



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 18-011**

**Issued: 26 January 2018**

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 2013-0122 dated 05 June 2013.

### ATA 53 – Fuselage – Belly Fairing and Keel Beam Side Panel Attachment Angles – Inspection / Replacement / Repair

**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 (MSN).

**Reason:**

During the fatigue test campaign of the A320 family type design, cracks were found at the lower riveting of the four titanium angles which connect the belly fairing to the keel beam side panels between frames FR40 and FR42, on both sides of the fuselage.

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



To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A320-53-1104, and DGAC France issued AD 92-201-030 to require reinforcement of the belly fairing structure.

Following new investigation which showed that these measures addressed only part of the unsafe condition, Airbus published SB A320-53-1259 and EASA issued AD 2013-0122, retaining the requirements of DGAC France AD 92-201-030, which was superseded, and requiring repetitive detailed inspections (DET) of the affected titanium angles and, depending on findings, repair or replacement of parts.

After that AD was issued, Airbus published Revision (Rev.) 01 and Rev. 02 of SB A320-53-1259. Incorrect instructions were introduced in Rev. 02, providing instructions to use EN6081D4 rivets for the titanium angles installation, instead of EN6081D5 rivets. Consequently, Airbus SB A320-53-1259 was updated (now at Rev. 03) including reference to the proper rivets.

For the reason described above, this AD retains the requirements of EASA AD 2013-0122, which is superseded, and requires additional work for aeroplanes on which Airbus SB A320-53-1259 at Rev. 02 was embodied.

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

Required as indicated, unless accomplished previously:

#### **Re-statement of the requirements of EASA AD 2013-0122:**

##### **Reinforcement:**

- (1) For A320-211 and A320-231 aeroplanes, MSN 0003 through 0092 inclusive: Before exceeding 12 000 flight cycles (FC) since aeroplane first flight, reinforce the belly fairing structure in accordance with the instructions of Airbus SB A320-53-1014.

##### **Inspections:**

- (2) For all aeroplanes: Within the compliance time defined in Table 1 of this AD and, thereafter, at intervals not to exceed 5 000 FC or 10 000 flight hours (FH), whichever occurs first, accomplish a DET of the four titanium angles between the belly fairing and the keel beam side panel in accordance with the instructions of Airbus SB A320-53-1259 Rev. 03.



Table 1 – Initial DET

<b>Compliance Time</b> (whichever occurs later, <b>A</b> , <b>B</b> or <b>C</b> )	
<b>A</b>	Within 30 000 FC or 60 000 FH, whichever occurs first after first flight of the aeroplane.
<b>B</b>	Within 30 000 FC or 60 000 FH, whichever occurs first after modification of the aeroplane as required by paragraph (1) of this AD, or after installation of new titanium angles, provided that, prior to installation, a rototest on the open holes has been accomplished with no findings, as specified in paragraph (3) of this AD.
<b>C</b>	Within 3 000 FC or 6 000 FH, whichever occurs first after 19 June 2013 [the effective date of EASA AD 2013-0122].

**Corrective Action(s):**

- (3) If, during any inspection as required by paragraph (2) of this AD, no crack is detected, it is allowed, before next flight after the inspection, to remove all inspected titanium angles, to accomplish a rototest on the open holes and, provided no cracks are found, to install new titanium angles, in accordance with the instructions of Airbus SB A320-53-1259 Rev. 03.
- (4) If, during any inspection as required by paragraph (2) of this AD, any crack is detected, before next flight, remove the affected titanium angle(s), accomplish a rototest on the open holes and, provided no cracks are found, install new titanium angles at the affected locations, in accordance with the instructions of Airbus SB A320-53-1259 Rev. 03.
- (5) If, during any rototest as required by paragraph (3) or (4) of this AD, as applicable, a crack is found, before next flight, contact Airbus for approved repair instructions and accomplish those instructions accordingly.

**Credit:**

- (6) Inspections and corrective actions on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A320-53-1259 at original issue, or Rev. 01, are acceptable to comply with the requirements of this AD for that aeroplane. After the effective date of this AD, SB A320-53-1259 Rev. 03 must be used.

**Next Inspection after Replacement:**

- (7) After installation of new titanium angles as specified in paragraph (3) of this AD, or as required by paragraph (4) of this AD, as applicable, the next DET, as required by paragraph (2) of this AD, may be deferred until 30 000 FC or 60 000 FH for the location where the replacement was done, whichever occurs first after that installation. Subsequent inspections must be accomplished as required by paragraph (2) of this AD.

**Terminating Action:**

- (8) Repair or replacement of parts on an aeroplane, as required by this AD, does not constitute terminating action for the repetitive DET as required by this AD for that aeroplane.



**New requirements of this AD:****Additional Work:**

- (9) For aeroplanes previously inspected in accordance with the instructions of Airbus SB A320-53-1259 Rev. 02, within 2 000 FC or 4 000 FH, whichever occurs first after the effective date of this AD, without exceeding 5 000 FC or 10 000 FH, whichever occurs first since the last DET per Airbus SB A320-53-1259 Rev. 02, accomplish the additional work as identified in, and in accordance with the instructions of, Airbus SB A320-53-1259 Rev. 03.

**Ref. Publications:**

Airbus SB A320-53-1014 original issue dated 25 June 1992, or Rev. 01 dated 26 May 1993, or Rev. 02 dated 01 September 1994.

Airbus SB A320-53-1259 original issue, dated 06 November 2012, or Rev. 01 dated 26 November 2013, or Rev. 02 dated 24 March 2016, or Rev. 03 dated 30 November 2017.

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 23 February 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. 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](mailto:account.airworth-eas@airbus.com).

