

these replacement times, the following items must be considered:

(A) Damage identified in the threat assessment required by paragraph (d)(1)(iv) of this section;

(B) Maximum acceptable manufacturing defects and in-service damage (i.e., those that do not lower the residual strength below ultimate design loads and those that can be repaired to restore ultimate strength); and

(C) Ultimate load strength capability after applying repeated loads.

(ii) Inspection intervals for PSEs must be established to reveal any damage identified in the threat assessment required by paragraph (d)(1)(iv) of this section that may occur from fatigue or other in-service causes before such damage has grown to the extent that the component cannot sustain the required residual strength capability. In establishing these inspection intervals, the following items must be considered:

(A) The growth rate, including no-growth, of the damage under the repeated loads expected in-service determined by tests or analysis supported by tests;

(B) The required residual strength for the assumed damage established after considering the damage type, inspection interval, detectability of damage, and the techniques adopted for damage detection. The minimum required residual strength is limit load; and

(C) Whether the inspection will detect the damage growth before the minimum residual strength is reached and restored to ultimate load capability, or whether the component will require replacement.

(3) Each applicant must consider the effects of damage on stiffness, dynamic behavior, loads, and functional performance on all PSEs in establishing the allowable damage size and inspection interval.

(e) Fatigue Evaluation: If an applicant establishes that the damage tolerance evaluation described in paragraph (d) of this section is impractical within the limits of geometry, inspectability, or good design practice, the applicant must do a fatigue evaluation of the particular composite rotorcraft structure and:

(1) Identify all PSEs considered in the fatigue evaluation;

(2) Identify the types of damage for all PSEs considered in the fatigue evaluation;

(3) Establish supplemental procedures to minimize the risk of catastrophic failure associated with the damages identified in paragraph (e) of this section; and

(4) Include these supplemental procedures in the Airworthiness Limitations section of the Instructions

for Continued Airworthiness required by § 29.1529.

#### Appendix A to Part 29 [Amended]

6. Amend the second sentence of section A.29.4 of Appendix A to Part 29 by removing the phrase "approved under § 29.571" and adding the phrase "required for type certification" in its place.

Issued in Washington, DC, on December 18, 2009.

**K.C. Yanamura,**

*Acting Director, Aircraft Certification Service.*

[FR Doc. E9-31381 Filed 1-5-10; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2009-0674; Directorate Identifier 2009-NE-25-AD]

**RIN 2120-AA64**

#### Airworthiness Directives; Rolls-Royce plc RB211-Trent 500, 700, and 800 Series Turbofan Engines

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede an existing airworthiness directive (AD) for Rolls-Royce plc RB211-Trent 800 series turbofan engines. That AD currently requires replacing the fuel-to-oil heat exchanger (FOHE). This proposed AD would require replacing the FOHE on the RB211-Trent 500 and RB211-Trent 700 series turbofan engines in addition to the RB211-Trent 800 series turbofan engines. This proposed 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, and results from the risk of engine FOHE blockage. The MCAI describes the unsafe condition as:

In January 2008, a Boeing 777 powered by RB211-Trent 800 engines crashed short of the runway as a result of dual loss of engine response during the final stages of approach. The investigation of the incident has established that, under certain ambient conditions, ice can accumulate on the walls of the fuel pipes within the aircraft fuel system, which can then be released downstream when fuel flow demand is increased. This released ice can then collect on the FOHE front face and limit fuel flow through the FOHE. This type of icing event was previously unknown and creates ice concentrations into the fuel system beyond

those specified in the certification requirements.

In May 2009, an Engine Indicating and Crew Alerting System (EICAS) surge message was set following a successful go-around maneuver on a single RB211-Trent 700 engine of an A330 aircraft. Subsequent analysis concluded the likely cause to be temporary ice accumulation causing fuel flow restriction in the FOHE. The incident has indicated the potential susceptibility to ice blockage for Airbus aircraft in combination with Rolls-Royce engines that feature similar fuel systems to the RB211-Trent 800.

We are proposing this AD to prevent ice from blocking the FOHE, which could result in an unacceptable engine power loss and loss of control of the airplane.

**DATES:** We must receive comments on this proposed AD by February 5, 2010.

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

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- *Fax:* (202) 493-2251.

Contact Rolls-Royce plc, P.O. Box 31, DERBY, DE24 8BJ, UK; telephone 44 (0) 1332 242424; fax 44 (0) 1332 249936, for the service information identified in this proposed AD.

#### Examining the AD Docket

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

#### FOR FURTHER INFORMATION CONTACT:

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [james.lawrence@faa.gov](mailto:james.lawrence@faa.gov); telephone (781) 238-7176; fax (781) 238-7199.

#### SUPPLEMENTARY INFORMATION:

## Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2009-0674; Directorate Identifier 2009-NE-25-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on 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 with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, *etc.*). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78).

## Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD 2009-0142, dated July 13, 2009 to correct an unsafe condition on RB211-Trent 800 series turbofan engines. We issued AD 2009-24-05 (74 FR 62222, November 27, 2009) to correspond with that EASA AD. Since we issued that AD, EASA issued AD 2009-0257, dated December 3, 2009, to correct the same unsafe condition on RB211-Trent 500 and RB211-Trent 700 series turbofan engines. That EASA AD states:

In January 2008, a Boeing 777 powered by RB211-Trent 800 engines crashed short of the runway as a result of dual loss of engine response during the final stages of approach. The investigation of the incident has established that, under certain ambient conditions, ice can accumulate on the walls of the fuel pipes within the aircraft fuel system, which can then be released downstream when fuel flow demand is increased. This released ice can then collect on the FOHE front face and limit fuel flow through the FOHE. This type of icing event was previously unknown and creates ice concentrations into the fuel system beyond those specified in the certification requirements.

In May 2009, an EICAS surge message was set following a successful go-around maneuver on a single Trent 700 engine of an

A330 aircraft. Subsequent analysis concluded the likely cause to be temporary ice accumulation causing fuel flow restriction in the FOHE. The incident has indicated the potential susceptibility to ice blockage for Airbus aircraft in combination with Rolls-Royce engines that feature similar fuel systems to the RB211-Trent 800.

To mitigate the risk of engine FOHE blockage, this proposed AD would require, for RB211-Trent 500, 700, and 800 series turbofan engines, replacing the existing FOHE with a FOHE incorporating the modifications specified in the applicable Rolls-Royce plc Alert Service Bulletin.

You may obtain further information by examining the MCAI in the AD docket.

## Relevant Service Information

Rolls-Royce plc has issued Alert Service Bulletin (ASB) No. RB.211-79-AG346, dated October 23, 2009 for RB211-Trent 500 series turbofan engines, ASB No. RB.211-79-AG338, Revision 1, dated December 2, 2009 for RB211-Trent 700 series turbofan engines, and ASB No. RB.211-79-AG257, Revision 1, dated September 14, 2009 for RB211-Trent 800 series turbofan engines. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

## FAA's Determination and Requirements of This Proposed AD

These products have been approved by the aviation authority of the United Kingdom, and are approved for operation in the United States. Pursuant to our bilateral agreement with the United Kingdom, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA, and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require replacing the existing FOHE on RB211-Trent 500 and RB211-Trent 700 series turbofan engines within 6,000 flight hours after the effective date of this AD, or before January 1, 2011, whichever occurs first, and on RB211-Trent 800 series turbofan engines, replacing the existing FOHE within 6,000 flight hours after January 4, 2010 (the effective date of FAA AD 2009-24-05), or before January 1, 2011, whichever occurs first.

## Differences Between This AD and the MCAI or Service Information

The EASA AD 2009-0142, dated July 13, 2009, and EASA AD 2009-0257,

dated December 3, 2009, require replacing the FOHE within 6,000 flight hours from July 10, 2009 or before January 1, 2011, whichever occurs first. This proposed AD would require replacing the FOHE on RB211-Trent 500 and RB211-Trent 700 series turbofan engines within 6,000 flight hours after the effective date of this AD, or before January 1, 2011, whichever occurs first, and on RB211-Trent 800 series turbofan engines, replacing the FOHE within 6,000 flight hours after January 4, 2010 (the effective date of AD 2009-24-05), or before January 1, 2011, whichever occurs first.

## Costs of Compliance

Based on the service information, we estimate that this proposed AD will affect about 138 RB211-Trent 800 series engines, and about 10 RB211-Trent 700 series engines, installed on airplanes of U.S. registry. There are currently no RB211-Trent 500 series engines installed on airplanes of U.S. registry. We also estimate that it will take about 8.5 work-hours per product to comply with this AD. The average labor rate is \$80 per work-hour. Required parts will cost about \$58,005 per product. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$8,685,380.

## 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

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); 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.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

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

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

#### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 Amendment 39–16092 (74 FR 62222, November 27, 2009) and by adding the following new AD:

**Rolls-Royce plc:** Docket No. FAA–2009–0674; Directorate Identifier 2009–NE–25–AD.

#### Comments Due Date

- (a) We must receive comments by February 5, 2010.

#### Affected Airworthiness Directives (ADs)

- (b) This AD supersedes AD 2009–24–05, Amendment 39–16092.

#### Applicability

- (c) This AD applies to:

(1) Rolls-Royce plc models RB211–Trent 553–61, 556–61, 556B–61, 560–61, 553A2–61, 556A2–61, 556B2–61, and 560A2–61 turbofan engines with fuel-to-oil heat exchangers (FOHEs) part number (P/N) 55027001–1 or 55027001–11 installed; and

(2) Rolls-Royce plc models RB211–Trent 768–60, 772–60, 772B–60, and RB211–Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17 turbofan engines with FOHEs P/N 55003001–1 or 55003001–11 installed.

(3) The RB211–Trent 500 series engines are installed on, but not limited to, Airbus A340–500 and –600 series airplanes. The RB211–Trent 700 series engines are installed on, but

not limited to, Airbus A330–200 and –300 series airplanes. The RB211–Trent 800 series engines are installed on, but not limited to, Boeing 777 series airplanes.

#### Reason

(d) 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, and results from the risk of engine FOHE blockage. We are issuing this AD to prevent ice from blocking the FOHE, which could result in an unacceptable engine power loss and loss of control of the airplane.

#### Actions and Compliance

(e) For RB211–Trent 500 series turbofan engines and RB211–Trent 700 series turbofan engines, unless already done, within 6,000 flight hours after the effective date of this AD, or before January 1, 2011, whichever occurs first, do the following:

(1) For RB211–Trent 500 series turbofan engines, replace the FOHE P/N 55027001–1 or 55027001–11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc Alert Service Bulletin (ASB) No. RB.211–79–AG346, dated October 23, 2009.

(2) For RB211–Trent 700 series turbofan engines, replace the FOHE, P/N 55003001–1 or 55003001–11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211–79–AG338, Revision 1, dated December 2, 2009.

(f) For RB211–Trent 800 series turbofan engines, unless already done, replace the FOHE, P/N 55003001–1 or 55003001–11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211–79–AG257, Revision 1, dated September 14, 2009 within 6,000 flight hours from January 4, 2010 (the effective date of FAA AD 2009–24–05), or before January 1, 2011, whichever comes first.

#### FAA AD Differences

(g) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) by requiring replacing the FOHE within 6,000 flight hours after the effective date of this AD for RB211–Trent 500 and RB211–Trent 700 series turbofan engines or January 4, 2010 for RB211–Trent 800 series turbofan engines, rather than within 6,000 flight hours from July 10, 2009.

#### Previous Credit

(h) For RB211–Trent 700 series engines, replacement of the FOHE with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211–79–AG338, dated September 29, 2009, complies with the replacement requirement specified in paragraph (e)(2) of this AD.

(i) For RB211–Trent 800 series engines, replacement of the FOHE with an FOHE that incorporates the modifications specified in Rolls Royce plc ASB No. RB.211–79–AG257, dated June 24, 2009, complies with the replacement requirement specified in paragraph (f) of this AD.

#### Alternative Methods of Compliance (AMOCs)

(j) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

#### Related Information

(k) Refer to MCAI AD 2009–0142, dated July 13, 2009, MCAI AD 2009–0257, dated December 3, 2009, for related information. Contact Rolls-Royce plc, P.O. Box 31, DERBY, DE24 8BJ, UK; telephone 44 (0) 1332 242424; fax 44 (0) 1332 249936, for a copy of the service information referenced in this AD.

(l) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [james.lawrence@faa.gov](mailto:james.lawrence@faa.gov); telephone (781) 238–7176; fax (781) 238–7199, for more information about this AD.

Issued in Burlington, Massachusetts, on December 31, 2009.

**Peter A. White,**

*Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

[FR Doc. E9–31394 Filed 1–5–10; 8:45 am]

**BILLING CODE 4910–13–P**

#### DEPARTMENT OF HOMELAND SECURITY

#### Coast Guard

#### 33 CFR Part 147

[Docket No. USCG–2009–0955]

**RIN 1625–AA00**

#### Safety Zone; FRONTIER DISCOVERER, Outer Continental Shelf Drillship, Chukchi and Beaufort Sea, Alaska

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes a temporary safety zone around the DRILLSHIP *FRONTIER DISCOVERER*, while anchored on location in order to drill exploratory wells at various prospects located in the Chukchi and Beaufort Sea Outer Continental Shelf, Alaska, from 12:01 a.m. on July 1, 2010 through 11:59 p.m. on October 31, 2010. The purpose of the temporary safety zone is to protect the DRILLSHIP from vessels operating outside normal shipping channels and fairways. Placing a temporary safety zone around the DRILLSHIP will significantly reduce the threat of allisions, oil spills, and releases of natural gas, and thereby protect the safety of life, property, and the environment.

**DATES:** Comments and related material must be received by the Coast Guard on or before February 5, 2010.