



## Notification of a proposal to issue an Airworthiness Directive

**PAD No.: 16-160**

**Issued: 11 November 2016**

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

### Design Approval Holder's Name:

ROLLS-ROYCE plc

### Type/Model designation(s):

RB211 Trent 700 engines

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**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.



For the reason described above, this PAD proposes to require 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 Alert NMSB RB.211-72-AH976 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.

**Part(s) Installation:**

- (3) 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 28 October 2016.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 09 December 2016.



2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. For any question concerning the technical content of the requirements in this PAD, 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](http://www.rolls-royce.com/contact/civil_team.jsp) identifying the correspondence as being related to **Airworthiness Directives**.

