EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2015-0080



Date: 07 May 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 I AIRBUS | Holder's Name: | Type/Model designation(s): A318, A319, A320 and A321 aeroplanes | |
|------------------------------------|--|---|--|
| TCDS Number: | EASA.A.064 | | |
| Foreign AD: | Not applicable | | |
| Supersedure: None | | | |
| ATA 27 | Flight Controls – Trimmable Horizontal Stabilizer Actuator – Identification / Replacement | | |
| Manufacturer(s): | Airbus (formerly Airbus Indus | strie) | |
| 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. | | |
| Reason: | During endurance qualification tests on A380 Trimmable Horizontal Stabilizer Actuator (THSA), a partial loss of the no-back brake (NBB) efficiency was experienced. Investigation results concluded that this particular malfunction was due to an ageing/endurance issue of the surfaces of the NBB carbon friction disks, leading to a partial loss of braking efficiency in some specific aerodynamic load conditions. | | |
| | Due to design similarity on A the THSA manufacturer on o Subject tests confirmed that installed on A320 family aero NBB efficiency. | 320 family fleet, the same tests were initiated by ertain SA type THSA, sampled from the field. THSA Part Number (P/N) 47145 series, as oplanes, are also affected by this partial loss of | |
| | This condition, if not detected gear train not able to keep the lead to an uncommanded mo control of the aeroplane. | d and corrected, and in conjunction with the power to ball screw in its last commanded position, could powement of the THS, possibly resulting in loss of | |
| | For the reasons described al each affected THSA, with the | bove, this AD requires the removal from service of e intent of in-shop NBB carbon disk replacement. | |
| Effective Date: | 21 May 2015 | | |

TE.CAP.00110-004 © European Aviation Safety Agency. All rights reserved.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

| Required Action(s) | Required as indicated, unless accomplished previously: | | |
|----------------------------|---|--|--|
| and Compliance Time(s): | Note 1: The THSA affected by the requirements of this AD are only those identified by P/N 47145-XXX (XXX in the P/N stands for any numerical value). | | |
| | Note 2: For the purpose of this AD, a serviceable THSA is a unit which has not exceeded the flight cycle (FC) limits specified in Table 1 of this AD, since first installation of the THSA on an aeroplane, or since last NBB replacement, whichever is later. NBB disc replacement can be accomplished through UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17. (1) Not later than the date specified in Table 1 of this AD, as applicable, determine the FC accumulated by each affected THSA since first installation on an aeroplane, or since last NBB replacement (see Note 3 of this AD), whichever is later, and, for those having reached or exceeded <u>on that date</u> the corresponding number of FC specified in Table 1 of this AD, replace the THSA with a serviceable unit (see Note 2 of this AD) in accordance with the instructions of Airbus SB A320-27-1242. Note 3: In case no maintenance records concerning last NBB disk replacement are available, the FC accumulated since first installation of the THSA on an aeroplane apply. (2) From each date as specified in Table 1 of this AD, and before exceeding the FC limit corresponding to each date, as applicable, replace each THSA with a serviceable unit (see Note 2 of this AD) an accordance with the instructions of Airbus SB A320-27-1242. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Date | THSA FC Limit (since first installation on an aeroplane, or since last NBB replacement, whichever is later) | |
| | 31 December 2015 | 40 000 FC | |
| | 31 December 2016 | 36 000 FC | |
| | 31 December 2017 | 33 600 FC | |
| | 31 December 2018 | 31 600 FC | |
| | 31 December 2019 | 30 000 FC | |
| | Conditions for the installation of a THSA on an aeroplane | | |
| | (3) From each date specifie to install a THSA P/N 47 serviceable unit, as defi | d in Table 1 of this AD, as applicable, it is allowed 145-XXX on an aeroplane, provided the unit is a ned in Note 2 of this AD. | |
| Ref. Publications: | Airbus SB A320-27-1242 original issue dated 09 February 2015. UTAS SB 47145-27-17 original issue dated 16 February 2015. | | |
| | | | |
| | The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD. | | |
| Remarks: | Remarks: 1. If requested and appropriately substantiated, EASA can appro Alternative Methods of Compliance for this AD. | | |
| | This AD was posted on 27 March 2015 as PAD 15-028 for consultation until 24 April 2015. The Comment Response Document can be found at <u>http://ad.easa.europa.eu</u>. | | |
| | 3. Enquiries regarding this Section, Certification Direction | AD should be referred to the Safety Information ectorate, EASA. E-mail: <u>ADs@easa.europa.eu</u> . | |
| | For any question concertive this AD, please contact: Fax +33 5 61 93 44 51, I | ning the technical content of the requirements in AIRBUS – Airworthiness Office – EIAS, E-mail: <u>account.airworth-eas@airbus.com</u> . | |