EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2015-0021 **Date: 13 February 2015** Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EU 748/2012, Part 21.A.3B. In accordance with 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 [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:	**Type/Model designation(s):**
AIRBUS	A318, A319, A320 and A321 aeroplanes

TCDS Number:	EASA.A.064
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0050 dated 05 March 2013.

ATA 71	**Powerplant – Aft Engine Mount Retainers – Inspection / Replacement**
Manufacturer(s):	Airbus (formerly Airbus Industries)
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.
Reason:	During in-service inspections, several aft engine mount retainers, fitted on aeroplanes equipped with CFM56-5A/5B engines, have been found broken. The results of the initial investigations highlighted that two different types of surface finish had been applied (respectively bright and dull material finishes), and that dull finish affects the strength of the retainer with regard to fatigue properties of the part. The pins which attach the engine link to the aft mount are secured by two nuts, which do not have a self-locking feature; this function is provided by the retainer brackets. In case of failure of the retainer bracket, the locking feature of the nuts of the inner and outer pins is lost; as a result, these nuts could subsequently become loose. In case of full loss of the nuts, there is the potential to also lose the pins, in which case the aft mount link will no longer be secured to the aft engine mount. The same locking feature is used for the three link assemblies of the aft mount. This condition, if not detected and corrected, could lead to in-flight loss of an aft mount link, possibly resulting in damage to the aeroplane and injury to person on the ground.

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	To address this potential unsafe condition, EASA issued AD 2013-0050 to require detailed inspections (DET) of the aft engine mount retainers and the replacement of all retainers with dull finish with retainers having a bright finish. Since that AD was issued, inspection results have shown that the main cause of crack initiation remains the vibration dynamic effect that affects both retainers, either with "dull" or "bright" surface finishes. The non-conforming "dull" surface's pitting is an aggravating factor. For the reasons described above, this AD retains the requirements of EASA AD 2013-0050, which is superseded, and requires repetitive DET of all aft engine mount retainers and, depending on findings, their replacement. This AD is considered to be an interim action, pending development and availability of a final solution.
Effective Date:	27 February 2015
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: **Restatement of the requirements of EASA AD 2013-0050**: Note: AD 2013-0050 used the acronym DVI instead of the current DET. This does not constitutes a technical or requirement change. (1) Within 3 months after the 19 March 2013 [the effective date of EASA AD 2013-0050], accomplish a DET of the aft engine mount retainers in accordance with the instructions of Airbus Alert Operators Transmission (AOT) A71N001-12 Revision 01. (2) If, during the DET as required by paragraph (1) of this AD, any installed dull finish aft engine mount retainer is found without cracks and not failed, within 25 flight cycles (FC), repeat the DET as required by paragraph (1) of this AD and, within 50 FC after the first DET as required by paragraph (1) of this AD, replace all dull finish retainers in accordance with the instructions of Airbus AOT A71N001-12 Revision 01. (3) If, during the DET as required by paragraph (1) of this AD, any installed aft engine mount retainer is found cracked or failed, before next flight, replace all affected aft engine mount retainers in accordance with the instructions of Airbus AOT A71N001-12 Revision 01. (4) Aeroplanes from MSN 4942 and higher have been delivered by Airbus with "bright" finish aft engine mount retainers. These aeroplanes are not affected by the requirements of paragraph (1) of this AD, provided it is determined that no engine and/or no aft engine mount retainer has been removed from the aeroplane since Airbus date of manufacture. A review of aeroplane maintenance records is acceptable to make this determination, provided those records can be relied upon for the purpose of this requirement. (5) From 19 March 2013 [the effective date of EASA AD 2013-0050], do not install any dull finish aft engine mount retainer on an aeroplane. The instructions of Airbus AOT A71N001-12, or those of Goodrich Service Bulletin (SB) RA32071-146, can be used to verify the correct finish of the part. **New requirements of this AD**: (6) Within the compliance time as specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 12 months, accomplish a DET of the aft engine mount retainers in accordance with the instructions of Airbus SB A320-71-1060, or Goodrich Aerostructures SB RA32071-160.

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Table 1 – Inspection Threshold

Compliance Time (**A**, **B** or **C**, whichever occurs later)	
A	Within 12 months since Airbus date of manufacture of the aeroplane
B	Within 12 months after installation of new retainers
C	Within 9 months after the effective date of this AD

(7) If, during any DET as required by paragraph (6) of this AD, any aft engine mount retainer is found damaged, cracked or broken, or detected as missing, before next flight, replace the affected aft engine mount retainers of the affected engine installation in accordance with the instructions of Airbus SB A320-71-1060.

(8) Within 30 days after any DET as required by paragraph (6) of this AD when findings are made, report the result to Airbus.

(9) Replacement of retainers on an aeroplane, as required by paragraph (7) of this AD, does not constitute terminating action for the repetitive DET as required by paragraph (6) of this AD for that aeroplane.

Ref. Publications:

Airbus AOT A71N001-12, Revision 01 dated 09 August 2012, or Revision 02 dated 27 February 2013.

Airbus SB A320-71-1060 dated 09 October 2014.

Goodrich Aerostructures SB RA32071-146, Revision 2 dated 26 July 2012.

Goodrich Aerostructures SB RA32071-160, original issue dated 18 September 2014.

The use of later approved revisions of these 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 09 January 2015 as PAD 15-001 for consultation until 06 February 2015. The Comment Response Document can be found at http://ad.easa.europa.eu/.
3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: 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.

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