



Notification of a proposal to issue an Airworthiness Directive

PAD No.: 16-043

Issued: 18 March 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 800 engines

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

TCDs Number(s): EASA.E.047

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Upper Bifurcation Fairing Seal Face – Inspection

Manufacturer(s):

Rolls-Royce plc

Applicability:

RB211 Trent 895-17, 892-17, 892B-17, 884-17, 884B-17, 877-17 and 875-17 engines, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 777 aeroplanes.

Reason:

Inspection of in-service Rolls-Royce RB211 Trent 800 engines has identified cracking and/or material release from the upper bifurcation fairing. This fairing hardware mates to the aeroplane thrust reverser upper bifurcation forward fire seal. Both sets of hardware create the engine firewall to isolate the engine compartment fire zone, which is a firewall feature of the aeroplane type design. Damage (missing materials and holes/openings) to the upper bifurcation fairing creates a breach of the engine fire wall, which may decrease the effectiveness of the engine fire detection and suppression systems due to excess fan air entering the engine compartment fire zone. This could delay or prevent the fire detection and suppression system from functioning properly, and can result in an increased risk of prolonged burning, potentially allowing a fire to reach unprotected areas of the engine, strut and wing.



This condition, if not detected and corrected, could lead to an uncontrolled fire, possibly resulting in damage to, or loss of, the aeroplane.

To address this potential unsafe condition, Rolls-Royce intends to publish Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ165 to provide inspection instructions.

For the reasons described above, this PAD proposes to require repetitive inspections of the upper bifurcation fairing and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Note 1: Where, in this AD, reference is made to an Rolls-Royce 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.

- (1) Within 7 500 engine flight hours (EFH) since last inspection (see Note 2 of this AD) of the upper bifurcation fairing, or within 150 flight cycles after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 7 500 EFH, accomplish an on-wing or in-shop inspection of the upper bifurcation fairing in accordance with the instructions of Rolls-Royce NMSB RB.211-72-AJ165.

Note 2: Previous inspection of an upper bifurcation fairing may have been accomplished in-shop in accordance with the applicable Engine Manual, task 72-03-14, or on-wing in accordance with the applicable aeroplane maintenance documents, as identified in Rolls-Royce NMSB RB.211-72-AJ165.

- (2) If, during any inspection as required by paragraph (1) of this AD, any discrepancy is detected, within the applicable compliance time(s) specified in Rolls-Royce NMSB RB.211-72-AJ165, accomplish the applicable corrective action(s) in accordance with the instructions of Rolls-Royce NMSB RB.211-72-AJ165.
- (3) Accomplishment of corrective actions on an engine, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections required by paragraph (1) of this AD for that engine.

Ref. Publications:

Rolls-Royce Alert NMSB RB.211-72-AJ165 original issue [currently on ballot at Rolls-Royce Care website].

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 April 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**.

