



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 18-087

Issued: 26 June 2018

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):

Trent 1000 engines

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

TCDS Number(s): EASA.E.036

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High Pressure Turbine Disc Front Cover Plate – Replacement [Life Limitation]

Manufacturer(s):

Rolls-Royce plc (RR)

Applicability:

Trent 1000-AE3, Trent 1000-CE3, Trent 1000-D3, Trent 1000-G3, Trent 1000-H3, Trent 1000-J3, Trent 1000-K3, Trent 1000-L3, Trent 1000-M3, Trent 1000-N3, Trent 1000-P3, Trent 1000-Q3 and Trent 1000-R3 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Boeing 787 aeroplanes.

Definitions:

For the purpose of this AD, the following definitions apply:

The NMSB: Rolls-Royce Alert Non-Modification Service Bulletin (NMSB) TRENT 1000 72-AK057.

Affected part: High Pressure (HP) turbine disc front cover plates, Part Number (P/N) KH59279.



Groups: Group 1 engines are those that have an affected part installed. Group 2 engines are those that do not have an affected part installed.

Reason:

Following a recent analysis of the material condition used in manufacture of these parts, it was established that the HP turbine disc front cover plate may have a safe life below its declared safe cyclic life (DSCL).

This condition, if not corrected, could lead to premature failure of an affected part, possibly resulting in damage to the engine and reduced control of the aeroplane.

To address this potential unsafe condition, RR published the NMSB to provide the new DSCL and replacement instructions.

For the reason described above, this AD requires implementation of the reduced DSCL and removal from service of those affected parts that have exceeded the reduced DSCL.

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

Required as indicated, unless accomplished previously:

Life Limit Implementation:

- (1) For Group 1 engines: From the effective date of this AD, before an affected part exceeds 865 flight cycles (FC) since its first installation on an engine, remove that affected part from service in accordance with the instructions of the NMSB.

Parts Installation:

- (2) For Group 1 and Group 2 engines: From the effective date of this AD, it is allowed to install an affected part on any engine, provided the part is new, or it is determined that the part has not exceeded 865 FC since its first installation on an engine, and that, following installation, the affected part is replaced as required by paragraph (1) of this AD.

Ref. Publications:

Rolls-Royce Alert NMSB TRENT 1000 72-AK057 original issue dated 10 April 2018.

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

Remarks:

1. This Proposed AD will be closed for consultation on 24 July 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).



4. 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**.

