

## Airworthiness Directive

**AD No.:** 2019-0058

**Issued:** 20 March 2019

Note: This Airworthiness Directive (AD) 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.

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 (EU) 2018/1139, Article 71 exemption].

**Design Approval Holder's Name:**

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

**Type/Model designation(s):**

Trent 1000 engines

**Effective Date:** 03 April 2019

**TCDS Number(s):** EASA.E.036

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 05 – Time Limits / Maintenance Checks – Time Limits Manual / Maintenance Programme – Amendment

**Manufacturer(s):**

Rolls-Royce plc

**Applicability:**

Trent 1000-A2, Trent 1000-AE2, Trent 1000-C2, Trent 1000-CE2, Trent 1000-D2, Trent 1000-E2, Trent 1000-G2, Trent 1000-H2, Trent 1000-J2, Trent 1000-K2 and Trent 1000-L2 engines, all serial numbers.

**Definitions:**

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

**The TLM:** Rolls-Royce Trent 1000 Time Limits Manual (TLM) T-Trent-10RRC, Revision dated 12 December 2018.

**The AMP:** The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated engine. For engines installed on aeroplanes registered in Europe, compliance with the approved AMP is required by Commission Regulation (EU) [1321/2014](#), Part M.A.301, paragraph 3.

**New and/or more restrictive tasks:** This includes all tasks that are new and all tasks for which a threshold or interval was reduced, which were introduced into the TLM (as defined in this AD) since the previous TLM Revision that is currently incorporated in the AMP.

**Reason:**

The airworthiness limitations and/or certification maintenance instructions for certain Trent 1000 engines (also known as 'Package C'), which are approved by EASA, are defined and published in TLM T-Trent-10RR. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Rolls-Royce recently revised the TLM, updating declared lives of certain critical parts and updating Direct Accumulation Counting (DAC) Data Files.

For the reason described above, this AD requires accomplishment of the actions specified in the TLM.

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

Required as indicated, unless accomplished previously:

**Maintenance Tasks and Replacement of Life Limited Parts:**

- (1) From the effective date of this AD, accomplish the following actions, as specified in the TLM, as applicable to engine model and depending on engine configuration:
  - (1.1) Replace each component before exceeding the applicable life limit, and
  - (1.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks.
  - (1.3) Ensure that DAC tables shown in the DAC life-usage calculator (LUC) tool match the applicable DAC Data Files as specified in the TLM.

**Corrective Action(s):**

- (2) In case of finding discrepancies (as defined in the TLM) during accomplishment of any task as required by paragraph (1) of this AD, within the compliance time specified in the TLM, accomplish the applicable corrective action(s) in accordance with approved Rolls-Royce maintenance documentation. If no compliance time is identified in the TLM, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified in the TLM, before next flight, contact Rolls-Royce for approved instructions and accomplish those instructions accordingly.

**AMP Revision:**

- (3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations, tasks and associated thresholds and intervals described in the TLM, as applicable to engine model and depending on engine configuration.



**Credit:**

- (4) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks and life limitations as specified in Rolls-Royce T-Trent-10RRC, Revision dated 01 March 2018 or earlier, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive tasks and limitations as specified in the TLM, as applicable to engine model and depending on engine configuration, within the compliance times as specified in the TLM to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive tasks and limitations as specified in the TLM, as applicable to engine model and depending on engine configuration, into the AMP to comply with paragraph (3) of this AD.

**Recording AD compliance:**

- (5) When the AMP of an aeroplane has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for the engine(s) installed on that aeroplane. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

**Ref. Publications:**

Rolls-Royce Trent 1000 TLM T-Trent-10RRC, Revision dated 12 December 2018.

The use of later approved revisions of the above-mentioned 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 08 February 2019 as PAD 19-020 for consultation until 08 March 2019. 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](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).



5. 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](http://www.rolls-royce.com/contact/civil_team.jsp) identifying the correspondence as being related to **Airworthiness Directives**.

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