

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2011-0624; Directorate Identifier 2010-NE-11-AD; Amendment 39-17358; AD 2013-04-01]

RIN 2120-AA64

**Airworthiness Directives; Rolls-Royce plc Turbofan Engines**

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

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

**SUMMARY:** We are superseding an existing airworthiness directive (AD) for all Rolls-Royce plc (RR) RB211-524 series turbofan engines. That AD currently requires removal and repair of certain thrust reverser units (TRUs) prior to reinstallation. This AD requires the same actions for an expanded population of TRUs and extends the compliance time for repairing certain TRUs. This AD was prompted by additional engineering evaluation of TRUs, as a result of a translating cowl gearbox stubshaft failure and subsequent repair. We are issuing this AD to prevent failure of the attachment rivets, which may result in release of the TRU from the engine.

**DATES:** This AD is effective March 8, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 8, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain other publication as of August 12, 2011, (76 FR 40217, July 8, 2011).

We must receive any comments on this AD by April 8, 2013.

**ADDRESSES:** You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://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 AD, contact Rolls-Royce plc,

Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936, or email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:**

Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [Robert.Green@faa.gov](mailto:Robert.Green@faa.gov).

**SUPPLEMENTARY INFORMATION:****Discussion**

On June 8, 2011, we issued AD 2011-13-01, Amendment 39-16724 (76 FR 40217, July 8, 2011), for all RR plc RB211-524 series turbofan engines. That AD required removal and repair of certain TRUs prior to reinstallation. That AD resulted from an investigation into the loss of a TRU during landing. The investigation revealed that the incident was preceded by the detachment of the TRU's fixed structure front ring rivet lines on the rear flange. It was determined that the loss of rivet lines was directly associated with a previous translating cowl gearbox stubshaft fracture and the repair of the fixed structure to Engine Manual repair No. FRS5887. At the time, the repair instructed the replacement of the damaged section of the structure but did not require the rivets adjacent to the repair to be replaced. Subsequent analysis has shown that the rivets may have weakened as a result of the translating cowl gearbox stubshaft failure.

**Actions Since AD Was Issued**

Since we issued AD 2011-13-01, (76 FR 40217, July 8, 2011), engineering evaluation by RR has concluded that the compliance time for repairing TRUs that

had only Engine Manual repair No. FRS5887 incorporated as a result of a translating cowl gearbox stubshaft failure, can be extended. RR also concluded that TRUs previously repaired at the front ring with additional rivets using Engine Manual repair No. FRS5887 Part 2, and that have not had Engine Manual repair Nos. FRS4976 and FRS6669 applied to the rear ring at the No. 2 or No. 3 gearbox position, constitute a new population that must be removed and repaired during the next scheduled engine removal. The European Aviation Safety Agency (EASA) has notified us of this same unsafe condition, and corrective actions described in EASA AD 2012-0255, dated November 30, 2012.

**Relevant Service Information**

We reviewed RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-78-AG084, Revision 7, dated November 23, 2012. The NMSB describes procedures for removal, repair, and reinstallation of affected TRUs.

**FAA's Determination**

We are issuing this AD because we evaluated all the relevant information 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 and repair of TRUs that experienced a cowl gearbox stubshaft failure with subsequent repair of the fixed structure to Engine Manual repair No. FRS5887. This AD also requires removal and repair of TRUs previously repaired at the front ring with additional rivets using Engine Manual repair No. FRS5887 Part 2, and that have not had Engine Manual repair Nos. FRS4976 and FRS6669 applied to the rear ring at the No. 2 or No. 3 gearbox position.

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

The FAA has found that notice and comment prior to adoption of this rule is unnecessary because no engines are used on U.S. registered airplanes. Therefore, we find that good cause exists 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 we did not provide you with notice and an opportunity to provide your comments before it becomes effective. However, we invite you to send any

written data, views, or arguments about this AD. Send your comments to an address listed under the **ADDRESSES** section. Include the Docket No. FAA-2011-0624 and Directorate Identifier 2010-NE-11-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### Costs of Compliance

We estimate that this AD will not affect any engines installed on airplanes of U.S. registry. Therefore, we estimate the cost of this AD to U.S. operators to be \$0.

### 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.

We are 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,

(2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) 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.

### Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends part 39 of the Federal Aviation Regulations (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 removing airworthiness directive (AD) 2011-13-01, Amendment 39-16724 (76 FR 40217, July 8, 2011) and adding the following new AD:

**2013-04-01 Rolls-Royce plc:** Amendment 39-17358; Docket No. FAA-2011-0624; Directorate Identifier 2010-NE-11-AD.

#### (a) Effective Date

This AD is effective March 8, 2013.

#### (b) Affected ADs

This AD supersedes AD 2011-13-01, Amendment 39-16724 (76 FR 40217, July 8, 2011).

#### (c) Applicability

This AD applies to Rolls-Royce plc (RR) RB211-524D4-19, -524D4-B-19, -524D4-39, -524D4-B-39, -524D4X-19, -524D4X-B-19, -524H-36, -524H2-19, -524H-T-36, -524H2-T-19, -524G2-19, -524G3-19, -524G2-T-19, and -524G3-T-19 turbofan engines with thrust reverser units (TRUs) that have a part number (P/N) specified in paragraph 1.A. of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-78-AG084, Revision 7, dated November 23, 2012, installed.

#### (d) Unsafe Condition

This AD was prompted by additional engineering evaluation of TRUs, as a result of a translating cowl gearbox stubshaft failure and subsequent repair. We are issuing this AD to prevent failure of the attachment rivets, which may result in release of the TRU from the engine.

### (e) Compliance

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

(1) If no repairs were performed as a result of a stubshaft failure, no further action is necessary.

(2) If before December 14, 2009, the TRU has incorporated Engine Manual repair No. FRS5887 and incorporated either Engine Manual repair No. FRS4976 or No. FRS6669 as a result of a translating cowl gearbox stubshaft failure, then repair the TRU before further flight. Use the procedures in Section 3., Accomplishment Instructions, of RR Alert NMSB No. RB.211-78-AG084, Revision 5, dated February 4, 2011, to do the repair.

(3) If before December 14, 2009, the TRU has incorporated Engine Manual repair No. FRS4976, or No. FRS6669 as a result of a translating cowl gearbox stubshaft failure, and it is not known whether Engine Manual repair No. FRS5887 was incorporated concurrently, then repair the TRU within 200 engine flight cycles after the effective date of this AD. Use the procedures in Section 3., Accomplishment Instructions, of RR Alert NMSB No. RB.211-78-AG084, Revision 5, dated February 4, 2011, to do the repair.

(4) If before December 14, 2009, the TRU has incorporated only Engine Manual repair No. FRS5887 as a result of a translating cowl gearbox stubshaft failure, then repair the TRU within 1,150 engine flight cycles after the effective date of this AD. Use the procedures in Section 3., Accomplishment Instructions, of RR Alert NMSB No. RB.211-78-AG084, Revision 7, dated November 23, 2012, to do the repair.

(5) If the TRU has previously been repaired at the front ring with additional rivets using Engine Manual repair No. FRS5887 Part 2, and has not had Engine Manual repair Nos. FRS4976 and FRS6669 applied to the rear ring at the No. 2 or No. 3 gearbox position:

(i) Remove the TRU from the engine during the next scheduled engine removal after the effective date of this AD; and

(ii) Before returning the TRU to service, repair the TRU using the procedure in Section 3.A.(4), Accomplishment Instructions, of RR Alert NMSB No. RB.211-78-AG084, Revision 7, dated November 23, 2012.

### (f) Credit for Actions Accomplished in Accordance With Previous Service Information

(1) Actions performed before the effective date of this AD using RR Alert NMSB No. RB.211-78-AG084, Revision 4, dated December 22, 2009, or RR Alert NMSB No. RB.211-78-AG084, Revision 3, dated November 24, 2009, satisfy the requirements of paragraphs (e)(2) and (e)(3) of this AD.

(2) Actions performed before the effective date of this AD using RR Alert NMSB No. RB.211-78-AG084, Revision 6, dated November 16, 2012, or Revision 5, dated February 4, 2011, or Revision 4, dated December 22, 2009, or Revision 3, dated November 24, 2009, satisfy the requirements of paragraph (e)(4) of this AD.

(3) Actions performed before the effective date of this AD using RR Alert NMSB No. RB.211-78-AG084, Revision 6, dated

November 16, 2012, satisfy the requirements of paragraph (e)(5)(ii) of this AD.

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

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(h) Related Information**

(1) Refer to EASA Airworthiness Directive 2012-0255, dated November 30, 2012, for related information.

(2) Contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [Robert.Green@faa.gov](mailto:Robert.Green@faa.gov), for more information about this AD.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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) Rolls-Royce plc Alert Non-Modification Service Bulletin No. RB.211-78-AG084, Revision 7, dated November 23, 2012.

(ii) Reserved.

(3) The following service information was approved for IBR on August 12, 2011, (76 FR 40217, July 8, 2011).

(i) Rolls-Royce plc Alert Non-Modification Service Bulletin No. RB.211-78-AG084, Revision 5, dated February 4, 2011.

(ii) Reserved.

(4) For Rolls-Royce plc service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936, or email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp).

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(6) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202 741 6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on February 7, 2013.

**Robert J. Ganley,**

*Acting Manager, Engine & Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 2013-03708 Filed 2-20-13; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1274; Directorate Identifier 2012-CE-042-AD; Amendment 39-17359; AD 2013-04-02]**

**RIN 2120-AA64**

**Airworthiness Directives; Reims Aviation S.A. Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Reims Aviation S.A. Model F406 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as improper material used in nose landing gear (NLG) attachment brackets could lead to failure of the NLG bracket with consequent damage to the airplane while landing. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective March 28, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 28, 2013.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

For service information identified in this AD, contact Reims Aviation Industries, A rodrome de Reims Prunay, 51360 Prunay, France; telephone + 33 3 26 48 46 65; fax + 33 3 26 49 18 57; email: [stephan.lapagne@reims-aviation.fr](mailto:stephan.lapagne@reims-aviation.fr); Internet: [www.geciaviation.com/en/f406.html](http://www.geciaviation.com/en/f406.html).

You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

**FOR FURTHER INFORMATION CONTACT:** Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901

Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: [albert.mercado@faa.gov](mailto:albert.mercado@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the **Federal Register** on December 5, 2012 (77 FR 72252). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

During the manufacturing process, RAI found that some of the nose landing gear (NLG) attachment brackets, Part Number (P/N) 6013119-1, were made of aluminum alloy, instead of steel. The results of the investigations showed that some of these aluminum alloy brackets are likely to be installed on aeroplanes currently in service.

This condition, if not detected and corrected, could lead to failure of the NLG attachment bracket and jamming of the NLG extension/retraction mechanism, possibly resulting in a runway excursion and consequent damage to the aeroplane and injury to the occupants.

For the reasons described above, this AD requires inspection of the NLG attachment bracket P/N 6013119-1 and, depending on findings, replacement with a serviceable bracket made of steel.

In addition, as some aluminum alloy P/N 6013119-1 NLG attachment brackets may have been supplied as spares, this AD also requires determination that the part is made of steel, prior to installation.

**Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 72252, December 5, 2012) or on the determination of the cost to the public.

**Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 72252, December 5, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the (77 FR 72252, December 5, 2012).

**Costs of Compliance**

We estimate that this AD will affect 7 products of U.S. registry. We also estimate that it would take about .5 work-hour per product to comply with