

Airworthiness Directive

AD No.: 2018-0192

Issued: 03 September 2018

Note: This Airworthiness Directive (AD) 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.

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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

Type/Model designation(s):

AIRBUS

A340 aeroplanes

Effective Date: 17 September 2018

TCDS Numbers: EASA.A.015

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2016-0226 dated 09 November 2016, including its Correction dated 10 November 2016.

ATA – Aircraft Flight Manual / Engine Bleed Air System – Amendment

ATA 31 – Indicating & Recording System – Flight Warning Computer – Modification / Replacement

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A340-31-4182.

Affected FWC: Flight Warning Computer (FWC) standard L13, Part Number (P/N) LA2E0060F130000, and earlier standard.



Reason:

Occurrences were reported by some operators of an engine bleed system over-temperature, without the engine bleed valve closing. In the case of an engine over-temperature, identified by an Electronic Centralised Aircraft Monitored (ECAM) message "AIR ENG 1(2)(3)(4) BLEED FAULT", the associated engine bleed valve should be automatically closed. Then, another ECAM message "AIR ABNORM BLEED CONFIG" instructs the flight crew to open the cross bleed valve. Investigation results revealed that, in these events, the engine bleed valve jammed in open position and the manual closure normally requested by the ECAM procedure did not permit the isolation of the failed engine bleed air system.

This condition, if not corrected, could lead to damage of the bleed manifold and the ducts downstream of the engine bleed system and exposure of the surrounding structure to heat stress, possibly resulting in reduced structural integrity of the aeroplane.

To initially address this potential unsafe condition, Airbus issued Aircraft Flight Manual (AFM) Temporary Revision (TR), operational procedure AFM TR 746 Issue 1, to provide applicable instructions if an engine bleed over-temperature occurs, identified by the "AIR ENG 1(2)(3)(4) BLEED FAULT" ECAM caution message, and combined with the associated engine bleed valve jammed open. Consequently, EASA issued AD 2016-0226 to require amendment of the AFM by incorporating the Airbus A340 AFM TR 746 Issue 1.

Since that AD was issued, Airbus developed a modification to install improved Flight Warning Computers (FWC), standard L14, and published the SB to provide installation instructions. This modification allows removal of Airbus A340 TR 746 Issue 1 from the AFM of the aeroplane.

For the reasons described above, this AD retains the requirements of EASA AD 2016-0226, which is superseded, and requires a software standard upgrade of the two FWCs, either by modification or replacement, which allows removal of operational procedure previously introduced by Airbus A340 AFM TR 746 Issue 1.

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

Required as indicated, unless accomplished previously:

AFM Change:

- (1) Within 30 days after 23 November 2016 [the effective date of EASA AD 2016-0226], amend the applicable AFM to incorporate Airbus A340 AFM TR 746 Issue 1, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM of an aeroplane to incorporate a later AFM revision, which includes AFM TR 746 Issue 1 (or AFM DU ABN-36-00005093.0004001), is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Modification / Replacement:

(3) Within 24 months after the effective date of this AD, install software standard L14, P/N LA2E0060F140000, (or later software standard) on both FWCs, or replace both FWCs with FWCs containing software standard L14, P/N LA2E0060F140000, (or later software standard), in accordance with the instructions of the SB.



AFM Change:

(4) After modification of an aeroplane as required by paragraph (3) of this AD, the operational procedure 'AFM TR 746 Issue 1' is no longer necessary and can be removed from the AFM of that aeroplane.

Part Installation Prohibition:

(5) After modification of an aeroplane as required by paragraph (3) of this AD, do not install an affected FWC on that aeroplane.

Ref. Publications:

Airbus SB A340-31-4182 original issue dated 15 May 2018.

The use of later approved revisions of the above-mentioned document 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 16 July 2018 as PAD 18-097 for consultation until 13 August 2018. 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: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> reporting system.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAL (Airworthiness Office), E-mail: <u>airworthiness.A330-A340@airbus.com</u>.

