



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-103

Issued: 22 July 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):

A318, A319, A320 and A321 aeroplanes

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

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0218 issued 11 October 2018, including its Correction dated 26 October 2018.

ATA 57 – Wings – Centre and Outer Wing Box Lower Panels / Stiffeners – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers, except:

- Aeroplanes on which Airbus modification (mod) 33421 was fully embodied in production;
- A318 aeroplanes on which Airbus mod 39195 was embodied in production, or on which Airbus Service Bulletin (SB) A320-00-1219 was embodied in service;
- A319 aeroplanes on which Airbus mod 28238, 28162 and 28342 were embodied in production;
- A319 and A320 aeroplanes on which the applicable modification SB was accomplished.



Definitions:

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

The applicable modification SB: Airbus SB A320-57-1131 Revision (Rev.) 02, SB A320-57-1137 Rev. 01 and SB A320-57-1140 Rev. 01, as applicable.

Groups: Group 1 are A319 aeroplanes on which Airbus SB A320-57-1137 original issue has been embodied in service. Group 2 are A320 aeroplanes on which Airbus SB A320-57-1131 original issue or Rev. 01, or SB A320-57-1137 original issue, or SB A320-57-1140 original issue, as applicable, was embodied in service.

Reason:

Taperlocks used in the wing-to-fuselage junction at Rib 1 were found to be non-compliant with the applicable specification, resulting in a loss of pre-tension in the fasteners.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued SB A320-57-1129 and SB A320-57-1130 (original issue), providing instructions for repetitive internal special detailed inspections (SDI) of the lower stiffeners and for repetitive external SDI of the lower panels of the centre and outer wing box at the level of Rib 1 junction. Consequently, EASA issued AD 2007-0067 (later revised) to require accomplishment of these inspections.

After EASA AD 2007-0067R1 was issued, new events and the results of studies identified an ageing effect on these parts. Prompted by these findings, Airbus revised SB A320-57-1129 (up to Rev. 05) and SB A320-57-1130 (up to Rev. 04), adding aeroplanes, modifying the inspection area and updating the intervals. Consequently, EASA issued AD 2018-0218, retaining the requirements of EASA AD 2007-0067R1, which was superseded, expanding the Applicability, modifying the areas to be inspected and revising the inspection thresholds and intervals.

Since that AD was issued, it has been determined that the compliance time for the inspection threshold for A319 and A320 models has to be corrected, and that accomplishment of the modification SB, at any previous revision, does not constitute terminating action for the repetitive inspections. Consequently, Airbus issued SB A320-57-1129 Rev. 06 and SB A320-57-1130 Rev. 05.

For the reason stated above, this AD partially retains the requirements of EASA AD 2018-0218, which is superseded, updates the compliance time for A320 models and expands the Applicability.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

- (1) Within the compliance time as defined in Table 1 of this AD, and, thereafter, at intervals not to exceed the values as defined in Table 2 of this AD, as applicable, accomplish an internal SDI of the centre and outer wing box lower stiffeners at the level of Rib 1 junction on both left-hand (LH) and right-hand (RH) sides, in accordance with the instructions of Airbus SB A320-57-1129 Rev. 06.



Table 1 – Inspection Threshold for wing box lower stiffeners

| Aeroplanes (all models) | Compliance Time | |
|-----------------------------------|---|--|
| A318 | Before exceeding 96 000 flight hours (FH) or 48 000 flight cycles (FC), whichever occurs first since aeroplane first flight | |
| A319 | (whichever occurs later, A , B or C) | |
| | A | Before exceeding 96 000 FH or 48 000 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD, without exceeding 34 900 FH or 17 400 FC, whichever occurs first since the last SDI accomplished in accordance with Airbus SB A320-57-1129 at any revision |
| | C | For Group 1 aeroplanes: Within 12 months after the effective date of this AD |
| A320 | (whichever occurs later, A , B or C) | |
| | A | Before exceeding 96 000 FH or 48 000 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD, without exceeding 34 900 FH or 17 400 FC, whichever occurs first since the last SDI accomplished in accordance with Airbus SB A320-57-1129 at any revision |
| | C | For Group 2 aeroplanes: Within 12 months after the effective date of this AD |
| A321 | (whichever occurs later, A or B) | |
| | A | Before exceeding 87 600 FH or 43 800 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD |

Table 2 – Inspection Intervals for wing box lower stiffeners

| Aeroplanes (all models) | Compliance Time (FH or FC, whichever occurs first) |
|-----------------------------------|---|
| A318, A319, A320 | 34 900 FH or 17 400 FC |
| A321 | 29 000 FH or 14 900 FC |

- (2) Within the compliance time as defined in Table 3 of this AD, and thereafter at intervals not to exceed the values as defined in Table 4 of this AD, as applicable, accomplish an external SDI of the centre and outer wing box lower panels at the level of Rib 1 junction on both LH and RH sides, in accordance with the instructions of Airbus SB A320-57-1130 Rev. 05.



Table 3 – Inspection Threshold for wing box lower panels

| Aeroplanes (all models) | Compliance Time | |
|-----------------------------------|--|---|
| A318 | Before exceeding 96 000 FH or 48 000 FC, whichever occurs first since aeroplane first flight | |
| A319 | (whichever occurs later, A , B or C) | |
| | A | Before exceeding 96 000 FH or 48 000 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD, without exceeding 18 300 FH or 9 100 FC, whichever occurs first since the last SDI accomplished in accordance with Airbus SB A320-57-1130 at any revision |
| | C | For Group 1 aeroplanes: Within 12 months after the effective date of this AD |
| A320 | (whichever occurs later, A , B or C) | |
| | A | Before exceeding 96 000 FH or 48 000 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD, without exceeding 19 800 FH or 9 900 FC, whichever occurs first since the last SDI accomplished in accordance with Airbus SB A320-57-1130 at any revision |
| | C | For Group 2 aeroplanes: Within 12 months after the effective date of this AD |
| A321 | (whichever occurs later, A or B) | |
| | A | Before exceeding 91 800 FH or 45 900 FC, whichever occurs first since aeroplane first flight |
| | B | Within 12 months after the effective date of this AD |

Table 4 – Inspection Intervals for wing box lower panels

| Aeroplanes (all models) | Compliance Time (FH or FC, whichever occurs first) |
|-----------------------------------|---|
| A318 | 21 800 FH or 10 900 FC |
| A319 | 18 300 FH or 9 100 FC |
| A320 | 19 800 FH or 9 900 FC |
| A321 | 19 400 FH or 9 700 FC |

Corrective Actions:

- (3) If, during any SDI required by paragraph (1) or (2) of this AD, as applicable, any damage is found, before next flight, contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.



Credit:

- (4) Inspections on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A320-57-1129 Rev. 03, Rev. 04 or Rev. 05 are acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.
- (5) Inspections on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A320-57-1130 Rev. 03 or Rev 04, are acceptable to comply with the requirements of paragraph (2) of this AD for that aeroplane provided that, within 12 months after the effective date of this AD, the additional work, as identified in Airbus SB A320-57-1130 Rev. 05, is accomplished on that aeroplane.

Terminating Action:

- (6) Repair of an aeroplane as required by paragraph (3) of this AD does not constitute terminating action for the repetitive SDI as required by paragraph (1) or (2) of this AD for that aeroplane, unless specified otherwise in the instructions provided by Airbus.
- (7) Modification of an aeroplane in accordance with the instructions of the applicable modification SB constitutes terminating action for the repetitive SDI as required by paragraphs (1) and (2) of this AD for that aeroplane.
- (8) For Group 1 and Group 2 aeroplanes: Accomplishment on an aeroplane of the additional work as identified in the applicable modification SB constitutes terminating action for the repetitive SDI as required by paragraphs (1) and (2) of this AD for that aeroplane.

Ref. Publications:

Airbus SB A320-57-1129 original issue dated 10 September 2004, or Rev. 01 dated 28 July 2006, or Rev. 02 dated 17 July 2007, or Rev. 03 dated 18 December 2015, or Rev. 04 dated 09 May 2016, or Rev. 05 dated 21 December 2017 or Rev. 06 dated 25 May 2020.

Airbus SB A320-57-1130 original issue dated 10 September 2004, or Rev. 01 dated 28 July 2006, or Rev. 02 dated 17 July 2007, or Rev. 03 dated 09 May 2016, or Rev. 04 dated 21 December 2017, or Rev. 05 dated 25 May 2020.

Airbus SB A320-57-1131 original issue dated 21 November 2006, or Rev. 01 dated 15 February 2011, or Rev. 02 dated 25 November 2013, or Rev. 03 dated 29 June 2015.

Airbus SB A320-57-1137 original issue dated 21 November 2006, or Rev. 01 dated 25 November 2013, or Rev. 02 dated 26 April 2014.

Airbus SB A320-57-1140 original issue dated 21 November 2006, or Rev. 01 dated 25 November 2013, or Rev. 02 dated 07 November 2014, or Rev. 03 dated 19 April 2019.

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 19 August 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 – Airworthiness Office – IIASA; E-mail: account.airworth-eas@airbus.com.

