[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1399; Project Identifier MCAI-2022-01533-E; Amendment 39-22585; AD 2023-22-01]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2020-15-07 for certain Rolls-Royce Deutschland Ltd & Co KG (RRD) (type certificate previously held by Rolls-Royce plc) Model RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36, and RB211-524H-T-36 engines. AD 2020-15-07 required replacement of the low-pressure turbine (LPT) stage 1 disk with part number (P/N) UL37606, UL37607, UL37608, UL37722, or UL37790, installed. This AD was prompted by an updated analysis by the engine manufacturer, which indicates certain part-numbered and serial-numbered LPT stage 1 disks that have undergone rework could fail before the current published life limits. This AD retains the requirement to replace the LPT stage 1 disk and includes additional LPT stage 1 disks, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 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 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-1399; 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 address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

• For service information identified in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

• 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 (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2023-1399.

FOR FURTHER INFORMATION CONTACT: Sungmo Cho, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7241; email: Sungmo.D.Cho@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020-15-07, Amendment 39-21170 (85 FR 43682, July 20, 2020) (AD 2020-15-07). AD 2020-15-07 applied to RRD RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36, and RB211-524H-T-36 model turbofan engines with LPT stage 1 disks, P/N UL37606, UL37607, UL37608, UL37722, or UL37790, installed. AD 2020-15-07 required replacement of the LPT stage 1 disk before it reaches its new Declared Safe Cycle Limit (DSCL) or within 25 flight cycles after the effective date of the AD, whichever occurs later. The FAA issued AD 2020-15-07 to prevent failure of the LPT stage 1 disk.

The NPRM published in the *Federal Register* on July 12, 2023 (88 FR 44235). The NPRM was prompted by AD 2022-0237, dated December 2, 2022 (EASA AD 2022-0237) (also referred to as the MCAI), issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states that further investigation by the manufacturer identified additional part-numbered LPT stage 1 disks affected by the unsafe condition. As a result of this finding, RRD published revised service information, which includes the additional affected LPT stage 1 disk P/Ns.

You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2023-1399.

In the NPRM, the FAA proposed to include additional LPT stage 1 disks and require accomplishing the actions specified in the MCAI described previously, except for any differences identified as exceptions in the regulatory text of the NPRM. The FAA is issuing this AD to prevent failure of the LPT stage 1 disk, which if not addressed, could

result in uncontained release of high-energy debris from the engine, in-flight shutdown of the engine, damage to the engine, and damage to the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from the Air Line Pilots Association, International (ALPA) and The Boeing Company who supported the NPRM without change.

Conclusion

These products have been approved by the aviation authority 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, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed EASA AD 2022-0237, which specifies procedures for replacement of the LPT stage 1 disk and reducing the DSCL for LPT stage 1 disks.

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 ADDRESSES.

Costs of Compliance

The FAA estimates that this AD affects 18 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 LPT stage 1 disk	120 work-hours x $85 per hour = $10,200	$30,000	$40,200	$723,600

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

The FAA has determined that 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,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

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:

a. Removing Airworthiness Directive 2020-15-07, Amendment 39-21170 (85 FR 43682, July 20, 2020); and

b. Adding the following new airworthiness directive:

2023-22-01 Rolls-Royce Deutschland Ltd. & Co. KG: Amendment 39-22585; Docket No. FAA-2023-1399; Project Identifier MCAI-2022-01533-E.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2020-15-07, Amendment 39-21170 (85 FR 43682, July 20, 2020).

(c) Applicability

This AD applies to Rolls-Royce Deutschland Ltd & Co. KG (RRD) Model RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36, and RB211-524H-T-36 engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by an updated analysis by the engine manufacturer, which indicates certain part-numbered and serial-numbered low-pressure turbine (LPT) stage 1 disks that have undergone rework could fail before the current published life limits. The FAA is issuing this AD to prevent failure of the LPT stage 1 disk. The unsafe condition, if not addressed, could result in uncontained release of high-energy debris from the engine, in-flight shutdown of the engine, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

Except as specified in paragraph (h) of this AD: Perform all required actions within the compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0237, dated December 2, 2022 (EASA AD 2022-0237).

(h) Exceptions to EASA AD 2022-0237

(1) Where EASA AD 2022-0237 refers to its effective date, this AD requires using the effective date of this AD.

(2) This AD does not adopt the "Remarks" section of EASA AD 2022-0237.

(i) 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 certification office, send it to the attention of the person identified in paragraph (j) of this AD and email 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) Additional Information

For more information about this AD, contact Sungmo Cho, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7241; email: Sungmo.D.Cho@faa.gov.

(k) Material Incorporated by Reference

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

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

(i) European Union Aviation Safety Agency (EASA) AD 2022-0237, dated December 2, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0237, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find this EASA AD on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at 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 (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 or email

fr.inspection@nara.gov.

Issued on October 25, 2023.

Caitlin Locke, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-25517 Filed: 11/17/2023 8:45 am; Publication Date: 11/20/2023]