



Airworthiness Directive

AD No.: 2017-0003

Issued: 09 January 2017

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:

ROLLS-ROYCE plc

Type/Model designation(s):

RB211 Trent 700 engines

Effective Date: 23 January 2017

TCDS Number(s): EASA.E.042

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Compressor Intermediate Case – Inspection / Repair

Manufacturer(s):

Rolls-Royce plc (RR)

Applicability:

RB211 Trent 768-60, 772-60, 772B-60 and 772C-60 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus A330 aeroplanes.

Reason:

It has been determined that certain compressor intermediate cases (CIC), repaired by RR Repair FRSC005, have a higher probability of cracking, due to increased residual stresses which were applied during the weld repair process.

This condition, if not detected and corrected, could lead to CIC failure, possibly resulting in damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, RR released Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AH976, providing inspection instructions. The NMSB was later revised to provide the correct module serial numbers.



For the reason described above, this AD requires a one-time fluorescent-penetrant inspection (FPI) of each affected CIC and, depending on findings, accomplishment of a repair.

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

Required as indicated, unless accomplished previously:

Note 1: Where in this AD, reference is made to an RR SB or NMSB with an 'A' (Alert) in the number, it should be recognised that an earlier or later revision may not have that 'A'. This kind of change does not effectively alter the publication references for the purpose of this AD.

Note 2: RR NMSB RB.211-72-AH976 Revision 1 is hereafter referred to as 'the NMSB' in this AD.

Note 3: For the purpose of this AD, the affected CICs are identified in Appendix 1 of the NMSB by listing the serial numbers of the affected intermediate modules on which those affected CICs are installed. Appendix 2 of the NMSB identifies the engines on which the affected modules were last known to be installed.

Inspection:

- (1) For each engine having an affected intermediate module (see Note 3 of this AD) installed, during the next qualified shop visit (see Note 4 of this AD), or within 6 000 engine flight cycles, whichever occurs first after the effective date of this AD, accomplish an FPI of the CIC in accordance with the instructions of the NMSB.

Note 4: For the purpose of this AD, a qualified shop visit is where the engine is undergoing a non-modular rework level of engine refurbishment.

Corrective action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, a CIC is found cracked, before release to service of the engine, accomplish RR Repair FRSC372 on that CIC, or replace it with a serviceable CIC.

Credit:

- (3) Inspection and corrective action(s) of an engine, accomplished before the effective date of this AD in accordance with the instructions of RR Alert NMSB RB.211-72-AH976 at original issue, is acceptable to comply with the requirements of paragraphs (1) and (2) of this AD.

Part(s) Installation:

- (4) From the effective date of this AD, it is allowed to install an affected intermediate module (see Note 3 of this AD) on an engine, provided that, prior to installation, the CIC has passed an FPI in accordance with the instructions of the NMSB.

Ref. Publications:

Rolls-Royce Alert NMSB RB.211-72-AH976 dated 03 November 2016, or Revision 1 dated 17 November 2016.

The use of later approved revisions of this 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 11 November 2016 as PAD 16-160 for consultation until 09 December 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact your designated Rolls-Royce representative, or download the publication from your Rolls Royce Care account at <https://customers.rolls-royce.com>.

If you do not have a designated representative or Rolls Royce Care account, please contact **Corporate Communications** at **Rolls-Royce plc**, P.O. Box 31, Derby, DE24 8BJ, United Kingdom Telephone +44 (0)1332 242424,

or send an email through http://www.rolls-royce.com/contact/civil_team.jsp identifying the correspondence as being related to **Airworthiness Directives**.

