Airworthiness Directive

AD No.: 2021-0001

Issued: 04 January 2021

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: 18 January 2021

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 71 – Powerplant – Front Engine Mount / Strut Mount and Thrust Link – Inspection

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Manufacturer(s):

Airbus

Applicability:

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

Definitions:

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

The AOT: Airbus Alert Operators Transmission (AOT) A71R017-20.

Affected engine: Rolls-Royce RB211 Trent 900 engines having an engine serial number (ESN) as listed in Appendix 1 of the AOT.

Groups: Group 1 aeroplanes are those that have an affected engine installed.
Group 2 aeroplanes are those that do not have an affected engine installed.

Reason:

Rolls-Royce manufactured a number of RB211 Trent 900 engines with salvage welds on the compressor intermediate case (CIC) lugs. During a stress analysis on the engine structure, it was discovered that, for those engines with salvage welds, the secondary load paths of both thrust link

and forward mount cannot ensure the capability of withstanding service loads for a full secondary load path activation inspection interval. Consequently, the current inspection intervals are inadequate to timely detect an engaged secondary load path.

This condition, if not detected and corrected, could lead to CIC lugs failure, possibly resulting in engine detachment in flight and consequent reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the AOT to provide inspections instructions.

For the reasons described above, this AD requires repetitive inspections of the front engine mount and strut mount of each affected engine at a reduced interval, and, depending on findings, removal from service of the engine.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For Group 1 aeroplanes: Before exceeding the threshold, and, thereafter, at intervals not to exceed the value as defined in Table 1, 2 or 3 of the AOT, as applicable to ESN, accomplish the applicable inspection(s) in accordance with the instructions of the AOT.

Where Tables 1, 2 and 3 of the AOT refer to a compliance time (first inspection) 'from date of publication of REF 3' (reference to Rolls-Royce Trent 900 Alert Non-Modification Service Bulletin (NMSB) RB.211-71-AK614), this AD requires the initial inspection within that compliance time after the effective date of this AD.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected on an affected engine, before next flight, remove that engine from service, contact Airbus for approved repair instructions and, before release to service of the affected engine, accomplish those instructions accordingly.

Terminating Action:

(3) None.

Engine Installation:

(4) For Group 2 aeroplanes: From the effective date of this AD, it is allowed to install an affected engine, provided that, following installation, the front engine mount and strut mount of that engine are inspected as required by this AD.

Ref. Publications:

Airbus AOT A71R017-20 original issue dated 10 December 2020.

Rolls-Royce Trent 900 Alert NMSB RB.211-71-AK614 original issue dated 07 December 2020.

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 16 December 2020 as PAD 20-200 for consultation until 30 December 2020. The Comment Response Document can be found in the EASA Safety Publications Tool, in the compressed (zipped) file attached to the record for this AD.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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. 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 SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.