EASA PAD No.: 20-042



# Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 20-042

Issued: 26 February 2020

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: Type/Model designation(s):

AIRBUS 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 2014-0209 dated 19 September 2014.

# ATA 53 – Fuselage – Center Fuselage Forward Pressure Bulkhead – 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, A321-232, aeroplanes, all manufacturer serial numbers (MSN), except:

- A318 aeroplanes on which Airbus modification (mod) 39195 was embodied in production, or Airbus Service Bulletin (SB) A320-00-1219 was embodied in service, and
- A319 aeroplanes on which Airbus mod 28238, mod 28162 and mod 28342 were embodied in production, and
- all aeroplanes on which mod 157159 was embodied in production.

#### **Definitions:**

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

The inspection SB: Airbus SB A320-53-1383, including Airbus SBIT 19-0038.



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**The applicable modification SB**: Airbus SB A320-53-1268 Revision 01 or Airbus SB A320-53-1372, as applicable to MSN.

#### Reason:

During the A320 fatigue test campaign for Extended Service Goal (ESG), it was determined that fatigue damage could develop on the forward pressure bulkhead at Frame (FR) 35 on left-hand (LH) side and right-hand (RH) side.

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

To address this potential unsafe condition, Airbus developed a reinforcement modification and published SB A320-53-1268 for in-service application, to allow aeroplanes to operate up to the ESG limit. Consequently, EASA published AD 2014-0209, requiring reinforcement of the center fuselage forward pressure bulkhead at FR35.

Since that AD was issued, several cases of cracks were reportedly found in service during application of Airworthiness Limitation Item (ALI) tasks 532166 and 533186. Prompted by these findings, Airbus published the inspection SB, providing different thresholds and inspection instructions compared to those specified in ALI tasks 532166 and 533186. Airbus also published SB A320-53-1372, having the same technical content as Airbus SB A320-53-1268, which allows terminating the repetitive inspections.

For the reasons described above, this AD retains the requirement of EASA AD 2014-0209, which is superseded, and additionally requires, pending accomplishment of that modification, repetitive inspections and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

## Repetitive Inspection(s):

(1) Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 15 000 flight cycles (FC) or 30 000 flight hours (FH), whichever occurs first, inspect the structure of FR35 (for A318, A319, A320) or FR35.8 (for A321) at stringer 30 in accordance with the instructions of the inspection SB.



Table 1 - Initial Inspection

| Aeroplane Status  | Aeroplanes concerned | Compliance Time   |
|---|----------------------|---|
| Not inspected in<br>accordance with<br>ALI task 532166 or<br>ALI task 533186            | All                  | Before exceeding 40 000 FC or 80 000 FH, whichever occurs first since aeroplane first flight  |
| Having already<br>accomplished ALI<br>task 532166 and<br>ALI task 533186                | All                  | Within 15 000 FC or 30 000 FH, whichever occurs first after last ALI task 532166 or task 533186 inspection, whichever was accomplished first  |
| Having already accomplished ALI task 533186 and having not accomplished ALI task 532166 | A319, A320           | Within 15 000 FC or 30 000 FH, whichever occurs first after last ALI task 533186 inspection, without exceeding 44 500 FC since aeroplane first flight                                     |
|   | A318, A321           | Within 15 000 FC or 30 000 FH, whichever occurs first after last ALI task 533186 inspection, without exceeding 48 000 FC aeroplane first flight   |
| Having already accomplished ALI task 532166 and having not accomplished ALI task 533186 | All                  | Within 15 000 FC or 30 000 FH, whichever occurs first after last ALI task 532166 inspection, without exceeding 40 000 FC or 80 000 FH, whichever occurs first from aeroplane first flight |

## Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, before next flight, contact Airbus to obtain approved instructions for corrective action and accomplish those instructions accordingly.

### **Modification:**

(3) Before exceeding 48 000 FC or 96 000 FH, whichever occurs first since aeroplane first flight, modify the aeroplane by reinforcing the forward pressure bulkhead at FR35 (for A318, A319, A320) or FR35.8 (for A321) stringer 30 on both LH and RH side in accordance with the instructions of the applicable modification SB.

## Credit:

- (4) Modification of an aeroplane, accomplished before 03 October 2014 [the effective date of EASA AD 2014-0209] in accordance with the instructions of Airbus SB A320-53-1268 at original issue, is acceptable to comply with the requirements of paragraph (3) of this AD for that aeroplane.
- (5) Accomplishment of corrective actions on an aeroplane, as required by paragraph (2) of this AD, is acceptable to comply with the modification requirement of paragraph (3) of this AD for that aeroplane, provided it is specified in the Airbus repair instructions.



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## **Terminating Action:**

(6) Modification of an aeroplane as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

(7) Accomplishment of corrective actions on an aeroplane, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, unless otherwise specified in the Airbus repair instructions.

## Related Action(s):

(8) Accomplishment of repetitive inspections on an aeroplane, as required by paragraph (1) of this AD, cancels the need to accomplish ALI task 532166 and task 533186, as required by EASA AD 2018-0288, for that aeroplane.

#### **Ref. Publications:**

Airbus SB A320-53-1268 original issue dated 08 January 2013, or Revision 01 dated 23 July 2013, or Revision 02 dated 15 July 2014, or Revision 03 dated 07 May 2015, or Revision 04 dated 29 July 2016, or Revision 05 dated 02 June 2017, or Revision 06 dated 30 November 2017.

Airbus SB A320-53-1372 original issue dated 15 May 2018.

Airbus SB A320-53-1383 original issue dated 05 March 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 25 March 2020.
- Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 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 <u>EU aviation</u> safety reporting system.
- For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51;
  E-mail: account.airworth-eas@airbus.com.

