

Airworthiness Directive

AD No.: 2016-0106R2

Issued: 08 October 2021

[Correction: 07 November 2023]

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: Type/Model designation(s):

AIRBUS A321 aeroplanes

Effective Date: Revision 2: 15 October 2021

Revision 1: 03 January 2019 Original issue: 13 June 2016

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0106R1 dated 20 December 2018.

ATA 53 - Fuselage - Frame 35.2A - 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.

Definitions:

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

The applicable inspection SB: Airbus Service Bulletin (SB) A320-53-1315 and SB A320-53-1316, as applicable to location.

The applicable pre-mod 155607 SB: Airbus SB A320-53-1355 (FR 35.2A RH side) and SB A320-53-1356 (FR 35.2A LH side), as applicable to location.

The applicable post-mod 155607 SB: Airbus SB A320-53-1437 (FR 35.2A RH side) and SB A320-53-1438 (FR 35.2A LH side), as applicable to location.



Aeroplane date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator.

Reason:

Following 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 holes at frame (FR) 35.2A between stringers (STR) 22 and STR23 on right-hand (RH) and left-hand (LH) sides, also on aeroplanes operated in the context of design service goal.

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

Prompted by these findings, Airbus developed an inspection programme, published in the applicable inspection SB, as defined in this AD, and EASA issued AD 2016-0106 to require repetitive special detailed (rototest) inspections (SDI) of the affected holes 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 modification instructions. Consequently, EASA issued AD 2016-0106R1 to introduce reference to that optional terminating action for pre-mod 155607 aeroplanes.

Since that AD was issued, Airbus informed EASA of the publication of the applicable post-mod 155607 SB, providing modification instructions for post-mod 155607 aeroplanes.

For the reason described above, this AD is revised to introduce reference to the optional terminating action for post-mod 155607 aeroplanes. This revised AD also introduces editorial changes, not affecting the requirements, to update the AD to current writing standards.

This AD is re-published to include the standard allowance to use later approved revisions of the documents listed under the Ref. Publication section, and to correct an erroneous reference in paragraph (1) of this AD.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within the compliance time specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 21 500 flight cycles (FC) or 43 100 flight hours (FH), whichever occurs first, accomplish an SDI of the affected holes at FR35.2A between STR22 and STR23 at the locations 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.



Table 1 – Inspection Threshold

Compliance Time (whichever occurs later, A or B)		
Α	Before exceeding 25 400 FC or 50 900 FH, whichever occurs first since aeroplane date of manufacture.	
В	Within 3 300 FC after 13 June 2016 [the effective date of the original issue of this AD]	

Table 2 – Locations and Applicable Inspection SB

Location	Inspection SB
FR 35.2A RH side	A320-53-1315
FR 35.2A LH side	A320-53-1316

Corrective Action(s):

(2) If, during any SDI as required by paragraph (1) of this AD, any crack is found, before next flight, contact Airbus for approved repair instructions and 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.
- (4) Modification of an aeroplane, at the related location, in accordance with the instructions of the applicable pre-mod 155607 or post-mod 155607 SB, constitutes terminating action for the repetitive SDI as required by paragraph (1) of this AD for that aeroplane, at that location.

Ref. Publications:

Airbus SB A320-53-1315 original issue dated 13 January 2016, Revision 01 dated 08 January 2019, or Revision 02 dated 09 October 2023.

Airbus SB A320-53-1316 original issue dated 13 January 2016, Revision 01 dated 08 January 2019, or Revision 02 dated 09 October 2023.

Airbus SB A320-53-1355 original issue dated 20 December 2017, Revision 01 dated 18 June 2019, or Revision 02 dated 24 October 2023.

Airbus SB A320-53-1356 original issue dated 20 December 2017, Revision 01 dated 09 April 2019, or Revision 02 dated 24 October 2023.

Airbus SB A320-53-1437 original issue dated 06 December 2018.

Airbus SB A320-53-1438 original issue dated 06 December 2018.

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.

- 2. The original issue of this AD was posted on 05 April 2016 as PAD 16-049 for consultation until 19 April 2016. The Comment Response Document can be found in the <u>EASA Safety Publications</u> <u>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: 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 <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 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 IIASA; E-mail: account.airworth-eas@airbus.com.