



[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-0612; Project Identifier MCAI-2020-00674-E; Amendment 39-21152; AD 2020-13-07]

RIN 2120-AA64

**Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc) Turbofan Engines**

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

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

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Rolls-Royce Deutschland Ltd. & Co KG (RRD) Trent 1000-D2, Trent 1000-J2, and Trent 1000-K2 model turbofan engines with fuel pump, part number G5030FPU01, installed. This AD requires removal and replacement of the fuel pump with a part eligible for installation. This AD was prompted by the manufacturer's investigation into an unexpected reduction in fuel pump performance in certain high life fuel pumps. 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 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 <https://www.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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, 15827 Blankenfelde-Mahlow, Germany; phone: +49 (0) 33 708 6 0; email: <https://www.rolls-royce.com/contact-us.aspx>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0612.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0612; 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. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7236; fax: 781-238-7199; email: stephen.l.elwin@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2020-0124, dated May 29, 2020 (referred to after this as “the MCAI”), to address an unsafe condition for the specified products. The MCAI states:

An unexpected reduction in fuel pump performance has been seen during testing of high life units. Strip examination of these fuel pumps has identified that life related wear-out of the internal components is causing deterioration in pump efficiency. The effect of the loss of fuel pump efficiency is more pronounced on higher rated engines.

This condition, if not corrected, could lead to reduced engine thrust, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Rolls-Royce published the NMSB to provide instructions for replacement of the affected parts before exceeding reduced life limits.

For the reasons described above, this [EASA] AD requires removal from service of the affected parts.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0612.

### **Related Service Information**

The FAA reviewed Rolls-Royce plc (RR) Alert Non-Modification Service Bulletin (NMSB) Trent 1000 73-AK581, dated May 12, 2020. The Alert NMSB introduces a reduced life limit for fuel pumps installed on affected engines.

### **FAA's Determination**

This product has been approved by EASA and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI. The FAA is issuing this AD because it evaluated all the relevant information provided by EASA and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **AD Requirements**

This AD requires removal of the affected fuel pump and its replacement with a part eligible for installation.

### **Differences Between this AD and the Service Information**

RR Alert NMSB Trent 1000 73-AK581, dated May 12, 2020, recommends removal of D2-rated engine fuel pumps with more than 17,000 hours (or 5,200 cycles) by May 31, 2020, and more than 16,000 hours (or 4,900 cycles) by June 30, 2020, or within 3 engine flight cycles, whichever is later. Since this AD will become effective after the RRD recommended compliance date of June 30, 2020, this AD requires removal of D2-rated engine fuel pumps before exceeding 16,000 hours time in service or 4,900 engine cycles since new or since last overhaul. This AD also provides a 30-day grace period for compliance.

### **FAA's Justification and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C.) 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 seeking comment prior to the rulemaking. Similarly, Section 553(d) of the APA authorizes agencies to make rules effective in less than 30 days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule. An unexpected reduction in fuel pump performance was seen during testing of high life fuel pumps. The reduced fuel pump performance could lead to reduced engine thrust, resulting in reduced control of the airplane. These fuel pumps must be removed and replaced before exceeding the reduced life-limits or within 30 days after the effective date of this AD, whichever occurs later.

The FAA considers the removal of these fuel pumps from service to be an urgent safety issue. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the reasons stated above, 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.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2020-0612 and Project Identifier MCAI-2020-00674-E at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. 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 <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this final rule.

### **Confidential Business Information**

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 final rule 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 final rule, 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 final rule. Submissions containing CBI should be sent to Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **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 notice and comment, RFA analysis is not required.

## Costs of Compliance

The FAA estimates that this AD affects 11 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

### Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Remove and replace fuel pump	3 work-hours x \$85 per hour = \$255	\$393,552	\$393,807	\$4,331,877

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in our cost estimate.

### 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 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.

## **Adoption of 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 (AD):

**2020-13-07 Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc):** Amendment 39-21152; Docket No. FAA-2020-0612; Project Identifier MCAI-2020-00674-E.

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

This 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 all Rolls-Royce Deutschland Ltd. & Co KG (Type Certificate previously held by Rolls-Royce plc) Trent 1000-D2, Trent 1000-J2, and Trent 1000-K2 model turbofan engines with fuel pump, part number (P/N) G5030FPU01, installed.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7314, Engine Fuel Pump.

**(e) Unsafe Condition**

This AD was prompted by the manufacturer's investigation into an unexpected reduction in fuel pump performance in certain high life fuel pumps. Further troubleshooting of the fuel pump discovered life-related wear-out of the internal components, which causes deterioration in fuel pump efficiency. The FAA is issuing this AD to reduce the risk of reduced thrust during engine operation. The unsafe condition, if not addressed, could result in failure of the fuel pump, loss of thrust control, and loss of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

Remove fuel pump, P/N G5030FPU01, and replace it with a part eligible for installation within the compliance times specified in paragraph (g)(1) or (2) of this AD, whichever occurs later:

(1) Before exceeding 16,000 hours in service or 4,900 engines cycles in service since new, or since last overhaul; or

(2) Within 30 days after the effective date of this AD.

**(h) Definition**

For the purpose of this AD, a “part eligible for installation” is a fuel pump that has not exceeded the compliance times specified in paragraph (g)(1) of this AD.

**Note 1 to paragraph (h):** Additional information on a sub-population of parts that are eligible for installation can be found in Appendix 1 of Rolls-Royce plc Alert Non-Modification Service Bulletin Trent 1000 73-AK581, dated May 12, 2020.

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

(1) The Manager, ECO 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 certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. You may email your request to: ANE-AD-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.

**(j) Related Information**

(1) For more information about this AD, contact Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7236; fax: 781-238-7199; email: stephen.l.elwin@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2020-0124, dated May 29, 2020, for more information. You may examine the EASA AD in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2020-0612.

**(k) Material Incorporated by Reference**

None.

Issued on June 17, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-13448 Filed: 6/25/2020 8:45 am; Publication Date: 6/26/2020]