



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 17-084R1**

**Issued: 15 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 2014-0154 dated 02 July 2014.

### ATA 54 – Nacelles / Pylons – Pylon Aft Fixed Fairings – Inspection

#### Manufacturer(s):

Airbus (formerly Airbus Industrie)

#### Applicability:

Airbus A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A320-211, A320-212, A320-214, A320-215, A320-216, A321-111, A321-112, A321-211, A321-212, and A321-213 aeroplanes, all manufacturer serial numbers on which Airbus modification (mod) 33844 has been embodied in production.

#### Reason:

On aeroplanes equipped with post-mod 33844 CFM pylons, several operators reported finding cracks on the Aft Fixed Fairing (AFF). After material analysis, it appeared that the pylon AFF structure, especially on this configuration, was subject to fatigue-induced damage which could lead to pylon AFF cracks.

This condition, if not detected and corrected, could lead to detachment of a pylon AFF from the aeroplane, possibly resulting in injury to persons on the ground.



To address this unsafe condition, Airbus published Alert Operators Transmission (AOT) A54N002-12, providing inspection instructions. Thereafter, Airbus issued Service Bulletin (SB) A320-54-1027, later revised, superseding AOT A54N002-12. EASA issued AD 2014-0154 to require repetitive inspections of the pylon AFF and, depending on findings, replacement.

Since that AD was issued, Airbus developed mod 156593 to increase the fatigue life of the pylon AFF structure by using a different material and introducing thermal treatment of the aluminium sheets parts. Prompted by new findings of cracks on rib 15, it was determined that this area also needs to be inspected to ensure the structural integrity of the new pylon AFF. Airbus revised SB A320-54-1027, including instructions for repetitive inspection of that area. Repetitive inspections are also required on post-mod 156593 aeroplanes.

For the reasons described above, this AD retains the requirements of EASA AD 2014-0154, which is superseded, and requires repetitive inspections of the upper spar at rib 15 area and, depending on findings, accomplishment of applicable corrective action(s).

Since PAD 17-084 was issued, Airbus revised SB A320-54-1027, including reference to improved inspection methods, and developed mod 159806 and 156765, redesigning the corner fittings at the junction upper spar and rib 15, which constitutes terminating action for the repetitive inspections. For retrofit purposes, Airbus issued SB A320-54-1035 and SB A320-54-1036, providing instructions to modify and re-identify the pylon AFF, which constitutes terminating action for the repetitive inspections. This PAD has been revised accordingly, including references to optional terminating actions, and providing installation requirements for the new pylon AFF.

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

Required as indicated, unless accomplished previously:

#### Re-statement of the Requirements of EASA AD 2014-0154:

- (1) Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 2 500 flight cycles (FC) or 3 750 flight hours (FH), whichever occurs first, accomplishes a detailed inspection (DET) of the pylon AFF in accordance with the instructions of Airbus SB A320-54-1027 at original issue or Revision 01.

Table 1 – Initial Pylon AFF DET

Affected Aeroplanes	Compliance Time (as applicable, whichever occurs later A, B or C)	
All	<b>A</b>	Before exceeding 5 000 FC or 7 500 FH, whichever occurs first since aeroplane first flight
Inspected per AOT A54N002-12	<b>B</b>	Within 2 500 FC or 3 750 FH, whichever occurs first since the latest accomplishment of MPD task ZL 471-01, or since AOT A54N002-12 inspection
Not inspected per AOT A54N002-12	<b>C</b>	Within 750 FC or 1 500 FH, whichever occurs first after 16 July 2014 [the effective date of EASA AD 2014-0154]



**New Requirements of this AD:****Repetitive Inspections for pre-mod 156593 aeroplanes:**

- (2) Within the compliance time defined in Table 2 of this AD, as applicable, and, thereafter, at intervals not to exceed 2 500 FC or 3 750 FH, whichever occurs first, inspect each pylon AFF in accordance with the instructions of Airbus SB A320-54-1027 Revision 032 (see Note 1 of this AD). Accomplishment of these inspections on an aeroplane supersedes the requirement of paragraph (1) of this AD for that aeroplane.

Note 1: Non Destructive Test Manual (NTM) 54-51-80 inspections, as referenced by SB A320-54-1027 Revision 03, must be accomplished, as applicable, in accordance with the instructions of NTM revision N°116, dated 01 November 2017, or later.

Table 2 – Initial Pylon AFF Inspection

<b>Compliance Time</b> (whichever occurs later <b>A</b> , <b>B</b> or <b>C</b> )	
<b>A</b>	Before exceeding 5 000 FC or 7 500 FH, whichever occurs first, since aeroplane first flight
<b>B</b>	Before exceeding 2 500 FC or 3 750 FH, whichever occurs first, since the latest inspection per SB A320-54-1027 original issue or Revision 01
<b>C</b>	Within 750 FC or 1 500 FH, whichever occurs first, after the effective date of this AD

**Repetitive Inspections for post-mod 156593 aeroplanes:**

- (3) Before exceeding 10 000 FC or 15 000 FH, whichever occurs first since aeroplane first flight, and, thereafter, at intervals not to exceed 5 000 FC or 7 500 FH, whichever occurs first, inspect each pylon AFF in accordance with the instructions of Airbus SB A320-54-1027 Revision 03 (see Note 1 of this AD). Accomplishment of these inspections on an aeroplane supersedes the requirement of paragraph (1) of this AD for that aeroplane.

**Corrective Action(s):**

- (4) If during any inspection as required by paragraph (1), (2) or (3) of this AD a crack is found, before next flight accomplish the applicable corrective action(s) in accordance with the instructions of Airbus SB A320-54-1027 Revision 032.

**Credit:**

- (5) Inspections accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-54-1027 at Revision 02, are acceptable to comply with the initial requirements of paragraph (2) of this AD for that aeroplane.
- (6) Corrective actions, accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-54-1027 at original issue or Revision 01 or Revision 02, are acceptable to comply with the initial requirements of paragraph (4) of this AD for that aeroplane.



**Terminating Action(s):**

- (7) Accomplishment of corrective action(s) on an aeroplane as required by paragraph (4) of this AD does not constitute terminating action for the repetitive inspection required by paragraph (1), (2), or (3) of this AD for that aeroplane.
- (8) An aeroplane embodying Airbus mod 159806 is not affected by the repetitive inspections required by paragraph (1), (2), or (3) of this AD, as applicable, provided that it is determined that no AFF having a Part Number (P/N) identified as “affected” in Table 3 of this AD, is installed on that aeroplane.
- (9) Modification of an aeroplane in accordance with the instructions of Airbus SB A320-54-1036 (for pre mod 156593) or SB A320-54-1035 (for post mod 156593), as applicable, constitutes terminating action for the repetitive inspections required by paragraph (1), (2), or (3) of this AD, as applicable, for that aeroplane, provided that it is determined that no AFF having a P/N identified as “affected” in Table 3 of this AD is installed on that aeroplane.
- (10) Installation on an aeroplane of a Left Hand / Right Hand AFF having a P/N identified as “new / alternative” in Table 3 of this AD constitutes terminating action for the repetitive inspections required by paragraph (1), (2), or (3) of this AD for that AFF of that aeroplane.

Table 3 – Affected and new / alternative (repaired) AFF (see Note 2 of this AD)

	Affected P/N	New / alternative P/N
<b>pre-mod 156593</b>	D54510050000YY	D00413079002YY
		D54510050000CJ
	D54510050001YY	D00413079003YY
		D54510050001CJ
<b>post-mod 156593</b>	D54510050000XX	D54510050000CJ
	D54510050001XX	D54510050001CJ

Note 2: for the purpose of this AD, YY may be any of the following suffixes: BC, BD, BE, BH, BI, BJ, BK, BL, BM, CA, CB, CC, CD, CE, CF. XX can be any of the following suffixes: CG, CH.

**Parts Installation:**

- (11) Do not install on any aeroplane an AFF having a P/N identified as “affected” in Table 3 of this AD, as required by paragraph (11.1) or (11.2) of this AD, as applicable.
- (11.1) For a Group 1 aeroplane (see Note 3 of this AD): After modification of that aeroplane as specified in paragraph (9) or (10) of this AD, as applicable.
- (11.2) For a Group 2 aeroplane: From the effective date of this AD.

Note 3: For the purpose of this AD, Group 1 aeroplanes are those that, on the effective date of this AD, have an AFF installed, having a P/N identified as “affected” in Table 3 of this AD. Group 2 aeroplanes are those that, on the effective date of this AD, do not have an AFF installed, having a P/N identified as “affected” in Table 3 of this AD.



(12) Installation on an aeroplane of an AFF having a P/N approved after the effective date of this AD is equal to compliance with the requirements of (9) of this AD for that aeroplane, provided the conditions as specified in paragraphs (12.1) and (12.2) of this AD are met.

(12.1) The P/N must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and

(12.2) The installation must be accomplished in accordance with modification instructions approved by EASA or under Airbus DOA.

#### Ref. Publications:

Airbus AOT A54N002-12 dated 30 October 2012.

Airbus SB A320-54-1027 original issue dated 10 April 2014, or Revision 01 dated 14 January 2015, or Revision 02 dated 12 January 2017, or Revision 03 dated 22 September 2017.

Airbus SB A320-54-1035 original issue dated 18 September 2017.

Airbus SB A320-54-1036 original issue dated 18 September 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 12 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).

