



Airworthiness Directive

AD No.: 2017-0075

Issued: 02 May 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 900 engines

Effective Date: 16 May 2017

TCDS Number(s): EASA.E.012

Foreign AD: Not applicable

Supersedure: None

ATA 71 – Powerplant – Drains Mast – Inspection / Replacement

Manufacturer(s):

Rolls-Royce plc (RR)

Applicability:

RB211 Trent 970-84, 972-84 and 972E-84 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus A380 aeroplanes.

Reason:

RB211 Trent 900 engines have been found in service with cracks in the transition duct area of the drains mast, which is part of the fire wall in Zone 1. Cracks were found on both pre-Mod 72-H499 drains masts, Part Number (P/N) FW29847, and post-Mod 72-H499 drains masts, P/N KH31996.

This condition, if not detected and corrected, could, in combination with a fire in the surrounding area, lead to a breach of the fire wall, possibly resulting in an uncontrolled fire and consequent reduced control of the aeroplane.

To address this potential unsafe condition, RR published Alert Non-Modification Service Bulletin (NMSB) RB.211-71-AJ576 to provide inspection instructions for engines with drains mast P/N KH31996 and post-Mod 80-H632 vent ejector installed, which have been determined as more susceptible to cracking.



For the reasons described above, this AD requires a one-time inspection of drains mast P/N KH31996 and, depending on findings, accomplishment of applicable corrective action(s). P/N FW29847 drains masts are, at this time, not affected by this AD.

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: RR Alert NMSB RB.211-71-AJ576 is hereafter referred to as 'the NMSB' in this AD. Although the new model Trent 972E-84 is not mentioned in the NMSB, the instructions of the NMSB are acceptable to be used on those engines to comply with this AD.

Note 3: For the purpose of this AD, drains mast P/N KH31996 is hereafter referred to as 'affected part' in this AD.

Note 4: For the purpose of this AD, Group 1 engines are those that have an affected part (see Note 3 of this AD) and vent ejector Mod standard 80-H632 installed. Group 2 engines are those in a different configuration.

Inspection:

(1) For Group 1 engines (see Note 4 of this AD): Within 12 months after the effective date of this AD, or within 12 months after first operation of the engine, whichever occurs later, visually inspect the external areas of the affected part in accordance with the instructions of the NMSB.

Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any visual crack is detected, as defined in the SB, before next flight, seal the crack in accordance with the instructions of the NMSB.

(3) Within 100 engine flight cycles after the inspection as required by paragraph (1) of this AD, replace the affected part with a serviceable part in accordance with the instructions of the NMSB.

Part Installation:

(4) For Group 1 engines: From the effective date of this AD, it is allowed to install an affected part on an engine, provided the part is new, or has passed an inspection (see Note 5 of this AD) in accordance with the instructions of the NMSB.

Note 5: For the purpose of this AD, "passed an inspection" means no cracks or other defect were found during the inspection.



- (5) For Group 2 engines: From the effective date of this AD, it is allowed to install an affected part and a vent ejector Mod standard 80-H632 on an engine, provided the affected part has passed an inspection (see Note 5 of this AD) in accordance with the instructions of the NMSB.

Engine Installation:

- (6) From the effective date of this AD, it is allowed to install a Group 1 engine on an aeroplane, provided the affected part installed on that engine has passed an inspection (see Note 5 of this AD) in accordance with the instructions of the NMSB.

Ref. Publications:

Rolls-Royce plc NMSB RB.211-71-AJ576 original issue dated 17 March 2017.

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 24 March 2017 as PAD 17-040 for consultation until 21 April 2017. 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 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**.

