

prior opportunities for comment described above.

### List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

### Citation

■ The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

### The Special Conditions

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Viking Air, Ltd., models DHC-6-100/-200/-300 Turbopropeller airplanes modified by Avmax Aviation Services, Ltd.

#### 1. Installation of Lithium Battery

The FAA adopts that the following special conditions be applied to lithium battery installations on the models DHC-6-100/-200/-300 Turbopropeller airplanes in lieu of the requirements § 23.1353(a)(b)(c)(d)(e), amendment 49.

Lithium battery installations on the models DHC-6-100/-200/-300 Turbopropeller airplanes must be designed and installed as follows:

(1) Safe cell temperatures and pressures must be maintained during—

- i. Normal operations;
- ii. Any probable failure conditions of charging or discharging or battery monitoring system; and
- iii. Any failure of the charging or battery monitoring system not shown to be extremely remote.

(2) The rechargeable lithium battery installation must be designed to preclude explosion or fire in the event of 1(1)(ii) and 1(1)(iii) failures.

(3) Design of the rechargeable lithium batteries must preclude the occurrence of self-sustaining, uncontrolled increases in temperature or pressure.

(4) No explosive or toxic gases emitted by any rechargeable lithium battery in normal operation or as the result of any failure of the battery charging system, monitoring system, or battery installation which is not shown to be extremely remote, may accumulate in hazardous quantities within the airplane.

(5) Installations of rechargeable lithium batteries must meet the requirements of § 23.863(a) through (d) at amendment 23-34.

(6) No corrosive fluids or gases that may escape from any rechargeable lithium battery may damage surrounding structure or any adjacent

systems, equipment, electrical wiring, or the airplane in such a way as to cause a major or more severe failure condition, in accordance with § 23.1309 at amendment 23-49 and applicable regulatory guidance.

(7) Each rechargeable lithium battery installation must have provisions to prevent any hazardous effect on structure or essential systems that may be caused by the maximum amount of heat the battery can generate during a short circuit of the battery or of its individual cells.

(8) Rechargeable lithium battery installations must have—

- i. A system to automatically control the charging rate of the battery to prevent battery overheating and overcharging; and either
- ii. A battery temperature sensing and over-temperature warning system with a means for automatically disconnecting the battery from its charging source in the event of an over-temperature condition; or
- iii. A battery failure sensing and warning system with a means for automatically disconnecting the battery from its charging source in the event of battery failure.

(9) Any rechargeable lithium battery installation, the function of which is required for safe operation of the aircraft, must incorporate a monitoring and warning feature that will provide an indication to the appropriate flight crewmembers whenever the state of charge of the batteries has fallen below levels considered acceptable for dispatch (see note 1) of the aircraft.

**Note 1:** Reference § 23.1353(h) for dispatch consideration.

(10) The Instructions for Continued Airworthiness (ICA) required by § 23.1529 must contain maintenance requirements (see note 2) to assure that the battery has been sufficiently charged (see note 3) at appropriate intervals specified by the battery manufacturer and the equipment manufacturer that contain the rechargeable lithium battery or rechargeable lithium battery system. The lithium rechargeable batteries and lithium rechargeable battery systems must not degrade below specified ampere-hour levels sufficient to power the aircraft system. The ICA must also contain procedures for the maintenance of replacement batteries (see note 4) to prevent the installation of batteries that have degraded charge retention ability or other damage due to prolonged storage at a low state of charge. Replacement batteries must be of the same manufacturer and part number as approved by the FAA.

**Note 2:** Maintenance requirements include procedures that—

(a) Check battery capacity, charge degradation at manufacturers recommended inspection intervals.

(b) Replace batteries at manufacturers recommended replacement schedule/time to prevent age related degradation.

**Note 3:** The term “sufficiently charged” means that the battery must retain enough charge, expressed in ampere-hours, to ensure that the battery cells will not be damaged.

A battery cell may be damaged by low charge (*i.e.*, below certain level), resulting in a reduction in the ability to charge and retain a full charge. This reduction would be greater than the reduction that may result from normal operational degradation.

**Note 4:** Replacement battery in spares storage may be subject to prolonged storage at a low state of charge.

Issued in Kansas City, Missouri on April 18, 2017.

**Mel Johnson,**

*Acting Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2017-08234 Filed 4-21-17; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2010-0755; Directorate Identifier 2010-NE-12-AD; Amendment 39-18860; AD 2017-08-11]

**RIN 2120-AA64**

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

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding airworthiness directive (AD) 2012-04-01 for all Rolls-Royce plc (RR) RB211-Trent 800 model turbofan engines. AD 2012-04-01 required removal from service of certain critical engine rotating parts based on reduced life limits. This AD makes additional revisions to the life limits of certain critical engine rotating parts. This AD was prompted by RR further revising the life limits of certain critical engine rotating parts. We are issuing this AD to correct the unsafe condition on these products.

**DATES:** This AD is effective May 30, 2017.

**ADDRESSES:** See the **FOR FURTHER INFORMATION CONTACT** section.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2010-0755; 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 mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is 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 FURTHER INFORMATION CONTACT:**

Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [robert.green@faa.gov](mailto:robert.green@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2012-04-01, Amendment 39-16956 (77 FR 10355, February 22, 2012), (“AD 2012-04-01”). AD 2012-04-01 applied to the specified products. The NPRM published in the **Federal Register** on January 18, 2017 (82 FR 5454). The NPRM proposed to continue to require removal from service of certain critical engine rotating parts based on reduced life limits.

**Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comments received. The Boeing Company and American Airlines support the NPRM as written.

**Conclusion**

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD as proposed.

**Costs of Compliance**

We estimate that this AD affects 16 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of critical engine rotating parts.	0 work-hours × \$85 per hour = \$0	\$45,000 (pro-rated cost of parts) ...	\$45,000	\$720,000

**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) 2012-04-01, Amendment 39-16956 (77

FR 10355, February 22, 2012) and adding the following AD:

**2017-08-11 Rolls-Royce plc:** Amendment 39-18860; Docket No. FAA-2010-0755; Directorate Identifier 2010-NE-12-AD.

**(a) Effective Date**

This AD is effective May 30, 2017.

**(b) Affected ADs**

This AD replaces AD 2012-04-01, Amendment 39-16956 (77 FR 10355, February 22, 2012).

**(c) Applicability**

This AD applies to all Rolls-Royce plc (RR) RR RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by RR revising the life limits of certain critical engine rotating parts. We are issuing this AD to prevent the failure of critical engine rotating parts, damage to the engine, and damage to the airplane.

**(f) Compliance**

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

(1) After the effective date of this AD, remove from service the parts listed in Table 1 to paragraph (f) of this AD before exceeding the new life limit indicated:

TABLE 1 TO PARAGRAPH (f)—REDUCED PART LIVES

Part nomenclature	Part No.	Life in standard duty cycles	Life in cycles using the HEAVY profile
Intermediate Pressure (IP) Compressor Rotor Shaft .....	FK24100	12,500	11,500
IP Compressor Rotor Shaft .....	FK24496	8,860	8,180
High-Pressure Compressor (HPC) Stage 1 to 4 Rotor Discs Shaft .....	FK24009	4,560	4,460
HPC Stage 1 to 4 Rotor Discs Shaft .....	FK26167	5,580	5,280
HPC Stage 1 to 4 Rotor Discs Shaft .....	FK32580	5,580	5,280
HPC Stage 1 to 4 Rotor Discs Shaft .....	FW11590	8,550	6,850
HPC Stage 1 to 4 Rotor Discs Shaft .....	FW61622	8,550	6,850
HPC Stage 5 and 6 Discs and Cone .....	FK25230	5,000	5,000
HPC Stage 5 and 6 Discs and Cone .....	FK27899	5,000	5,000
IP Turbine Rotor Disc .....	FK21117	11,610	10,400
IP Turbine Rotor Disc .....	FK33083	0	0

(2) Reserved.

**(g) Installation Prohibition**

After the effective date of this AD, do not install any IP turbine discs, P/N FK33083, into any engine.

**(h) 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. You may email your request to: [ANE-AD-AMOC@faa.gov](mailto:ANE-AD-AMOC@faa.gov).

**(i) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [robert.green@faa.gov](mailto:robert.green@faa.gov).

(2) Refer to MCAI European Aviation Safety Agency, AD 2016-0223, dated November 8, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2010-0755.

**(j) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on April 13, 2017.

**Robert J. Ganley,**

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

[FR Doc. 2017-07984 Filed 4-21-17; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-7269; Directorate Identifier 2015-NM-198-AD; Amendment 39-18862; AD 2017-08-13**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Airbus Model A300 series airplanes; Model A300 B4-600, B4-600R, and F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes); and Model A310 series airplanes. This AD was prompted by a report indicating that during inspections to detect corrosion of the bulk cargo doors, several cracks were discovered. This AD requires inspections of the bulk cargo door frame to identify any structural repairs and cracking, and corrective actions if necessary. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective May 30, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 30, 2017.

**ADDRESSES:** For service information identified in this final rule, contact Airbus SAS, Airworthiness Office—EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet: <http://www.airbus.com>.

[www.airbus.com](http://www.airbus.com). You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7269.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7269; 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 (telephone: 800-647-5527) is Docket 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 FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Model A300 series airplanes; Model A300 B4-600, B4-600R, and F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes); and Model A310 series airplanes. The NPRM published in the **Federal Register** on