

Airworthiness Directive AD No.: 2025-0107 **Issued**: 07 May 2025

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, or Annex Vb Part ML.A.301, as applicable, 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 | Part M.A.303, or Annex Vb Part MLA.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Type/Model designation(s):

AIRBUS S.A.S.

A318, A319, A320 and A321 aeroplanes

Effective Date: 21 May 2025

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2016-0146R2 dated 14 June 2021.

ATA 53 – Fuselage – Frame 35 / Slidebox Junction – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers, except aeroplanes which have embodied Airbus modification (mod) 161341 or mod 161511 in production.

Definitions:

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

The applicable inspection SB: Airbus Service Bulletin (SB) A320-53-1308, SB A320-53-1309, SB A320-53-1310, SB A320-53-1311, SB A320-53-1312 and SB A320-53-1313, as applicable.

The applicable pre-mod 155607 modification SB: Airbus SB A320-53-1345, SB A320-53-1346, SB A320-53-1348, SB A320-53-1349, SB A320-53-1478 and SB A320-53-1479, as applicable.

The applicable post-mod 155607 modification SB: Airbus SB A320-53-1427, SB A320-53-1428, SB A320-53-1429, SB A320-53-1430, SB A320-53-1431 and SB A320-53-1432, as applicable.



Affected area: Fastener holes of frame (FR) 35.1, FR 35.2, and FR 35.3 between stringer (STR) 29 and STR 32 and at the FR 35.2 to Slidebox junction (Triform fitting), both left-hand (LH) and right-hand (RH) sides.

Reason:

Following the results of a new full-scale fatigue test campaign on the A321 airframe in the context of the A321 extended service goal, it was identified that cracks could develop on the affected area.

This condition, if not detected and corrected, could reduce the structural integrity of the fuselage.

Prompted by these findings, Airbus developed an inspection program, published in the applicable inspection SB, as defined in this AD, where each SB contains instructions for a specific location, and EASA issued AD 2016-0146 to require repetitive special detailed inspections (SDI) of the affected frame locations and, depending on findings, accomplishment of a repair.

After that AD was issued, Airbus published the applicable pre-mod 155607 SB, as defined in this AD, providing in-service modification instructions which constitute terminating action for the repetitive inspections. It was also determined that the inspection instructions provided through the above-mentioned inspection program did not apply to post-mod 161341 aeroplanes. Further AD action was expected for those aeroplanes when the applicable inspection instructions had been published. Consequently, EASA issued AD 2016-0146R1 to introduce reference to the optional terminating action and to reduce the Applicability.

After that AD was issued, Airbus published the applicable post-mod 155607 SB, providing modification instructions. Consequently, EASA issued AD 2016-0146R2 to add the optional modification of post-mod 155607 aeroplanes as a terminating action for the repetitive inspections.

Since EASA AD 2016-0146R2 was issued, Airbus improved the optional aeroplane modification proposed on respectively FR35.3 RH side and FR35.3 LH side for pre-mod 155607 aeroplanes and replaced Airbus SB A320-53-1347 and SB A320-53-1350 respectively by SB A320-53-1478 and SB A320-53-1479.

For the reason described above, this AD retains the requirements of EASA AD 2016-0146R2, which is superseded, and proposes a new optional terminating action based on the SB A320-53-1478 and SB A320-53-1479.

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:

Inspection(s):

(1) Within the compliance time specified in Table 1 of this AD, as applicable, and thereafter, at intervals not to exceed 5 300 flight cycles (FC), accomplish an SDI of the affected area, as specified in Table 2 of this AD, and in accordance with the instructions of the applicable inspection SB, as defined in Table 2 of this AD.



| Accumulated FC | Compliance Time | | |
|---------------------|--|--|--|
| Less than 18 300 FC | Before exceeding 18 300 FC since aeroplane first flight, or within | | |
| | 5 300 FC, after the 03 August 2016 [the effective date of EASA AD | | |
| | 2016-0146 at original issue] whichever occurs later | | |
| 18 300 FC or more | Before exceeding 23 600 FC since aeroplane first flight, or within | | |
| | 2 100 FC, after the 03 August 2016 [the effective date of EASA AD | | |
| | 2016-0146 at original issue] whichever occurs later | | |

Table 1 – Inspection Threshold (see Note 1 of this AD)

Note 1: Unless otherwise specified, the FC indicated in Table 1 of this AD are those accumulated by the aeroplane on 03 August 2016 [the effective date of EASA AD 2016-0146 at original issue] since its first flight.

| Location | Applicable | Applicable Modification SB | |
|-----------------|---------------|----------------------------|-----------------|
| Location | Inspection SB | Pre-mod 155607 | Post-mod 155607 |
| FR 35.1 LH side | A320-53-1308 | A320-53-1348 | A320-53-1430 |
| FR 35.1 RH side | A320-53-1309 | A320-53-1345 | A320-53-1427 |
| FR 35.2 LH side | A320-53-1310 | A320-53-1349 | A320-53-1431 |
| FR 35.2 RH side | A320-53-1311 | A320-53-1346 | A320-53-1428 |
| FR 35.3 LH side | A320-53-1312 | A320-53-1479 | A320-53-1432 |
| FR 35.3 RH side | A320-53-1313 | A320-53-1478 | A320-53-1429 |

Table 2 – Locations and Applicable Inspection SB and Modification SB

Corrective Action(s):

(2) If during any SDI as required by paragraph (1) of this AD, any crack is found, before next flight, accomplish the applicable corrective action instructions in accordance with the applicable inspection SB or contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Terminating Action:

(3) Repair of an aeroplane as required by paragraph (2) of this AD does not constitute terminating action for the repetitive SDI as required by paragraph (1) of this AD for that aeroplane, unless specified otherwise in the instructions provided by Airbus.

Note 2: If the instructions of the applicable inspection SB provide terminating action for the repetitive SDI as required by paragraph (1) of this AD, the applicable inspection SB can be considered "instructions provided by Airbus", as described in paragraph (3) of this AD.

(4) Modification of an aeroplane at the location as defined in <u>Table 2</u> of this AD in accordance with the instructions of the applicable pre-mod 155607 SB or post-mod 155607 SB, as applicable, accomplished an inspection before next flight after passing (no cracks detected) in accordance with the instructions of the applicable inspection SB, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, at that location.



(5) Modification of an aeroplane at the location as defined in <u>Table 3</u> of this AD, accomplished before the effective date of this AD in accordance with the instructions of the applicable pre-mod 155607 SB or post-mod 155607 SB, as applicable, and before next flight after passing (no cracks detected) an inspection in accordance with the instructions of the applicable inspection SB, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, at that location.

| Location | Applicable Inspection SB | Applicable Pre-mod 155607 Modification SB |
|-----------------|-----------------------------|---|
| FR 35.3 LH side | A320-53-1312 | A320-53-1350 |
| FR 35.3 RH side | A320-53-1313 | A320-53-1347 |

Table 3 – Locations and Applicable Inspection SB and Modification SBbefore the effective date of this AD

(6) Modification of an aeroplane at the location as defined in <u>Table 2 and Table 3</u> of this AD, accomplished before the effective date of this AD in accordance with the instructions of the pre-mod 155607 SB or post-mod 155607 SB, as applicable, and without having accomplished the inspection in accordance with the instructions of the applicable inspection SB, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, at that location.

Ref. Publications:

Airbus SB A320-53-1308 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 20 June 2024.

Airbus SB A320-53-1309 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 20 June 2024.

Airbus SB A320-53-1310 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 20 June 2024.

Airbus SB A320-53-1311 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 20 June 2024.

Airbus SB A320-53-1312 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 04 November 2024.

Airbus SB A320-53-1313 original issue dated 04 November 2015, or Revision 01 dated 12 March 2019, or Revision 02 dated 04 November 2024.

Airbus SB A320-53-1345 original issue dated 23 November 2017, or Revision 01 dated 28 January 2021.



Airbus SB A320-53-1346 original issue dated 23 November 2017, or Revision 01 dated 28 January 2021.

Airbus SB A320-53-1347 original issue dated 23 November 2017.

Airbus SB A320-53-1348 original issue dated 23 November 2017, or Revision 01 dated 28 January 2021.

Airbus SB A320-53-1349 original issue dated 23 November 2017, or Revision 01 dated 31 May 2019, or Revision 02 dated 02 July 2021.

Airbus SB A320-53-1350 original issue dated 23 November 2017.

Airbus SB A320-53-1427 original issue dated 05 July 2019, or Revision 01 dated 20 June 2024.

Airbus SB A320-53-1428 original issue dated 05 July 2019, or Revision 01 dated 20 June 2024.

Airbus SB A320-53-1429 original issue dated 05 July 2019, or Revision 01 dated 04 November 2024.

Airbus SB A320-53-1430 original issue dated 05 July 2019, or Revision 01 dated 22 March 2022.

Airbus SB A320-53-1431 original issue dated 05 July 2019, or Revision 01 dated 22 March 2022.

Airbus SB A320-53-1432 original issue dated 05 July 2019, or Revision 01 dated 04 November 2024.

Airbus SB A320-53-1478 original issue dated 04 November 2024.

Airbus SB A320-53-1479 original issue dated 05 November 2024.

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.
- This AD was posted on 07 February 2025 as PAD 25-032 for consultation until 07 March 2025. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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: <u>ADs@easa.europa.eu.</u>
- 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 <u>EU aviation safety</u> 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 – Airworthiness Office – 1IASA; E-mail: <u>account.airworth-eas@airbus.com</u>.

