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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. 2002-NM-172-AD; Amendment 39-14488; AD 2006-04-07]**

**RIN 2120-AA64**

**Airworthiness Directives; BAE Systems (Operations) Limited Model BAe 146 and Avro 146-RJ Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to all BAE Systems (Operations) Limited Model BAe 146 and Avro 146-RJ airplanes, that requires installation of a linear fluid-filled damper between each elevator surface and the airplane structure on both the left and right sides of the airplane, along with related structural and system modifications. The actions specified by this AD are intended to prevent pitch oscillation (vertical bouncing) of the fuselage due to excessive ice buildup on the elevator servo tab, and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective March 24, 2006.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 24, 2006.

**ADDRESSES:** The service information referenced in this AD may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearn Road, Herndon, Virginia 20171. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer; International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1175; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all BAE Systems (Operations) Limited Model BAe 146 and Avro 146-RJ airplanes was published as a supplemental notice of proposed rulemaking (NPRM) in the Federal Register on December 8, 2005 (70 FR 72942). That action proposed to require installation of a linear fluid-filled damper between each elevator surface and the airplane structure on both the left and right sides of the airplane, along

with related structural and system modifications. That action also revised and updated applicable service information and revised the compliance time to accurately reflect the compliance time specified by the service information.

## Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. We received no comments on the supplemental NPRM or on the determination of the cost to the public.

## Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed, except for certain minor editorial changes that have no effect on any legal or technical aspect of the AD.

## Cost Impact

The FAA estimates that 55 airplanes of U.S. registry will be affected by this AD. Accomplishment of the required actions specified in the referenced BAE Systems (Operations) Limited modification service bulletins will require an approximate number of work hours as shown in the following table, at an average labor rate of \$65 per work hour.

**Work Hours and Costs**

<b>BAE Systems (operations) limited modification service bulletin</b>	<b>Parts costs</b>	<b>Work hours</b>	<b>Cost per airplane</b>
SB27-167-01614CDG	\$2,937	12	\$3,717
SB27-168-01614EH	713	40	3,313
SB27-169-01692A	10,415	8	10,935
SB27-170-01692E <sup>1</sup>	826	20	2,126
SB27-171-01692F <sup>2</sup>	826	12	1,606
SB27-174-01692G	NA	1	65

<sup>1</sup> (For Model BAE 146 airplanes only)

<sup>2</sup> (For Model Avro 146-RJ airplanes only)

Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be between \$1,079,980 and \$1,108,580, or between \$19,636 and \$20,156 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

## 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 Impact**

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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); 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

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

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

### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration 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. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

## **2006-04-07 BAE Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft):** Amendment 39-14488. Docket 2002-NM-172-AD.

**Applicability:** All Model BAe 146-100A, -200A, and -300A series airplanes and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent pitch oscillation (vertical bouncing) of the fuselage due to excessive ice buildup on the elevator servo tab, and consequent reduced controllability of the airplane, accomplish the following:

### **Linear Fluid-Filled Damper Installation**

(a) Within 24 months after the effective date of this AD, install linear fluid-filled dampers between each elevator surface and the airplane structure on both the left and right sides of the airplane and perform the related structural and system modifications, by doing all actions in accordance with the Accomplishment Instructions of the service bulletins specified in Table 1 of this AD; as applicable.

**Table 1—Service Information**

<b>BAE Systems (operations) limited modification service bulletin</b>	<b>Revision level</b>	<b>Date</b>
SB27-167-01614CDG	2	July 25, 2003
SB27-168-01614EH	2	July 25, 2003
SB27-169-01692A	1	July 11, 2002
SB27-170-01692E, including Appendix 1, Revision 1, dated August 27, 2001 <sup>1</sup>	3	May 16, 2003
SB27-171-01692F, including Appendix 1, dated March 20, 2001 <sup>2</sup>	1	July 10, 2002
SB27-174-01692G	Original	December 10, 2001

<sup>1</sup> (For Model BAE 146 airplanes only)

<sup>2</sup> (For Model Avro 146-RJ airplanes only)

### **Credit for Prior Revisions of Service Information**

(b) Actions accomplished before the effective date of this AD in accordance with applicable service information listed in Table 2 of this AD are considered acceptable for compliance with the corresponding actions specified in paragraph (a) of this AD.

**Table 2–Prior Revisions of Service Information**

<b>BAE Systems (operations) limited modification service bulletin</b>	<b>Revision level</b>	<b>Date</b>
SB27–167–01614CDG	Original	January 2, 2001
SB27–167–01614CDG	1	July 11, 2002
SB27–168–01614EH	Original	January 22, 2001
SB27–168–01614EH	1	July 11, 2002
SB27–169–01692A	Original	December 10, 2001
27–170–01692E, including Appendix 1 <sup>1</sup>	Original	March 20, 2001
SB27–170–01692E, including Appendix 1 <sup>1</sup>	1	August 27, 2001
SB27–170–01692E, including Appendix 1, Revision 1, dated August 27, 2001 <sup>1</sup>	2	July 10, 2002
SB27–171–01692F, including Appendix 1 <sup>2</sup>	Original	March 20, 2001

<sup>1</sup> (For Model BAE 146 airplanes only)

<sup>2</sup> (For Model Avro 146-RJ airplanes only)

**No Reporting Requirement**

(c) Although all referenced service bulletins describe procedures for reporting accomplishment to the manufacturer, this AD does not require that action.

**Alternative Methods of Compliance**

(d)(1) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, is authorized to approve alternative methods of compliance for this AD.

(2) Before using any AMOC approved in accordance with 14 CFR 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

**Note 1:** The subject of this AD is addressed in British airworthiness directive 005-12-2001.

**Incorporation by Reference**

(e) Unless otherwise specified in this AD, the actions must be done in accordance with the service information specified in Table 3 of this AD, as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get copies of this service information, contact British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. To inspect copies of this service information, go to the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or to the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Table 3–Service Information Incorporated by Reference**

<b>BAE Systems (operations) limited modification service bulletin</b>	<b>Revision level</b>	<b>Date</b>
SB27–167–01614CDG	2	July 25, 2003
SB27–168–01614EH	2	July 25, 2003
SB27–169–01692A	1	July 11, 2002
SB27–170–01692E, including Appendix 1, Revision 1, dated August 27, 2001	3	May 16, 2003
SB27–171–01692F, including Appendix 1, dated March 20, 2001	1	July 10, 2002
SB27–174–01692G	Original	December 10, 2001

**Effective Date**

(f) This amendment becomes effective on March 24, 2006

Issued in Renton, Washington, on February 6, 2006

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service

[FR Doc 06-1410 Filed 2-16-06; 8:45 am]