

# Airworthiness Directive AD No.: 2020-0205 Issued: 24 September 2020

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

Effective Date: 01 October 2020

TCDS Numbers: EASA.A.004

Foreign AD: Not applicable

Supersedure: None

Type/Model designation(s)

A330 aeroplanes

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

#### 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.

## **Definitions:**

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

**The applicable AFM TR:** Airbus A330 Aircraft Flight Manual (AFM) Temporary Revision (TR) 803 issue 1.0, A330 AFM TR 804 issue 1.0 and A330 AFM TR 805 issue 1.0, as applicable.

#### Reason:

During A330 NEO certification exercise, it was identified that, for A330 CEO aeroplanes (including those in MRTT configuration), there is a risk of an engine bleed system over-temperature, without the engine bleed valve closing. In the case of an engine bleed system over-temperature, identified by an Electronic Centralised Aircraft Monitored (ECAM) message "AIR ENG 1(2) BLEED FAULT" or "AIR ENG 1+2 BLEED FAULT", the associated engine bleed valve should be automatically closed. If, however, the engine bleed valve remains jammed in open position, the manual closure normally requested by the ECAM procedure will not isolate 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 address this potential unsafe condition, Airbus issued the applicable AFM TR, as defined in this AD, to provide applicable procedures to be applied if an engine bleed over-temperature occurs, identified by the "AIR ENG 1(2) BLEED FAULT" or "AIR ENG 1+2 BLEED FAULT" ECAM caution messages, combined with the associated engine bleed valve jammed open. In addition, Airbus developed flight warning computer (FWC) software (SW) T9-0 standard that allows removal of the applicable AFM TR. Additional FWC SW T9 standards are being developed, which will also allow removal of the applicable AFM TR.

For the reasons described above, this AD requires amendment of the applicable AFM by incorporating the applicable AFM TR and operating the aeroplane accordingly. This AD also allows, following embodiment of a certain FWC SW standard, removal of the applicable AFM TR.

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

Required as indicated, unless accomplished previously:

#### **AFM Change:**

(1) For all aeroplanes, except those equipped with FWC SW T9-0 standard (or later standard): Within 30 days after the effective date of this AD, amend the applicable AFM by incorporating the applicable AFM TR, as specified in Table 1 of this AD, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

Aeroplane Configuration	Applicable AFM TR
FWC SW pre-T6 or M6 standard installed	AFM TR 803 issue 1.0, for single engine bleed over-temperature, "AIR ENG 1(2) BLEED FAULT" ECAM caution
FWC SW T6 or M6 standard, P/N LA2E20202T60000 or P/N LA2E20202M60000, or later standard installed	AFM TR 804 issue 1.0, for single engine bleed over-temperature, "AIR ENG 1(2) BLEED FAULT" ECAM caution
FWC SW pre-T9-0 standard (any P/N prior to P/N LA2E20202T90000), or FWC SW MRTT standard (P/N LA2E20202Mx0000 – x being a numerical value between 3 and 7 inclusive) installed	AFM TR 805 issue 1.0, for dual engine bleed over-temperature, "AIR ENG 1+2 BLEED FAULT" ECAM caution

## Table 1 – AFM Amendment

(2) Amending the applicable AFM of an aeroplane to incorporate a later AFM revision, which includes the applicable AFM TR, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.



(3) After embodiment on an aeroplane of FWC SW T9-0 standard, P/N LA2E20202T90000 (or later standard and P/N), the operational procedure of the applicable AFM TR, as required by paragraph (1) of this AD, is no longer necessary and can be removed from the AFM of that aeroplane.

#### **Ref. Publications:**

Airbus A330 AFM TR 803 issue 1.0, approved by EASA on 15 July 2020.

Airbus A330 AFM TR 804 issue 1.0, approved by EASA on 15 July 2020.

Airbus A330 AFM TR 805 issue 1.0, approved by EASA on 04 September 2020.

The use of later approved revisions of the above-mentioned documents are 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS Airworthiness Office IIAL,E-mail: <u>airworthiness.a330-a340@airbus.com</u>.

