



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-132

Issued: 26 August 2021

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:

AIRBUS

Type/Model designation(s):

A330 aeroplanes

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

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 that, during SB embodiment, passed the roto test (no defect detected) 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 (OIT) 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 holes, from aeroplane MSN 0400 and later MSN, following production process modification. On bulk cargo door frames (FR) 67 and FR69 right hand (RH) side, the door fitting attachment holes have this TSA or CAA treatment, which leads to a detrimental effect on fatigue behaviour.

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, DET or 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 Models	Compliance Time	
		Flight Cycles (FC) or Flight Hours (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 A or B, as specified in Table 3 of this AD, in accordance with the instructions of the SB.

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

Action/ Area(s)	Affected Aeroplanes	Inspection Interval (FC or FH, whichever occurs first)
A	All	150 FC
B	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



Table 3 – Areas and Inspection Methods (See Note 2 of this AD)

Inspection	Method and area(s) to be inspected
A	DET for frame around the fittings from the visible side i.e. looking forward for FR67 and looking aft for FR69
B	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

Note 2: The kind of inspection applied to an area, as specified in Table 3 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, as applicable, no discrepancy is detected, before next flight, install new (never installed on an aeroplane) bushes in accordance with the instructions of the inspection 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 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.

Airbus SB A330-53-3275 original issue dated 08 September 2017, Revision 01 dated 20 December 2018, 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. This Proposed AD will be closed for consultation on 23 September 2021.



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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – IIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

