



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2025-5398; Project Identifier MCAI-2024-00370-E; Amendment  
39-23225; AD 2025-26-03]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Rolls-Royce Deutschland Ltd & Co KG (RRD) Model Trent 1000-A, Trent 1000-AE, Trent 1000-C, Trent 1000-CE, Trent 1000-D, Trent 1000-E, Trent 1000-G, and Trent 1000-H engines. This AD was prompted by a determination made by the manufacturer that a high-pressure compressor (HPC) mini-disc anti-rotation block could possibly release into the HPC assembly stage 5 and 6 discs and the cone rotor rear shaft (HPC rear drum) during an engine operation. This AD requires repetitive borescope inspections (BSIs) of the HPC rear drum cavity and cavities between each HPC rotor disc, and depending on the results of inspection, removal of the engine from service. This AD also allows an alternative method of complying with the repetitive BSIs if certain actions are accomplished. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](http://regulations.gov). Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

*AD Docket:* You may examine the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2025-5398; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

*Material Incorporated by Reference:*

- For European Union Aviation Safety Agency (EASA) material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: [easa.europa.eu](http://easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

• You may view this material at the FAA, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2025-5398.

**FOR FURTHER INFORMATION CONTACT:** Barbara Caufield, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments using a method listed under the ADDRESSES section. Include “Docket No. FAA-2025-5398; Project Identifier MCAI-2024-00370-E” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that

you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Barbara Caufield, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2024-0122, dated June 28, 2024 (EASA AD 2024-0122) (also referred to as the MCAI), to correct an unsafe condition on RRD Model Trent 1000-A, Trent 1000-AE, Trent 1000-C, Trent 1000-CE, Trent 1000-D, Trent 1000-E, Trent 1000-G and Trent 1000-H engines having Rolls-Royce Service Bulletin (SB) 72-G319 or SB 72-G893 embodied (known as Trent 1000 ‘Pack B’ engine models Trent 1000-A/01, Trent 1000-A/01A, Trent 1000-AE/01, Trent 1000-AE/01A, Trent 1000-C/01, Trent 1000-C/01A, Trent 1000-CE/01, Trent 1000-CE/01A, Trent 1000-D/01, Trent 1000-D/01A, Trent 1000-E/01, Trent 1000-E/01A, Trent 1000-G/01, Trent 1000-G/01A, Trent 1000-H/01, and Trent 1000-H/01A), except those having embodied Rolls-Royce modification 72-AK645 in production, or having embodied the applicable SB in service. The MCAI states that the manufacturer identified a possibility of release of an HPC mini-disc anti-rotation block into the HPC assembly stage 5 and 6 discs and at the HPC rear drum during an engine operation. The manufacturer issued service material that provides instructions for repetitive BSIs and, depending on the results of the inspections, removal of the engine from service. The MCAI also includes an alternative method of complying with the repetitive BSIs if operation using the Rolls-Royce engine health monitoring

(EHM) service is utilized and all corrective actions are accomplished within the guidelines of the Rolls-Royce EHM.

The unsafe condition, if not addressed, could result in failure of the HPC assembly stage 5 and 6 discs and the HPC rear drum, and consequent structural failure of the engines critical parts.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-5398.

### **Material Incorporated by Reference Under 1 CFR Part 51**

The FAA reviewed EASA AD 2024-0122, which specifies procedures for repetitive BSIs of the HPC rear drum cavity and cavities between each HPC rotor disc for any missing or loose parts, foreign objects, scoring, and impact damage and contacting Rolls-Royce for applicable repair instructions. EASA AD 2024-0122 also specifies an alternative method of complying with the repetitive BSIs if certain actions are accomplished.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

These products have been approved by the civil aviation authority (CAA) of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

## **AD Requirements**

This AD requires accomplishing the actions specified in EASA AD 2024-0122, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD. See “Differences Between this AD and the MCAI” for a discussion of the general differences included in this AD.

## **Differences Between this AD and the MCAI**

Where EASA AD 2024-0122 specifies to contact Rolls-Royce Deutschland Ltd & Co KG, instead this AD requires contacting the Manager, AIR-520 Continued Operational Safety Branch, FAA; or EASA; or the Rolls-Royce Deutschland Ltd & Co KG EASA Design Organization Approval (DOA).

## **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some CAA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, the FAA incorporates EASA AD 2024-0122 by reference in the FAA final rule. This AD, therefore, requires compliance with EASA AD 2024-0122 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Using common terms that are the same as the heading of a particular section in EASA AD 2024-0122 does not mean that operators need comply only with that section. For example, where the AD requirement refers to “all required actions and compliance times,” compliance with this AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in EASA AD 2024-0122. Material required by EASA AD 2024-0122 for compliance will be available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-5398 after this FAA final rule is published.

## **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

The FAA justifies waiving notice and comment prior to adoption of this rule because no domestic operators use this product. It is unlikely that the FAA will receive any adverse comments or useful information about this AD from any U.S. operator. Accordingly, notice and opportunity for prior public comment are unnecessary, pursuant to 5 U.S.C. 553(b). In addition, for the foregoing reason(s), the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

## **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

## **Costs of Compliance**

There are no costs of compliance with this AD because there are no engines with this type design on the U.S. Registry.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2025-26-03 Rolls-Royce Deutschland Ltd & Co KG:** Amendment 39-23225; Docket No. FAA-2025-5398; Project Identifier MCAI-2024-00370-E.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Rolls-Royce Deutschland Ltd & Co KG Model Trent 1000-A, Trent 1000-AE, Trent 1000-C, Trent 1000-CE, Trent 1000-D, Trent 1000-E, Trent 1000-G, and Trent 1000-H engines as identified in European Union Aviation Safety Agency (EASA) AD 2024-0122, dated June 28, 2024 (EASA AD 2024-0122).

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code 7200, Engine (Turbine/Turboprop).

#### **(e) Unsafe Condition**

This AD was prompted by a determination made by the manufacturer that a high-pressure compressor (HPC) mini-disc anti-rotation block could possibly release into the HPC assembly stage 5 and 6 discs and cone rotor rear shaft (HPC rear drum) during an engine operation. The FAA is issuing this AD to detect and correct any missing or loose parts and foreign objects in the engine. The unsafe condition, if not addressed, could lead to failure of the HPC assembly stage 5 and 6 discs and the HPC rear drum, and consequent structural failure of the engine's critical parts.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

Except as specified in paragraphs (h) and (i) of this AD, perform all required actions within the compliance times specified in, and in accordance with, EASA AD 2024-0122.

**(h) Exceptions to EASA AD 2024-0122**

(1) Where EASA AD 2024-0122 requires compliance from its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2024-0122 specifies to “contact Rolls-Royce Deutschland Ltd & Co KG,” this AD requires replacing that text with “contact the Manager, AIR-520 Continued Operational Safety Branch, FAA; or EASA; or the Rolls-Royce Deutschland Ltd & Co KG EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.”

(3) Where the material referenced in EASA AD 2024-0122 specifies “REJECT the engine”, this AD requires replacing that text with “remove the engine from service”.

(4) This AD does not adopt the “Remarks” paragraph of EASA AD 2024-0122.

**(i) No Reporting Requirement**

Although the service material referenced in EASA AD 2024-0122 specifies to submit certain information to the manufacturer, including capturing photos and videos, this AD does not include those requirements.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, AIR-520 Continued Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information

directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD and email to: [AMOC@faa.gov](mailto:AMOC@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Additional Information**

For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7146; email: [barbara.caufield@faa.gov](mailto:barbara.caufield@faa.gov).

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2024-0122, dated June 28, 2024.

(ii) [Reserved]

(3) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: [easa.europa.eu](http://easa.europa.eu). You may find this EASA AD on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

(4) You may view this material at the FAA, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA,

visit [www.archives.gov/federal-register/cfr/ibr-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email

[fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on January 5, 2026.

Peter A. White,  
Deputy Director, Integrated Certificate Management Division,  
Aircraft Certification Service.

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