



Airworthiness Directive

AD No.: 2021-0233

Issued: 27 October 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:

AIRBUS

Type/Model designation(s):

A330 aeroplanes

Effective Date: 10 November 2021

TCDS Number(s): EASA.A.004

Foreign AD: Not applicable

Supersedure: None

ATA 53 – Fuselage – Bulk Cargo Door Frames – Inspection / Repair

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN) up to MSN 1779 inclusive, on which Airbus Service Bulletin (SB) A330-53-3275 was embodied in service at original issue or Revision 01, except those on which, during SB embodiment, the roto test was accomplished (no defects detected, or defect(s) corrected, as applicable) as specified in that SB.

Definitions:

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

The SB: Airbus SB A330-53-3303.

SR or LR: Depending on utilisation of the aeroplane, either in short range (SR) or long range (LR) operation, the corresponding thresholds and intervals in flight cycles (FC) or flight hours (FH), as specified in Table 1 and Table 2 of this AD, must be applied. For more information, refer to Airbus Operator Information Telex 999.086/11.



Reason:

In the frame of the certification of the A330 Extended Service Goal exercise, it was identified that Tartaric Sulfuric Anodising (TSA) or Chromic Acid Anodising (CAA) surface treatment is present in some frame attachment holes. From aeroplanes MSN 0400 to MSN 1779 inclusive, following production process sequence modification (surface treatment after drilling) on bulk cargo door frames (FR) 67 and FR69 right hand (RH) side, the door fitting attachment holes have either CAA or TSA treatment, which leads to a detrimental effect on fatigue behaviour. It was also determined that aeroplanes MSN 0001 to MSN 0399 inclusive, despite the fact that no surface treatment was applied in the same frame attachment holes, were also affected by fatigue issue.

This condition, if not detected and corrected, could lead to cracks in the primary structure, possibly resulting in in-flight loss of a bulk cargo door, consequent decompression and potential damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, EASA issued AD 2016-0102, later superseded by EASA AD 2018-0005, which required repetitive inspections of the holes at the upper and lower door support fittings of FR67 and FR69 RH side, and the holes at door latch fitting of FR69 RH side. EASA AD 2018-0005 also introduced an optional modification, which constituted terminating action for the repetitive inspections as required by that AD.

Since that AD was issued, it was determined that Airbus SB A330-53-3275, for the optional modification, contained instructions that could be misleading, as a result of which the rototest inspection, intended to be accomplished prior to the modification, may not have been accomplished on all aeroplanes.

Prompted by this determination, Airbus published the SB, as defined in this AD, to provide inspection instructions for these aeroplanes.

For the reasons described above, this AD requires a one-time rototest inspection or, alternatively, a detailed (DET) or a one-time high frequency eddy current (HFEC) and ultrasonic inspection for certain holes, and rototest inspection for certain other holes, and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance times specified in Table 1 of this AD, accomplish a rototest inspection of the holes at the upper and lower door support fittings of FR67 and FR69 RH side, and the holes at door latch fitting of FR69 RH side in accordance with the instructions of the SB.



Table 1 – Inspection (See Note 1 of this AD) (A, B or C, whichever occurs later)

MSN	Aeroplane Model(s)	Compliance Time (FC or FH, whichever occurs first)	
0001 to 0399	All (except -200F)	A	SR: Before exceeding 27 100 FC or 83 900 FH LR: Before exceeding 23 600 FC or 133 100 FH
0400 to 1779			SR: Before exceeding 16 000 FC or 49 500 FH LR: Before exceeding 13 900 FC or 78 600 FH
All	A330-223F and A330-243F		Before exceeding 11 300 FC or 34 000 FH
All	All	B	Before exceeding 4 830 FC since embodiment of Airbus SB A330-53-3275 original issue or Revision 01, as applicable
All	All	C	Within 150 FC after the effective date of this AD

Note 1: Unless indicated otherwise, the FC and FH specified in Table 1 of this AD are those accumulated by the aeroplane since first flight.

- (2) As an alternative to the inspection as required by paragraph (1) of this AD, within the compliance times specified in Table 1 of this AD and, thereafter, at intervals not to exceed the compliance times specified in Table 2 of this AD, accomplish the inspection method 1 or 2, as specified in Table 2 of this AD, in accordance with the instructions of the SB.

Table 2 – Inspection Intervals (See Note 2 of this AD)

Inspection / Area(s)	Affected Aeroplanes	Inspection Interval (FC or FH, whichever occurs first)
1 - DET for frame around the fittings from the visible side i.e. looking forward for FR67 and looking aft for FR69	All	150 FC
2 - HFEC and ultrasonic inspection for upper door support fitting holes, rototest for lower door support fitting holes and HFEC for door latch fittings at frame FR69	A330 (except -200F)	SR: 1 700 FC or 6 100 FH LR: 1 400 FC or 8 400 FH
	A330-223F and A330-243F	1 700 FC or 5 200 FH

Note 2: The kind of inspection applied to an area, as specified in Table 2 of this AD, determines the inspection interval, i.e. the compliance time(s) for the next due inspection, as specified in Table 2 of this AD. Alternating between inspection methods, or intermixing, is allowed and for each area, the inspection interval (see Table 2 of this AD) applies, depending on the method used during the latest inspection.



Corrective Action(s):

- (3) If, during the inspection as required by paragraph (1) of this AD, or as specified in paragraph (2) of this AD, as applicable, no discrepancy is detected, before next flight, install new (never installed on an aeroplane) bushes to the latch fittings of FR69 in accordance with the instructions of the SB.
- (4) If, during the inspection as required by paragraph (1) of this AD, or during any inspection as required by paragraph (2) of this AD, as applicable, any discrepancy is detected, before next flight, contact Airbus for approved repair instructions and, within the compliance time(s) specified therein, accomplish those instructions accordingly.

Terminating Action:

- (5) Accomplishment of a repair on an aeroplane, as required by paragraph (4) of this AD, does not constitute terminating action for the repetitive inspections as required by this AD for that aeroplane, unless otherwise specified in the Airbus (repair) instructions.
- (6) Accomplishment on an aeroplane of the rototest inspection and installation of new bushes in accordance with the instructions of the SB, as required by paragraphs (1) and (3) of this AD, constitutes terminating action for the repetitive inspections as specified in paragraph (2) of this AD for that aeroplane.

Ref. Publications:

Airbus SB A330-53-3303 original issue dated 12 July 2021, or Revision 01 dated 24 September 2021.

Airbus SB A330-53-3275 original issue dated 08 September 2017, Revision 01 dated 20 December 2018, or Revision 02 dated 28 April 2021.

The use of later approved revisions of these 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. This AD was posted on 26 August 2021 as PAD 21-132 for consultation until 23 September 2021. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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: AIRBUS – IIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

