Airworthiness Directive

AD No.: 2018-0215

Issued: 05 October 2018

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):

A380 aeroplanes

Effective Date: 19 October 2018

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA – Aircraft Flight Manual – Fuel Quantity Indication System Procedure – Amendment

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Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The AFM TR: Airbus A380 Aircraft Flight Manual (AFM) Temporary Revision (TR) 205 issue 1.

Reason:

During a pre-departure check of an A380 aeroplane, a difference was noticed between the fuel on board (FOB) indicated on the system display after refuelling, and the sum of the initial FOB plus the fuel uplifted from the refuelling bowser. The investigation results indicate that a wrong signal from a refuel isolation valve (valve indicated in closed position, whereas the valve was actually open during refuelling) had caused this mismatch, which may have been due to contamination of the affected refuel isolation valve position sensor. This wrong signal triggers the system to use the fuel density determined during a previous flight for computation. If the real fuel density of the current

refuelling is different to the previous fuel density, the resulting fuel weight indication may show a discrepancy that is potentially above the allowable limits.

This condition, if not corrected, could lead to an undetected fuel measurement error, possibly resulting in loss of sufficient fuel supply to all engines and consequent reduced control of the aeroplane.

To address this unsafe condition, Airbus issued the AFM TR to introduce a comparison of the indicated FOB displayed after the refuelling with the sum of the initial FOB plus the fuel uplifted from the refuelling bowser.

For the reasons described above, this AD requires amendment of Section Normal Procedures, pre-flight checks/fuel system of the applicable AFM to include a quantified tolerance for the indicated FOB cross check with the uplifted fuel.

This AD is considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

AFM Amendment:

(1) Within 30 days after the effective date of this AD, amend Section Normal Procedures, pre-flight checks/fuel system of the applicable AFM to incorporate the AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

(2) Amending the applicable AFM to incorporate later AFM revisions, which include the AFM TR, as required by paragraph (1) of this AD, is acceptable to comply with the requirements of paragraph (1) of this AD.

Ref. Publications:

Airbus A380 AFM TR 205 issue 1, EASA approval date 22 June 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. 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 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 SAS - EIANA (Airworthiness Office), Telephone : +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.