

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2009-0811; Directorate Identifier 2008-NE-41-AD]

RIN 2120-AA64

#### Airworthiness Directives; Rolls-Royce Corporation (RRC) AE 3007A Series Turbofan Engines

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

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

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for RRC AE 3007A series turbofan engines. This proposed AD would require removing or performing initial and repetitive eddy current inspections (ECIs) or surface wave ultrasonic testing (SWUT) inspections on high-pressure turbine (HPT) stage 2 wheels for cracks. This proposed AD also reduces the approved life limits of certain HPT stage 2 wheels. This proposed AD results from reports of cracked HPT stage 2 wheels. We are proposing this AD to prevent uncontained failure of the HPT stage 2 wheel and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by March 22, 2010.

**ADDRESSES:** Use one of the following addresses to comment on this proposed AD.

- *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.

You can get the service information identified in this proposed AD from Rolls-Royce Corporation, P.O. Box 420, Speed Code U15, Indianapolis, IN 46206-0420, e-mail: [indy.pubs.services@rolls-royce.com](mailto:indy.pubs.services@rolls-royce.com).

**FOR FURTHER INFORMATION CONTACT:** Kyri Zaroyiannis, Aerospace Engineer, Chicago Aircraft Certification Office, Small Airplane Directorate, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; e-mail: [kyri.zaroyiannis@faa.gov](mailto:kyri.zaroyiannis@faa.gov); telephone (847) 294-7836; fax (847) 294-7834.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send us any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2009-0811; Directorate Identifier 2008-NE-41-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light 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 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).

##### 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.

##### Discussion

On September 8, 2008, we issued emergency AD 2008-19-51 that applied to RRC AE 3007A series turbofan engines. That AD required performing initial and repetitive eddy current inspections (ECIs) on HPT stage 2 wheels that have accumulated 6,500 or more cycles-since-new (CSN). That AD resulted from reports of HPT stage 2 wheels that had cracks in the bores of the wheels. This condition, if not corrected, could result in a possible uncontained failure of the HPT stage 2 wheel, which could cause damage to the airplane.

##### Actions Since AD 2008-19-51 Was Issued

After we issued emergency AD 2008-19-51, we determined that the cracks in the HPT stage 2 wheel bores are caused by a thermally-induced high stress in the disk bore, which was not identified at the time of the original certification. We performed a new risk assessment for cracking in the bore of the HPT stage 2 wheel using the FAA methodology guidelines in FAA Advisory Circular 39-8 and the results of the inspections from AD 2008-19-51. The risk assessment takes into account physical characteristics about the cracks that were not available when we issued AD 2008-19-51. The new risk assessment, in combination with a sufficient number of early inspections, showed that the risk profile was not rapidly increasing, which was a concern when we issued AD 2008-19-51. Using this new information, we determined we could change the compliance requirements for the ECI while still maintaining a level of safety consistent with the intent of the original AD 2008-19-51. We changed the new compliance schedule to an interval of 150 cycles-in-service (CIS) between wheel populations. The intervals for the wheel populations were based on CSN, and they varied because of the distribution of the affected wheels throughout the fleet at that time. A distribution based on CSN resulted in a compliance schedule that inspected the fleet from the highest time, highest risk

wheels to the lowest time, lowest risk wheels. It allowed us to control the overall risk consistent with the intent of AD 2008–19–51.

We also determined that a requirement to perform the ECI by a certain CIS is by itself sufficient to maintain the level of safety consistent with the intent of the original AD 2008–19–51. Because of that determination, we no longer prohibit installing any engine that had an HPT stage 2 wheel with more than 6,500 CSN unless the wheel was inspected. Instead, we modified that requirement to apply only to HPT stage 2 wheels removed from service as a result of complying with AD 2008–26–06 or emergency AD 2008–19–51.

Finally, we specified the part numbers (P/Ns) for the affected HPT stage 2 wheels to ensure proper identification.

On December 12, 2008, we issued AD 2008–26–06 as an immediately adopted rule to mandate a short-term program (90 days) to ensure the continued airworthiness of the product. That AD published in the **Federal Register** on December 24, 2008 (73 FR 78927).

#### **Actions Since AD 2008–26–06 Was Issued**

A few months after we issued AD 2008–26–06 we received reports of additional cracks in the HPT stage 2 wheels. A revised risk assessment that included these additional reports indicated that we needed to require a higher inspection rate. For this reason, we issued Emergency AD 2009–08–51 on April 10, 2009. That AD also provides instructions for an optional SWUT inspection. We then published a final rule; request for comments (74 FR 22091, May 12, 2009) to make the emergency actions applicable to all persons.

We are now proceeding through the normal rule making process to ensure full public comment on our proposed actions. In this proposed AD, we are still requiring the same removal from service or ECI or SWUT inspections, but we are expanding the scope of the compliance schedule to more engines by including wheels with lower CSN. We are also including a requirement for repetitive inspections. In addition, we have identified by serial number a group of HPT stage 2 wheels that were repaired while in-service; because of this repair those wheels can only be inspected by the ECI method. We have also determined that the engine cycle life limit (ECLL) of the HPT stage 2 wheels, P/N 23075345 and 23084520, covered by this proposed AD should be reduced to 23,000 CSN and that the

ECLL of all other part number HPT stage 2 wheels covered by this proposed AD should be reduced to 20,000 CSN on the effective date of this AD.

The occurrence of cracked HPT stage 2 wheels has been shown by statistical analysis of field data to have a causal link to a manufacturing process that led to incomplete shot peening on the drive arm fillets (shaft inner diameter fillet) of the wheel. Improvements to the fixed manufacturing process have addressed this incomplete peening condition. Therefore, HPT stage 2 wheels that have been determined to have been fully shot peened in the drive arm fillet are excluded from the inspection requirements of this proposed AD.

#### **Relevant Service Information**

We have reviewed and approved the technical contents of:

- RRC Alert Service Bulletin AE 3007A–A–72–367, Revision 2, dated June 22, 2009, that describes procedures for ECI of the HPT stage 2 wheel on AE 3007A series engines.
- RRC Service Bulletin AE 3007A–72–368, Revision 2, dated April 28, 2009, that describes the procedures for SWUT inspection of the HPT stage 2 wheel on AE 3007A series turbofan engines.
- RRC Service Bulletin AE 3007A–72–369, Revision 2, dated November 5, 2009, that describes the procedures for SWUT inspection of the HPT stage 2 wheel on AE 3007A series turbofan engines.

#### **FAA's Determination and Requirements of the Proposed AD**

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. We are proposing this AD, which would require:

- Removing from service any engine with certain P/N HPT stage 2 wheels that have a CSN specified in Table 1 of this AD by the compliance time specified in Table 1 of this AD; or
- Performing an ECI or SWUT inspection on certain P/N HPT stage 2 wheels that have a CSN specified in Table 1 of this AD by the compliance time specified in Table 1 of this AD; and
- Performing repetitive ECI or SWUT inspections of the HPT stage 2 wheels within 3,000 cycles-since-last inspection.

You must use the service information described previously to perform the actions required by this AD.

#### **Interim Action**

These actions are interim actions and we may take further rulemaking actions in the future.

#### **Costs of Compliance**

We estimate that this proposed AD would affect 1402 engines installed on airplanes of U.S. registry. We also estimate that it would take about 2 work-hours per engine to perform both the proposed ECI and proposed SWUT. The average labor rate is \$85 per work-hour. No parts are required for the inspection. We estimate the prorated life lost per stage 2 wheel is about \$13,177. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$18,712,494. This estimate is exclusive of any warranty coverage.

#### **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 have 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 that the proposed AD:

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. Would 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. You may get a copy of this summary at the address listed under **ADDRESSES**.

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

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

#### The Proposed Amendment

Under the authority delegated to me by the Administrator, the Federal Aviation Administration 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 adding the following new airworthiness directive:

**Rolls-Royce Corporation (Formerly Allison Engine Company):** Docket No. FAA-2009-0811; Directorate Identifier 2008-NE-41-AD.

##### Comments Due Date

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by March 22, 2010.

##### Affected ADs

(b) This AD supersedes AD 2009-08-51.

##### Applicability

(c) This AD applies to Rolls-Royce Corporation (RRC) AE 3007A series turbofan engines with high-pressure turbine (HPT) stage 2 wheels, part numbers (P/Ns) 23069438, 23069592, 23074462, 23074644, 23075345, or 23084520 installed. These engines are installed on, but not limited to, Empresa Brasileira de Aeronautica S. A. (EMBRAER) EMB-135 and EMB-145 airplanes.

##### Unsafe Condition

(d) This AD results from reports of cracked HPT stage 2 wheels. We are issuing this AD to prevent uncontained failure of the HPT stage 2 wheel and damage to the airplane.

##### Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

##### HPT Stage 2 Wheels Exempted From the Inspection Requirements of This AD

(f) The following engines are exempt from the inspection requirements of this AD:

(1) All engines with an HPT stage 2 wheel, P/N 23084520.

(2) All engines with an HPT stage 2 wheel, P/N 23075345, that has a serial number (S/N) specified in Table 1 of this AD, and

(3) All engines with an HPT stage 2 wheel, P/N 23074462, that has a S/N specified in Table 2 of this AD.

**TABLE 1—HPT STAGE 2 WHEEL, P/N 23075345 BY S/N EXCLUDED FROM INSPECTION REQUIREMENTS (G) THROUGH (I) OF THIS AD**

MM507646	MM508211	MM508319
MM508144	MM508221	MM508320
MM508153	MM508241	MM508322
MM508176	MM508248	MM508337
MM508186	MM508251	MM508338
MM508188	MM508264	MM508382
MM508205	MM508305	MM508387
MM508208	MM508311	

**TABLE 2—HPT STAGE 2 WHEEL, P/N 23074462 BY S/N EXCLUDED FROM INSPECTION REQUIREMENTS (G) THROUGH (I) OF THIS AD**

MM504890	MM505025	MM505054
MM504963	MM505034	MM505055
MM504990	MM505041	MM505056
MM504995	MM505045	MM505061
MM505007	MM505046	All "MM" prefix S/Ns higher than MM505061.
MM505017	MM505048	All S/Ns with "MW" prefix.

##### Initial Eddy Current Inspection (ECI) or Surface Wave Ultrasonic Testing (SWUT) Inspection

(g) For engines with an HPT stage 2 wheel, P/Ns 23069438, 23069592, 23074462, 23074644, or 23075345, remove the engine from service or perform an initial inspection of the wheel by the cycle limit specified in Table 3 of this AD. Use one of the following methods for the inspection:

(1) For HPT stage 2 wheels that have S/Ns listed in Table 4 of this AD, use paragraphs 2.A. through 2.C.(4) of RRC Alert Service Bulletin (ASB) AE 3007A-A-72-367, Revision 2 dated June 22, 2009, to inspect the wheel.

(2) For HPT stage 2 wheels that have S/Ns not listed in Table 4 of this AD, use paragraphs 2.A. through 2.C.(4) of RRC ASB AE 3007A-A-72-367, Revision 2, dated June 22, 2009, or use paragraphs 2.A. through 2.N. of RRC Service Bulletin (SB) AE 3007A-72-368, Revision 2, dated April 28, 2009; or use 2.A. through 2.V.(4) of RRC SB AE 3007A-72-369, Revision 2, dated November 5, 2009, to perform the inspections.

**TABLE 3—COMPLIANCE TIMES FOR ENGINE REMOVAL OR ECI OR SWUT INSPECTION OF THE HPT STAGE 2 WHEELS BY CYCLES-SINCE-NEW (CSN)**

For HPT stage 2 wheels with the following CSN on the effective date of this AD:	Remove engine from service or inspect wheel within the following cycles-in-service (CIS) after the effective date of this AD:
(3) 17,500 or more CSN.	Remove engine from service or inspect before next flight.
(4) 10,000 to 17,499 CSN.	15 CIS.
(5) 9,999 or fewer CSN.	Before accumulating 10,015 CSN.

**TABLE 4—S/Ns OF HPT STAGE 2 WHEELS TO BE INSPECTED BY SB AE 3007A-72-367 (ECI METHOD ONLY)**

##### HPT Stage 2 Wheels Requiring ECI Method Only

MM119400	MM183796
MM119480	MM183808
MM119508	MM183831
MM155847	MM228730
MM155907	MM228951
MM155908	MM503748
MM183236	MM504004
MM183362	MM57188
MM183754	MM57440
MM183762	MM57480

##### Installation Prohibition

(h) After the effective date of this AD, don't return to service, any HPT stage 2 wheel that was installed in any RRC AE 3007A series engine that has been removed as a result of the inspection requirements of this AD, unless the HPT stage 2 wheel was inspected as specified in RRC ASB AE 3007A-A-72-367, Revision 2, dated June 22, 2009; or RRC SB AE 3007A-72-368, Revision 2, dated April 28, 2009; or RRC SB AE 3007A-72-369, Revision 2, dated November 5, 2009.

##### Repetitive Inspection

(i) Thereafter, within 3,000 cycles-since-last inspection, remove the engine from service until an ECI or SWUT inspection is performed on the HPT stage 2 wheel. Use paragraphs 2.A. through 2.C.(4) of RRC ASB AE 3007A-A-72-367, Revision 2, dated June 22, 2009, or use paragraphs 2.A. through 2.N. of RRC SB AE 3007A-72-368, Revision 2, dated April 28, 2009; or use 2.A. through 2.V.(4) of RRC SB AE 3007A-72-369, Revision 2, dated November 5, 2009, to inspect the wheel.

##### New, Reduced Engine Cycle Life Limit and Removal From Service

(j) For HPT stage 2 wheels, P/N 23084520, do the following:

(1) For wheels that have 22,985 CSN or more on the effective date of this AD, remove

the wheel from service within 15 CIS after the effective date of this AD.

(2) Thereafter, remove HPT stage 2 wheels, P/N 23084520, before exceeding the new, reduced engine cycle life limit (ECLL) of 23,000 CSN.

(k) For HPT stage 2 wheels, P/N 23075345 and 23074644, do the following:

(1) For wheels that have 19,985 CSN or more on the effective date of this AD, remove

the wheel from service within 15 CIS after the effective date of this AD unless paragraph (k)(3) of this AD applies.

(2) Thereafter, remove HPT stage 2 wheels, P/N 23075345 and 23074644, before exceeding the new, reduced ECLL of 20,000 CSN.

(3) For HPT stage 2 wheels, P/N 23075345, that have a S/N listed in Table 5 of this AD and that have 22,985 CSN or more on the

effective date of this AD, remove the wheel from service within 15 CIS after the effective date of this AD.

(4) Thereafter, for HPT stage 2 wheels, P/N 23075345, that have a S/N listed in Table 5 of this AD, remove the wheel from service before exceeding the new, reduced ECLL of 23,000 CSN.

TABLE 5—S/Ns OF HPT STAGE 2 WHEEL, P/N 23075345, ELIGIBLE TO REMAIN IN SERVICE UNTIL 23,000 CSN

MM507646	MM508205	MM508251	MM508322
MM508144	MM508208	MM508264	MM508337
MM508153	MM508211	MM508305	MM508338
MM508176	MM508221	MM508311	MM508382
MM508186	MM508241	MM508319	MM508387
MM508188	MM508248	MM508320	

(l) For wheels, P/N 23069438, in engines that have not complied with RRC SB AE 3007A-72-176, Revision 5, dated September 2, 2008, or SB AE 3007A-72-215, Revision 2, dated September 28, 2009, remove the wheel before exceeding the new, reduced ECLL of 10,000 CSN.

(m) For wheels, P/N 23069438, in engines that have complied with RRC SB AE 3007A-72-176, Revision 5, dated September 2, 2008 or SB AE 3007A-72-215, Revision 2, dated September 28, 2009, do the following:

(1) For wheels that have 19,985 CSN or more on the effective date of this AD, remove the wheel from service within 15 CIS after the effective date of this AD.

(2) Thereafter, remove the wheel from service before exceeding the new, reduced ECLL of 20,000 CSN.

#### Alternative Methods of Compliance

(n) The Manager, Chicago Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

#### Special Flight Permits

(o) Under 14 CFR 39.23, we are limiting the special flight permits for this AD by restricting the flight to essential flight crew only.

#### Related Information

(p) Contact Kyri Zaroyiannis, Aerospace Engineer, Chicago Aircraft Certification Office, Small Airplane Directorate, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; e-mail: [kyri.zaroyiannis@faa.gov](mailto:kyri.zaroyiannis@faa.gov); telephone (847) 294-7836; fax (847) 294-7834, for more information about this AD.

Issued in Burlington, Massachusetts, on February 11, 2010.

#### Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2010-3145 Filed 2-17-10; 8:45 am]

BILLING CODE 4910-13-P

## EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

### 29 CFR Part 1625

#### RIN 3046-AA87

#### Definition of "Reasonable Factors Other Than Age" Under the Age Discrimination in Employment Act

**AGENCY:** Equal Employment Opportunity Commission

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Equal Employment Opportunity Commission ("EEOC" or "Commission") is issuing this notice of proposed rulemaking ("NPRM") to address the meaning of "reasonable factors other than age" (RFOA) under the Age Discrimination in Employment Act ("ADEA").

**DATES:** Comments must be received on or before April 19, 2010. The Commission will consider any comments received on or before the closing date and thereafter adopt final regulations. Comments received after the closing date will be considered to the extent practicable.

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

- By mail to Stephen Llewellyn, Executive Officer, Executive Secretariat, Equal Employment Opportunity Commission, U.S. Equal Employment Opportunity Commission, 131 "M" Street, NE., Washington, DC 20507.

- By facsimile ("FAX") machine to (202) 663-4114. (There is no toll free FAX number). Only comments of six or fewer pages will be accepted via FAX transmittal, in order to assure access to the equipment. Receipt of FAX transmittals will not be acknowledged, except that the sender may request confirmation of receipt by calling the Executive Secretariat staff at (202) 663-

4070 (voice) or (202) 663-4074 (TTY). (These are not toll free numbers).

- By the Federal eRulemaking Portal: <http://www.regulations.gov>. After accessing this Web site, follow its instructions for submitting comments.

*Instructions:* All comment submissions must include the agency name and docket number or the Regulatory Information Number (RIN) for this rulemaking. Comments need be submitted in only one of the above-listed formats, not all three. All comments received will be posted without change to <http://www.regulations.gov>, including any personal information you provide. Copies of the received comments also will be available for inspection in the EEOC Library, FOIA Reading Room, by advanced appointment only, from 9 a.m. to 5 p.m., Monday through Friday except legal holidays, from April 19, 2010 until the Commission publishes the rule in final form. Persons who schedule an appointment in the EEOC Library, FOIA Reading Room, and need assistance to view the comments will be provided with appropriate aids upon request, such as readers or print magnifiers. To schedule an appointment to inspect the comments at the EEOC Library, FOIA Reading Room, contact the EEOC Library by calling (202) 663-4630 (voice) or (202) 663-4641 (TTY). (These are not toll free numbers).

**FOR FURTHER INFORMATION CONTACT:** Dianna B. Johnston, Assistant Legal Counsel, or Lyn J. McDermott, Senior Attorney-Advisor, at (202) 663-4638 (voice) or (202) 663-7026 (TTY). (These are not toll free numbers). This notice also is available in the following formats: Large print, Braille, audio tape and electronic file on computer disk. Requests for this notice in an alternative format should be made to the Publications Information Center at