



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-02-008	發布日期 Date issued	2024/02/16
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Trent 7000-72 and Trent 7000-72C engines, all serial numbers.		
主旨摘要 Subject	Time Limits / Maintenance Checks - Time Limits Manual / Maintenance Programme - Amendment		
民航局 CAA <input type="radio"/> 本國產品 Native product <input type="radio"/> 其他個案 Other	<div>設計國民航主管機構 Original Authority</div> <div><input type="radio"/> FAA <input type="radio"/> Germany LBA <input checked="" type="radio"/> EASA <input type="radio"/> CAA-NL <input type="radio"/> Brazil <input type="radio"/> UK CAA <input type="radio"/> Transport Canada Civil Aviation <input type="radio"/> Japan CAB <input type="radio"/> DGAC <input type="radio"/> CAA of Israel <input type="radio"/> Other_____</div>		
	設計國AD編號 Original AD number	2024-0041	
	<div>1. 直接採用原AD之內容? (Is the original AD directly adopted?) <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 否(No)_ a. 生效日期另訂為(Re-specify the effective date as) : b. 執行時限另訂為(Re-specify the compliance time or period as) :</div> <div>2. 使用人是否需要將AD執行結果向民航局提出報告? (Do users need to report the status of compliance to the CAA?) <input type="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No)</div>		
備註 Note	This AD supersedes EASA AD 2023-0192 (CAA-2023-11-002) dated 07 November 2023.		

註： 1. AD內容後附。

2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。

3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, adcaa@mail.caa.gov.tw

Note： 1. The AD text is enclosed.

2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.

3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, adcaa@mail.caa.gov.tw



Airworthiness Directive

AD No.: 2024-0041

Issued: 09 February 2024

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] 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 7000 engines

Effective Date: 23 February 2024

TCDS Number(s): EASA.E.036

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0192 dated 07 November 2023.

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

Manufacturer(s):

Rolls-Royce plc

Applicability:

Trent 7000-72 and Trent 7000-72C engines, all serial numbers.

Definitions:

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

The TLM: Rolls-Royce Trent 7000 Time Limits Manual (TLM) T-T7000-1RR, Chapters 05-10 and 05-20, Revision 20.

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 engine. For engines installed on aeroplanes 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: This includes all tasks and limitations that are new, or for which a threshold, life limit 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 certification maintenance instructions for the Trent 7000 engines, which are approved by EASA, are defined and published in TLM T-T7000-1RR. These instructions have been identified as mandatory for continued airworthiness.

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

Previously, EASA issued AD 2023-0192 to require accomplishment of the tasks and limitations specified in TLM T-T7000-1RR at Revision 18.

Since that AD was issued, Rolls-Royce issued Revision 19 of TLM T-T7000-1RR, Chapters 05-10 and 05-20, to change the reference for high pressure (HP) nozzle guide vanes inspection, and later issued the TLM, as defined in this AD, to change a maximum approved life for low pressure (LP) turbine stage 1 to 6 rotor disc, LP turbine shaft assembly and LP turbine rotating arm seal, and to add mandatory inspections for HP / intermediate pressure (IP) bearing support air tubes, IP8 front bearing housing buffer tubes, IP8 tail bearing housing transfer tubes and support air tubes.

For the reasons described above, this AD supersedes EASA AD 2023-0192 and requires accomplishment of the actions specified in the TLM.

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

Required as indicated by this AD, unless the actions required by this AD have been already accomplished:

Maintenance Tasks and Replacement of Critical 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.
 - (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 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 a previous revision of Rolls-Royce TLM T-T7000-1RR, 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, as defined in this AD, 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, as defined in this AD, 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 7000 TLM T-T7000-1RR, Revision 20 dated 10 December 2023.

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 11 January 2024 as PAD 24-003 for consultation until 08 February 2024. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: 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](#). This may include reporting on the same or similar components, other than



those covered by the design to which this AD 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.

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

