



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-04-003	發布日期 Date issued	2018/4/25
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	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).		
主旨摘要	Fuselage - Belly Fairing and Keel Beam Side Panel Attachment Angles - Inspection / Replacement / Repair		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> FAA</div> <div style="width: 50%;"><input type="checkbox"/> Germany LBA</div> <div style="width: 50%;"><input checked="" type="checkbox"/> EASA</div> <div style="width: 50%;"><input type="checkbox"/> CAA-NL</div> <div style="width: 50%;"><input type="checkbox"/> Brazil</div> <div style="width: 50%;"><input type="checkbox"/> UK CAA</div> <div style="width: 50%;"><input type="checkbox"/> Transport Canada Civil Aviation</div> <div style="width: 50%;"><input type="checkbox"/> Japan CAB</div> <div style="width: 50%;"><input type="checkbox"/> DGAC</div> <div style="width: 50%;"><input type="checkbox"/> CAA of Israel</div> <div style="width: 50%;"><input type="checkbox"/> Other _____</div> </div>		
	設計國 AD 編號 Original AD number	2018-0091	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 56. This AD supersedes EASA AD 2013-0122(CAA-2013-06-003) dated 05 June 2013. 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. and 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.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2018-0091

**Issued:** 20 April 2018

Note: This Airworthiness Directive (AD) 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.

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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

AIRBUS

### Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

**Effective Date:** 04 May 2018

**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) A320-53-1014, 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. Rev. 02 provided incorrect instructions to use Part Number (P/N) EN6081D4 rivets for the titanium angles installation, instead of P/N 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

Compliance Time (whichever occurs later, A, B or C)	
<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, Airbus 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.

**Credit:**

- (10) A review of the aeroplane maintenance records is acceptable to comply with the requirements of paragraph (9) of this AD for that aeroplane, provided it can be determined that no titanium angles have been installed on that aeroplane in accordance with the instructions of Airbus SB A320-53-1259 Rev. 02, or that rivets P/N EN6081D5 have been used to install the titanium angles on that aeroplane.



**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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 26 January 2018 as PAD 18-011 for consultation until 23 February 2018. 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 Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. 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).

