

# Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 25-033

Issued: 11 February 2025

Note: This Proposed Airworthiness Directive (PAD) 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.

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: Type/Model designation(s):

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG RB211 Trent 500 engines

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

TCDS Number(s): EASA.E.060

Foreign AD: Not applicable

Supersedure: This AD supersedes UK CAA G-2003-0005 dated 25 November 2003, EASA AD

2008-0042 dated 27 February 2008 and EASA AD 2008-0098 dated 21 May 2008.

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

# Manufacturer(s):

Rolls-Royce plc

#### **Applicability:**

RB211 Trent 553-61, Trent 556-61, Trent 553A2-61, Trent 556A2-61 and Trent 560A2-61 engines.

These engines are known to be installed on, but not limited to, Airbus A340-500 and Airbus A340-600 aeroplanes.

### **Definitions:**

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

**The TLM**: The Rolls-Royce RB211 Trent 500 engines Time Limits Manual (TLM) T-TRENT-5RR Revision 52 dated 07 February 2025, module 05-10-01-800-801 (Critical and Critical Group A Parts Lives) and module 05-20-01-800-801 (Critical Group A Parts Mandatory Inspections).



**The AMP**: The Aircraft Maintenance Programme (AMP) contains the tasks on the basis of which the scheduled maintenance is conducted to ensure the continuing airworthiness of each operated aircraft. For RB211 Trent 500 engines installed on aircraft operated under EU regulations, the operator or the owner ensures compliance with the AMP as stipulated in Commission Regulation (EU) 1321/2014.

**New and/or more restrictive tasks and limitations**: This includes all tasks and limitations 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 the RB211 Trent 500 engines, which are approved by EASA, are currently defined and published in the RB211 Trent 500 engines TLM document(s). These instructions have been identified as mandatory for continued airworthiness.

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

Previously EASA grandfathered and adopted UK CAA G-2003-0005, later issued EASA AD 2008-0042 and EASA AD 2008-0098 addressing unsafe conditions originating from potential failure of various rotating engine parts addressed by those ADs.

Since those ADs were issued, Rolls-Royce issued the TLM, as defined in this AD, incorporating life limits and maintenance tasks for affected parts addressed by those ADs.

For the reason described above, this AD supersedes UK CAA G-2003-0005 and EASA AD 2008 0098 which became obsolete after transferring the limitations and tasks from them into the TLM. This AD also supersedes EASA AD 2008-0042 where the Intermediate Pressure Compressor (IPC) Drums addressed by that AD were removed from service and the life limit applicable to those IPC Drums cancelled from the TLM.

This AD requires accomplishment of the actions and limitations specified in the TLM.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

# 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 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.



# 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 the applicable 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 RB211 Trent 500 engine model and depending on RB211 Trent 500 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 the previous TLM revision, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an RB211 Trent 500 engine installed on 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 RB211 Trent 500 engine model and depending on RB211 Trent 500 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 RB211 Trent 500 engine model and depending on RB211 Trent 500 engine configuration, into the AMP to comply with paragraph (3) of this AD.

#### **Recording AD Compliance:**

(5) When the AMP of an aircraft has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the tasks and limitations as required by paragraphs (1) and (2) of this AD for that aircraft. 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 RB211 Trent 500 engines Time Limits Manual (TLM) T-TRENT-5RR Revision 52 dated 07 February 2025.

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 25 February 2025.
- Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 <a href="EU aviation safety reporting system">EU aviation safety reporting system</a>. This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
- 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 <a href="https://customers.rolls-royce.com">https://customers.rolls-royce.com</a>.

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,

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send an email through https://www.rolls-royce.com/contact-us/civil-aerospace.aspx identifying the correspondence as being related to **Airworthiness Directives**.

