



Notification of a proposal to issue an Airworthiness Directive

PAD No.: 16-165

Issued: 01 December 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 500 engines

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

TCDS Number(s): EASA.E.60

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Low Pressure Compressor Case, A-Frame Hollow Locating Pins – Replacement

Manufacturer(s):

Rolls-Royce PLC (RR)

Applicability:

RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61 and 560A2-61 engines, serial numbers (ESN) as identified in Section 1.A. Effectivity of RR Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ451 dated 22 November 2016.

These engines are known to be installed on, but not limited to, Airbus A340-500 and A340-600 series aeroplanes.

Reason:

All low pressure compressor (LPC) case A-frame hollow locating pins, Part Number (P/N) FK32009, manufactured since 2012 have potentially been subjected to incorrect heat treatment. This may have reduced the integrity of the pin such that in a Fan Blade Off (FBO) event it is unable to withstand the applied loads.



This condition, if not corrected, could lead to loss of location of the A-frame following an FBO event, possibly resulting in engine separation, loss of thrust reverser unit, release of high-energy debris, or an uncontrolled fire.

To address this potential unsafe condition, RR identified the affected engines that have these A-frame hollow locating pins installed and published Alert NMSB RB.211-72-AJ451, providing instructions for replacement of these pins.

For the reason described above, this AD requires a one-time replacement of the A-frame hollow locating pins P/N FK32009 on the affected engines.

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 Mod, 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: The affected A-frame hollow locating pins, P/N FK32009, are hereafter referred to as 'the affected parts' in this AD.

Note 3: RR Alert NMSB RB.211-72-AJ451 is hereafter referred to as 'the NMSB' in this AD.

On-wing Replacement:

- (1) Within the compliance time specified in Section 1.D.(1) of the NMSB, as applicable to ESN, replace the affected parts with serviceable parts in accordance with the instructions of Section 3 of the NMSB.

Spare Engines:

- (2) For an engine that, on the effective date of this AD, is held as a serviceable spare engine, or is removed from the aeroplane after the effective date of this AD and then held as a serviceable spare engine, before (re)installation of that engine on an aeroplane, replace the affected parts with serviceable parts in accordance with the instructions of Section 3 of the NMSB.

In-shop Replacement:

- (3) Unless already accomplished as required by paragraph (1) of this AD, or as required by paragraph (2) of this AD, during the next qualified shop visit (see Note 4 of this AD) after the effective date of this AD, or, if on the effective date of this AD, an engine is in a qualified shop visit, before release to service, replace the affected parts with serviceable parts in accordance with the instructions of Section 3 of the NMSB.

Note 4: For the purpose of this AD, a qualified shop visit is defined as any shop visit for an engine subject to a Level 1 to Level 4 workscope, as defined by the Trent 500 Generic Engine Management Programme (EMP), on Rolls-Royce Care Customer website and includes 'hospital' shop visits.

Ref. Publications:

Rolls-Royce NMSB RB.211-72-AJ451 original issue dated 22 November 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 15 December 2016.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: 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 identifying the correspondence as being related to **Airworthiness Directives**.

