



## Airworthiness Directive

**AD No.:** 2020-0005

**Issued:** 13 January 2020

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:

AIRBUS

### Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

**Effective Date:** 27 January 2020

**TCDS Number(s):** EASA.A.064

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 53 – Fuselage – Windshield Central Lower Node Continuity Fittings – Inspection / Modification

### 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 meeting one of the configuration criteria below:

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

### Definitions:

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

**Groups:** Group 1 are A320 model aeroplanes that have not embodied Airbus mod 22058 nor mod 21999 nor Airbus SB A320-53-1329.



Group 2 are aeroplanes (any model) that have not embodied Airbus SB A320-53-1329, and are not Group 1.

Group 3 aeroplanes are those that have been modified in service in accordance with the instructions of Airbus SB A320-53-1329 before 29 400 flight cycles (FC) since aeroplane first flight.

Note 1: For aeroplanes modified in service in accordance with Airbus SB A320-53-1329 after or at 29 400 FC, no further action is required up to the Publication Trigger (refer to Airworthiness Limitations Section (ALS) Part 2 paragraph 3.2).

#### **Reason:**

Two fatigue cracks on continuity fittings on left-hand (LH) and right-hand (RH) side at the front windshield lower framing were reportedly found on an A319 aeroplane, on which Airbus mod 22058 had been embodied in production. Mod 22058, which is included in Airbus mod 21999, was introduced to improve the fatigue strength of the windshield front framing by increasing the thickness of framing flanges adjacent to the concerned fittings. Further analyses demonstrated that the damage tolerance and fatigue requirements of JAR 25.571 (b) are not met on aeroplanes in post-mod 22058 configuration.

This condition, if not detected and corrected, could lead to failure of windshield central frame lower node continuity fittings, possibly resulting in decompression of the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus issued instructions to accomplish repetitive high frequency eddy current (HFEC) inspections of the windshield central lower node continuity fittings, which are now included in the Airbus A320 family ALS Part 2, as Airworthiness Limitation Item (ALI) 531129. DGAC France and EASA issued several ADs to require compliance with ALS Part 2 (previously known as sub-section 9-2 of the MPD), each one superseding the previous AD. Compliance with ALS Part 2 (Revision 07) is currently required by EASA AD 2018-0288.

Since introduction of those HFEC inspections, numerous cases of cracks have been reported. Consequently, Airbus issued SB A320-53-1331 to provide instructions for repetitive inspections of the central node windshield area, which replace the HFEC inspections specified in ALI task 531129. Airbus also published SB A320-53-1329 providing instructions to reinforce the windshield central post lower area.

For the reason described above, this AD requires repetitive inspections of the central node windshield area and includes reference to reinforcement modification of that area.

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

Required as indicated, unless accomplished previously:

#### **Repetitive Inspection(s):**

- (1) Before exceeding the threshold as defined in Table 1 of this AD, and, thereafter, at intervals not to exceed the values defined in Table 1 of this AD, as applicable, accomplish an HFEC inspection of the windshield central lower node continuity fittings on both LH and RH sides, in accordance with the instructions of Airbus SB A320-53-1331.



After modification of a Group 1 or Group 2 aeroplane in accordance with the instructions of Airbus SB A320-53-1329, subsequent inspections of that aeroplane must be accomplished as defined in Table 1 of this AD for Group 3 aeroplanes.

Table 1 – Initial and Repetitive HFEC Inspections

<b>Aeroplane configuration</b>	<b>Threshold (A, B or C, whichever occurs later, as applicable)</b>	<b>Interval (not to exceed)</b>
Group 1	A) Before exceeding 36 000 FC since aeroplane first flight B) Within 8 300 FC since last ALI 531129 inspection C) Within the compliance time for reduced interval, as identified in the ALS Part 2 Revision 7 for ALI task 531129, without exceeding 13 500 FC since last ALI 531129 inspection	8 300 FC
Group 2	A) Before exceeding 30 600 FC since aeroplane first flight B) Within 8 800 FC since last ALI task 531129 inspection	8 800 FC
Group 3	A) Before exceeding 30 600 FC since SB A320-53-1329 embodiment	

- (2) For a windshield central lower node continuity fitting of an aeroplane that, before the effective date of this AD, has been inspected per ALI task 531129 and repaired in accordance with an Airbus Repair Design Approval Sheet (RDAS), accomplish the next inspections of that fitting in accordance with, and within the compliance time as specified in, the Airbus RDAS.

#### **Corrective Action(s):**

- (3) For Group 1 and Group 2 aeroplanes: If, during any inspection as required by paragraph (1) of this AD, any crack is detected, before next flight, modify the aeroplane in accordance with the instructions of Airbus SB A320-53-1329, or accomplish a repair in accordance with the instructions of Airbus SB A320-53-1331, as applicable, or contact Airbus for approved instructions and accomplish those instructions accordingly.
- (4) For Group 3 aeroplanes: If, during any inspection as required by paragraph (1) of this AD, any crack is detected, before next flight, contact Airbus for approved instructions and accomplish those instructions accordingly.

#### **Terminating Action(s):**

- (5) None.

#### **Impact on ALS:**

- (6) Accomplishment of inspections on an aeroplane, as required by paragraph (1) of this AD, supersedes the inspection requirements of ALI task 531129 for that aeroplane.

#### **Alternative Method of Compliance:**

- (7) Accomplishment of an inspection in accordance with ALI task 531129 on an aeroplane, within the threshold and intervals as defined in paragraph (1) of this AD, constitutes an acceptable



method to comply with the requirements of paragraph (1) of this AD for that aeroplane for the next inspection due after the effective date of this AD.

**Reporting:**

- (8) Within 90 days after the accomplishment of each HFEC inspection as required by paragraph (1) of this AD, report the results, including no findings, to Airbus.

**Ref. Publications:**

Airbus Service Bulletin A320-53-1329 original issue dated 21 December 2018.

Airbus Service Bulletin A320-53-1331 original issue dated 14 January 2019.

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. This AD was posted on 15 July 2019 as PAD 19-125 for consultation until 12 August 2019. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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 [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com).

