



Airworthiness Directive Cancellation Notice

AD No.: 2014-0257-CN

Issued: 17 November 2021

Note: This Airworthiness Directive (AD) Cancellation Notice (CN) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A330 and A340 aeroplanes

Effective Date: 17 November 2021

TCDS Number(s): EASA.A.004 and EASA.A.015

Foreign AD: Not applicable

Cancellation: This Notice cancels EASA AD 2014-0257R1 dated 29 May 2015.

ATA 27 – CANCELLED: Flight Controls – Trimmable Horizontal Stabilizer Actuator – Identification / Replacement

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN).

Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.

Reason:

During endurance qualification tests on Trimmable Horizontal Stabilizer Actuator (THSA) of another Airbus aeroplane type, a partial loss of the no-back brake (NBB) efficiency was experienced. Due to THSA design similarity on the A330/A340 fleet, a similar partial loss of the NBB efficiency was identified on THSA Part Number (P/N) 47147 as installed on A330-300 and A340-200/-300 aeroplanes, on THSA P/N 47172 as installed on A330-200/-300 and A340-200/-300 aeroplanes, and on THSA P/N 47175 as installed on A340-500/600 aeroplanes.

Investigation results concluded that this partial loss of braking efficiency in some specific aerodynamic load conditions was due to polishing and auto-contamination of the NBB carbon friction disks.



This condition, if not detected and corrected and in conjunction with the power gear train not able to keep the ball screw in its last commanded position, could lead to uncommanded movements of the THS, possibly resulting in loss of control of the aeroplane.

To address this potential unsafe condition, EASA issued AD 2013-0144 to require replacement of each THSA that has exceeded 16 000 flight cycles (FC) in service, to be sent in shop for NBB carbon disk replacement, later revised (EASA AD 2013-0144R1), to clarify the identification of 'affected' THSAs.

In addition, a note was added to make clear that the life limits as specified in (the current revision of) A330 Airworthiness Limitations Section (ALS) Part 4 are still relevant for the affected THSA, as applicable to aeroplane model and THSA P/N.

Since this AD was issued, further assessment of the ageing / endurance issue has resulted in the conclusion that there is a need to replace the NBB installed on the THSA.

Consequently, EASA issued AD 2014-0257, which retained the requirements of EASA AD 2013-0144R1, which was superseded, and required removal from service of affected THSA. THSA should be sent in shop for NBB carbon disk replacement. This AD affected additional THSA P/N when compared to EASA AD 2013-0144R1 and Airbus AOT A27L005-13.

Since that AD was issued, it was determined that it is necessary to consider that the THSA removal for NBB disks replacement could also be calculated since last NBB disk replacement which was done in-shop.

Since that AD was issued, Airbus amended A330 ALS Part 4, consequently EASA issued AD 2021-0250, requiring accomplishment of the actions as specified in A330 ALS Part 4 Revision 8.

This AD, however, also takes over the requirements for A330 aeroplanes from EASA AD 2014-0257R1, which therefore is no longer necessary.

For the reasons described above, this Notice cancels EASA AD 2014-0257R1.

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

None

Ref. Publications:

Airbus SB A330-27-3199 dated 15 July 2014, SB A340-27-4190 dated 15 July 2014 and SB A340-27-5062 dated 15 July 2014, and Airbus A330 ALS Part 4 Revision 8 dated 01 July 2021.

Remarks:

1. Enquiries regarding this AD-CN should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
2. For any question concerning the technical content of this AD-CN, please contact: AIRBUS – IIAL (Airworthiness Office); E-mail: airworthiness.A330-A340@airbus.com.

