



Airworthiness Directive Cancellation Note

AD No.: 2018-0164-CN

Issued: 10 August 2020

Note: This Airworthiness Directive (AD) Cancellation Notice (CN) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

Design Approval Holder's Name:

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

Type/Model designation(s):

Trent 1000 engines

Effective Date: 10 August 2020

TCDS Number(s): EASA.E.036

Foreign AD: Not applicable

Cancellation: This Notice cancels EASA AD 2018-0164R1 dated 14 March 2019, including its Correction dated 21 March 2019.

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

Manufacturer(s):

Rolls-Royce plc

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-CN, the following definitions apply:

The TLM Task: Rolls-Royce Trent 1000 Time Limits Manual (TLM) T-Trent-10RRT, task 05-10-01-800-801, dated 18 June 2020.

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



Reason:

Following analysis of the material condition used in manufacture of these parts, it was established that the HP turbine disc front cover plate might 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, Rolls-Royce published Alert Non-Modification Service Bulletin (NMSB) TRENT 1000 72-AK057 to provide the new DSCL and replacement instructions. Consequently, EASA issued AD 2018-0164 (later revised and corrected) to require implementation of the reduced DSCL and removal from service of those affected parts that had exceeded the reduced DSCL.

Since the Correction of EASA AD 2018-0164R1 was issued, further analysis has resulted in the approval of an extended life for the affected parts, actually restoring the life to the original value of 1 500 flight cycles, as it was before AD 2018-0164 was issued. RR has published the TLM Task for this extended limit and NMSB 72-AK057 has been cancelled accordingly. With these measures in place, the unsafe condition addressed by EASA AD 2018-0164 no longer exists and cannot develop on any engine.

Affected parts previously removed from service as required by EASA AD 2018-0164 (any version) would be considered eligible for return to service for the remaining life of the part, without further actions, except critical part inspections for which the instructions already exist in the TLM, if exposed at piece-part level.

For the reasons described above, this Notice cancels EASA AD 2018-0164R1, including its Correction.

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

None

Ref. Publications:

Rolls-Royce Trent 1000 TLM T-Trent-10RRT, Task 05-10-01-800-801.

Remarks:

1. This AD-CN was posted on 03 July 2020 as PAD 20-106-CN for consultation until 04 August 2020. No comments were received during the consultation period.
2. Enquiries regarding this AD-CN should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of this AD-CN, 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-us/civil-aerospace.aspx> identifying the correspondence as being related to **Airworthiness Directives**.

