

# 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-2005-23500; Directorate Identifier 2005-NE-46-AD]

RIN 2120-AA64

#### Airworthiness Directives; International Aero Engines (IAE) V2500 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 IAE V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, and V2528-D5 turbofan engines. This proposed AD would require repetitive monitoring of N2 vibration on all IAE V2500 series engines to identify engines that might have a cracked high pressure turbine (HPT) stage 2 air seal. This proposed AD results from a report that HPT stage 2 air seals have developed cracks. We are proposing this AD to prevent uncontained failure of the HPT stage 2 air seal.

**DATES:** We must receive any comments on this proposed AD by August 1, 2006.

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

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.

- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You can get the service information identified in this proposed AD from International Aero Engines AG, 400 Main Street, East Hartford, CT 06108; telephone: (860) 565-5515; fax: (860) 565-5510.

You may examine the comments on this proposed AD in the AD docket on the Internet at <http://dms.dot.gov>.

#### FOR FURTHER INFORMATION CONTACT:

James Rosa, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7152; fax (781) 238-7199.

#### 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-2005-23500; Directorate Identifier 2005-NE-46-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://dms.dot.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 DOT Web site, anyone can find and read the comments in any of our dockets, including 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) or you may visit <http://dms.dot.gov>.

#### Examining the AD Docket

You may examine the docket that contains the proposal, any comments

received and, any final disposition in person at the DOT Docket Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in **ADDRESSES**. Comments will be available in the AD docket shortly after the Docket Management Facility receives them.

#### Discussion

This proposed AD would require repetitive monitoring of N2 vibration on all IAE V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, and V2528-D turbofan engines, to identify engines that might have a cracked HPT stage 2 air seal. Although there have been 24 recorded cracks of HPT stage 2 air seals, this proposed AD results from a report that HPT stage 2 air seal that developed cracks in the front snap fillet radius. The cracks propagated to the extent that parts of the seal fractured into several pieces. No terminating action to this proposed AD currently exists. We are proposing this AD to prevent uncontained failure of the HPT stage 2 air seal.

#### Relevant Service Information

We have reviewed and approved the technical contents of IAE Service Bulletin (SB) V2500-ENG-72-0500, dated July 25, 2005, and IAE SB V2500-ENG-72-0501, dated July 25, 2005, that describe procedures for repetitive monitoring of N2 vibration on all IAE V2500 A1/A5 and V2500-D5 engines.

#### Differences Between the Proposed AD and the Manufacturer's Service Information

IAE SB V2500-ENG-72-500 states that the majority of airplanes fitted with V2500 series engines have onboard data recording equipment that will detect and record N2 vibration. This proposed AD would require that all airplanes with V2500 series engines in revenue service comply with the requirement to monitor N2 vibration, using the onboard monitoring equipment.

#### 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 repetitive monitoring of N2 vibration on all IAE V2500 A1/A5 and V2500–D5 engines to identify engines that might have a cracked HPT stage 2 air seal. The proposed AD would require you to use the service information described previously to perform these actions.

#### Costs of Compliance

We estimate that this proposed AD would affect 1,022 engines installed on airplanes of U.S. registry. We also estimate that it would take about 2 workhours per engine to perform the proposed actions, and that the average labor rate is \$80 per workhour. Required parts would cost about \$97,040 per engine. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$99,338,400.

#### 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 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. 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. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

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

Air transportation, Aircraft, Aviation safety, 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:

**International Aero Engines:** Docket No. FAA–2005–23500; Directorate Identifier 2005–NE–46–AD.

#### Comments Due Date

- (a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by August 1, 2006.

#### Affected ADs

- (b) None.

#### Applicability

(c) This AD applies to International Aero Engines (IAE) V2500–A1, V2522–A5, V2524–A5, V2527–A5, V2527E–A5, V2527M–A5, V2530–A5, V2533–A5, V2525–D5, and V2528–D5 turbofan engines. These engines are installed on, but not limited to, Airbus A319–132, A320, and Boeing MD–90 airplanes.

#### Unsafe Condition

(d) This AD results from a report that HPT stage 2 air seals developed cracks in the front snap fillet radius. We are issuing this AD to prevent uncontained failure of the HPT stage 2 air seal.

#### 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.

#### Monitoring N2 Vibration on All IAE V2500–A1 and V2522–A5, V2524–A5, V2527–A5, V2527E–A5, V2527M–A5, V2530–A5, and V2533–A5 Engines

(f) For IAE V2530–A5 and V2533–A5 engines operated at 30,000 or 33,000 pounds of thrust, or for V2522–A5, V2524–A5, V2527–A5, V2527E–A5, and V2527M–A5 engines that have ever operated in the 30,000

or 33,000 pound thrust range, begin monitoring for N2 vibration trend if the HPT stage 2 air seal reaches 4,000 cycles-since-new (CSN) or more.

(g) For IAE V2500–A1 and V2522–A5, V2524–A5, V2527–A5, V2527E–A5, and V2527M–A5 engines operated below 30,000 pounds of thrust, begin monitoring for N2 vibration trend if the HPT stage 2 air seal has reached 6,000 CSN.

(h) Monitor for N2 vibration trend every 200 CSN as follows:

(1) Look for an increasing trend that has a slope of 0.001 units per cycle or greater, *e.g.*, 0.3 units or greater increase over 300 cycles.

(2) If these trends are observed, remove the HPT stage 2 air seal within 100 cycles.

(3) If the front fillet radius of the HPT stage 2 air seal is cracked, remove the HPT stage 1 disk, the HPT stage 2 disk, and the HPT rear air seal.

(i) Use Section 3. Accomplishment Instructions of IAE Service Bulletin (SB) V2500–ENG–72–0500, dated July 25, 2005, to gather and monitor the steady state cruise N2 vibration data.

#### Monitoring N2 Vibration on All IAE V2525–D5 and V2528–D5 Engines

(j) For all IAE V2500–D5 series engines, begin monitoring for N2 vibration trend if the HPT stage 2 air seal reaches 6,000 CSN or more.

(k) Monitor for N2 vibration trend every 200 CSN as follows:

(1) Look for an increasing trend that has a slope of 0.0007 Normalized Units (NU) per cycle, *e.g.*, 0.3 NU or greater increase over 425 cycles.

(2) If these trends are observed, remove the HPT stage 2 air seal within 100 cycles.

(3) If the front fillet radius of the HPT stage 2 air seal is cracked, remove the HPT stage 1 disk and the HPT rear air seals.

(l) Use Section 3. Accomplishment Instructions of IAE SB V2500–ENG–72–0501, dated July 25, 2005, to gather and monitor the steady state cruise N2 vibration data.

#### Removal of HPT Stage 2 Air Seal and Other Parts, If Necessary

(m) For all engines, when the HPT stage 2 air seal reaches 2,000 CSN, remove the HPT stage 2 air seal at the next separation of the HPT stage 1 and 2 rotors.

(n) The Accomplishment Instructions of IAE SB V2500–72–0500, dated July 25, 2005, IAE SB V2500–ENG–72–0501, dated July 25, 2005 and IAE SB V2500–ENG–72–0502, dated March 15, 2006, provide information on removing and replacing the HPT stage 2 air seal.

#### Alternative Methods of Compliance

(o) The Manager, Engine 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.

#### Related Information

- (p) None.

Issued in Burlington, Massachusetts, on May 26, 2006.

**Diane Romanosky,**

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

[FR Doc. E6-8562 Filed 6-1-06; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2006-24641; Directorate Identifier 2006-CE-27-AD]

RIN 2120-AA64

#### Airworthiness Directives; Stemme GmbH & Co. KG Models S10, S10-V, and S10-VT Sailplanes

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

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

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Stemme GmbH & Co. KG Models S10, S10-V, and S10-VT sailplanes. This proposed AD would require you to inspect the connection between the aileron push-rod and the connecting shaft to determine if a safety washer is installed. If there is no safety washer installed, this proposed AD would require you to modify the aileron control assembly. This proposed AD results from mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Germany. We are proposing this AD to prevent a loose bearing in the aileron control lever, which could result in separation of the aileron control system. Separation of the aileron control system could lead to loss of aileron control.

**DATES:** We must receive comments on this proposed AD by June 29, 2006.

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

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Governmentwide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.
- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact STEMME AG, Flugplatzstraße F 2, Nr. 7, D-15344 Strausberg, Germany; telephone: + 49.33.41/36 12 - 0; facsimile: + 49.33.41/36 12 - 30; e-mail: [P.Ellwanger@stemme.de](mailto:P.Ellwanger@stemme.de).

#### FOR FURTHER INFORMATION CONTACT:

Gregory A. Davison, Aerospace Engineer, ACE-112, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4130; facsimile: (816) 329-4090.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments regarding this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include the docket number, "FAA-2006-24641; Directorate Identifier 2006-CE-27-AD" at the beginning 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://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive concerning this proposed AD.

##### Discussion

The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for Germany, notified FAA that an unsafe condition may exist on all Stemme GmbH & Co. KG (Stemme) Models S10, S10-V, and S10-VT sailplanes. The LBA reports that, during production, a loose bearing was found on the control lever of a powered Stemme S10 sailplane.

Additional inspections of other levers revealed that a bearing might become loose during operation on the powered sailplane.

The only joint that may disengage because of a loose bearing is the connection between the aileron control rod, part number (P/N) 10SQ-RMB, and the connecting shaft, P/N 10SQ-RMW. All other connections between the push-rods and levers on the affected sailplanes are held in a fork-design that

does not allow the joints to disengage because of a loose bearing.

This condition, if not corrected, could result in a loose bearing in the aileron control lever, which could cause separation of the aileron control system. Separation of the aileron control system could lead to loss of aileron control.

#### Relevant Service Information

We have reviewed Stemme Service Bulletin Document Number: A31-10-069, Am.-Index 01.a, dated September 10, 2004.

The service information describes procedures for:

- Inspecting the bearing of the joint between the push-rod and the connecting shaft for correct position and tight fit;
- Inspecting all connections in the control system with circular caulked hinge or ball bearing to verify that the bearing is in the middle of the part where it is installed;
- Inspecting the joint between the aileron control rod, P/N 10SQ-RMB, and the connecting shaft, P/N 10SQ-RMW, for the installation of a safety washer, P/N DIN 440-06; and
- Modifying the aileron control system if a safety washer is not installed.

#### Foreign Airworthiness Authority Information

The LBA classified this service bulletin as mandatory and issued German AD Number D-2004-443, dated September 27, 2004, to ensure the continued airworthiness of these sailplanes in Germany. These Stemme Models S10, S10-V, and S10-VT sailplanes are manufactured in Germany and are type-certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement.

Under this bilateral airworthiness agreement, the LBA has kept us informed of the situation described above.

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

We are proposing this AD because we have examined the LBA's findings, evaluated all information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design that are certificated for operation in the United States.

This proposed AD would require you to inspect the joint between the aileron control rod, P/N 10SQ-RMB, and the connecting shaft, P/N 10SQ-RMW, to