



Airworthiness Directive

AD No.: 2019-0028

Issued: 07 February 2019

Note: This Airworthiness Directive (AD) 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.

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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name::

AIRBUS

Type/Model designation(s):

A340 aeroplanes

Effective Date: 21 February 2019

TCDS Number(s): EASA.A.015

Foreign AD: Not applicable

Supersedure: None

ATA 27 – Flight Controls – Flight Control Primary Computer – Modification / Replacement

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all manufacturer serial numbers, if equipped with Flight Control Primary Computer (FCPC) having software standard L23 (hardware 2K2), L24 (hardware 2K0 or 2K1), W13 (hardware 2K2) or earlier software standard.

Note 1: These software standards correspond, respectively, to Part Number (P/N) LA2K2B1002B0000, P/N LA2K015002C0000, P/N LA2K1A1002C0000 and P/N LA2K2B100GD0000. All affected aeroplanes should be equipped with this software, as required by EASA AD 2015-0124R3.

Definitions:

For the purpose of this AD, the following definitions apply:

The applicable SB: Airbus Service Bulletin (SB) A340-27-4207, SB A340-27-4208, SB A340-27-5070, as applicable.

Groups:

Group 1 aeroplanes are those in pre-Airbus modification (mod) 206555 (SB A340-27-4208),



or pre-mod 206556 (SB A340-27-4207), or pre-mod 206557 (SB A340-27-4207), or pre-mod 206523 (SB A340-27-5070) configuration.

Group 2 aeroplanes are those in post-mod 206555 (SB A340-27-4208), or post-mod 206556 (SB A340-27-4207), or post-mod 206557 (SB A340-27-4207), or post-mod 206523 (SB A340-27-5070) configuration.

Reason:

In 2015, occurrences were reported of multiple Angle of Attack (AOA) blockages. Investigation results indicated the need for AOA monitoring in order to better detect cases of AOA blockage.

This condition, if not corrected, could, under specific circumstances, lead to undue activation of the Alpha protection, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus developed new FCPC software standards for enhanced AOA monitoring and, consequently, EASA issued AD 2015-0124 (later revised) to require these software standard upgrades.

Since EASA AD 2015-0124R3 was issued, it was identified that, for some cases, AOA blockages were not detected by those FCPC software standards. Consequently, new FCPC software standards, as specified in Table 1 of this AD, have been developed (Airbus mod 206555, mod 206556, mod 206557 and mod 206523) to further improve the detection of AOA blockage. Airbus issued the applicable SB to implement these mods on in-service aeroplanes.

For the reasons described above, this AD requires a software standard upgrade, either by modification or replacement of the three FCPCs, and allows removal of the Aircraft Flight Manual (AFM) Temporary Revision (T/R), operational procedure 'AFM T/R 529', as previously required by EASA AD 2014-0267-E, from the applicable AFM.

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

Required as indicated, unless accomplished previously:

Modification / Replacement:

- (1) For Group 1 aeroplanes: Within 9 months after the effective date of this AD, modify or replace the three FCPCs, by installing software standards as specified in Table 1 of this AD, in accordance with the instructions of the applicable SB.

Table 1 – Software Standard Updates

Software Standard to be installed	FCPC Hardware Standard(s)	Applicable SB
L26	2K0 / 2K1	SB A340-27-4207
L25	2K2	SB A340-27-4208
W14	2K2	SB A340-27-5070



AFM Change:

- (2) After modification of an aeroplane as required by paragraph (1) of this AD **and** having an AOA configuration as identified in Table 2 of this AD, or as identified in paragraph (10) [installation of AOA sensors having a P/N approved after 01 June 2015] of EASA AD 2015-0134, as applicable, the operational procedure 'AFM TR 529' (any issue), as previously required by EASA AD 2014-0267-E, is no longer necessary and can be removed from the AFM of that aeroplane.

Table 2 – AOA Sensor Installation configurations

AOA Sensor P/N - Captain	AOA Sensor P/N – First Officer	AOA Sensor P/N - Standby
C16291AB or C16291AA	C16291AB or C16291AA	C16291AB, C16291AA, 0861ED or 0861ED2

Note 2: For AOA Sensor P/N C16291AA, a detailed inspection (DET) and a functional heating test of each sensor must be accomplished as required by paragraph (3) of EASA AD 2015-0134.

Credit:

- (3) An aeroplane modified as required by paragraph (1) of this AD, remains compliant with the modification requirements of paragraph (1) of EASA AD 2015-0124 (any revision) for that aeroplane.

Part Installation Prohibition:

- (4) Do not install on an aeroplane any software or hardware of a version earlier than the one listed in Table 1 of this AD, as required by paragraph (4.1) or (4.2) of this AD, as applicable.
- (4.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (1) of this AD.
- (4.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

Airbus SB A340-27-4207 original issue dated 27 November 2018.

Airbus SB A340-27-4208 original issue dated 27 November 2018.

Airbus SB A340-27-5070 original issue dated 29 May 2018.

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 08 January 2019 as PAD 19-003 for consultation until 05 February 2019. No comments were received during the consultation period.



3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

