(s) Installation:

- (6) From the effective date of this AD, do not install on any aeroplane a Community 1 affected part.
- (7) From the effective date of this AD, it is allowed to install on any aeroplane a Community 2 affected part, provided it is a serviceable part, as defined in this AD, and that, following installation, it is inspected as required by this AD.

Ref. Publications:

Airbus AOT A25R031-24 original issue (Revision 00) dated 05 April 2024.

Collins Aerospace (Vendor) SBA 103004-7-8-25-A543 original issue dated 01 April 2024.

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 23 April 2024.
- 2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 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 <u>EU aviation safety reporting system</u>. 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.
- For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, or E-mail: <u>account.airworth-A380@airbus.com</u>.

