

[Federal Register: November 21, 2005 (Volume 70, Number 223)]
[Rules and Regulations]
[Page 70038-70041]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr21no05-5]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-23006; Directorate Identifier 2002-NM-51-AD; Amendment 39-14380; AD 2005-23-22]

RIN 2120-AA64

Airworthiness Directives; British Aerospace Model HS 748 Airplanes

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

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all British Aerospace Model HS 748 airplanes. This AD requires repetitive inspections for fatigue cracking, corrosion, and other related discrepancies of the rear pressure bulkhead and associated areas, and the fin attachment fittings, particularly the fin link beam; and related investigative and corrective actions. This AD results from a structural integrity audit of the airplane that showed the importance of inspecting for fatigue cracking and corrosion of these areas. We are issuing this AD to detect and correct cracking, corrosion, and other related discrepancies of the rear pressure bulkhead and associated areas, and the fin attachment fittings, particularly the fin link beam, which could result in damage to the airplane structure or injury to airplane occupants.

DATES: This AD becomes effective December 6, 2005.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of December 6, 2005.

We must receive comments on this AD by January 20, 2006.

ADDRESSES: Use one of the following addresses to submit comments on this 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.
- 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.

Contact British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171, for service information identified in this AD.

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

SUPPLEMENTARY INFORMATION:

Discussion

The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom, notified us that an unsafe condition may exist on all British Aerospace Model HS 748 airplanes. The CAA advises that a structural integrity audit of the airplane showed the importance of inspecting for fatigue cracking and corrosion of the rear pressure bulkhead and associated areas, and of the fin attachment fittings, particularly the fin link beam. Although there have been no reports of damage or corrosion, the CAA has determined that the potential exists for fatigue cracking or corrosion to occur in these areas. The CAA further advises that, in order to do the inspection, operators must remove the fin, and that other inspections for cracking or corrosion and certain replacements should be done while the fin is removed. Failure to detect and repair cracking, corrosion, and other related discrepancies of the rear pressure bulkhead and associated areas, and the fin attachment fittings, particularly the fin link beam, could result in damage to the airplane structure or injury to airplane occupants.

Relevant Service Information

BAE Systems (Operations) Limited has issued Inspection Service Bulletin HS748-53-49, Revision 2, dated May 4, 2001. The service bulletin describes procedures for doing various repetitive inspections of the rear pressure bulkhead and associated areas, and of the fin attachment fittings, particularly the fin link beam. The service bulletin also states that, in order to inspect these areas, the fin of the airplane must be removed. The inspections include high frequency eddy current (HFEC), rototest eddy current, radiographic, and close visual inspections for fatigue cracking and corrosion, and for other related discrepancies described in the service bulletin, such as loose rivets, and worn bolts and bushings.

The service bulletin also describes procedures for any necessary corrective actions. The corrective actions depend on the inspection findings and the location of the problem to be corrected. The corrective actions can include reaming rivet holes, installing appropriate new bolts, repairing cracks and corrosion, and replacing various parts with new or serviceable parts. The corrective actions can also include related investigative actions such as close visual inspections for cracks, corrosion, and discrepancies that may be revealed during the repair process.

For certain inspection findings, such as certain bore diameters or certain cracks, and for certain areas that cannot be repaired within the limits described in the service bulletin, the service bulletin specifies that operators should contact BAE Systems (Operations) Limited for repair instructions. The service bulletin also specifies that certain parts are to be returned to the manufacturer, and that results of all inspections should be sent to the manufacturer.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition. The CAA mandated the service information and issued British airworthiness directive 002-03-83 to ensure the continued airworthiness of these airplanes in the United Kingdom.

FAA's Determination and Requirements of This AD

This airplane model is manufactured in the United Kingdom and is 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. Pursuant to this bilateral airworthiness agreement, the CAA has kept the FAA informed of the situation described above. We have examined the CAA's findings, evaluated all pertinent information, and determined that we need to issue an AD for products of this type design that are certificated for operation in the United States.

Therefore, we are issuing this AD to detect and correct cracking, corrosion, and other related discrepancies of the rear pressure bulkhead and associated areas, and the fin attachment fittings, particularly the fin link beam, which could result in damage to the airplane structure or injury to airplane occupants. This AD requires accomplishing the actions specified in the service information described previously, except as discussed under "Differences Among the AD, the British Airworthiness Directive, and the Service Bulletin."

Differences Among the AD, the British Airworthiness Directive, and the Service Bulletin

Although the service bulletin referenced by the British airworthiness directive specifies to submit certain information to the manufacturer, and to return certain parts to the manufacturer, this AD does not include those requirements.

The service bulletin referenced by the British airworthiness directive specifies to contact the manufacturer for instructions on how to repair certain conditions, but this AD requires repairing those conditions using a method that we approve.

Clarification of Actions in the Service Bulletin

Where the service bulletin is not specific regarding an inspection, corrective action, or any step necessary to complete the requirements of this AD, this AD requires doing the applicable action or step using a method that we, or the CAA (or its delegated agent) approve.

Clarification of Inspection Terminology

In this AD, the "close visual inspection" specified in the service bulletin is referred to as a "detailed inspection." We have included the definition for a detailed inspection in a note in the AD.

Costs of Compliance

None of the airplanes affected by this action are on the U.S. Register. All airplanes affected by this AD are currently operated by non-U.S. operators under foreign registry; therefore, they are not directly affected by this AD action. However, we consider this AD necessary to ensure that the unsafe condition is addressed if any affected airplane is imported and placed on the U.S. Register in the future.

If an affected airplane is imported and placed on the U.S. Register in the future, the required actions would take about 200 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the AD would be \$13,000 per airplane, per inspection cycle.

FAA's Determination of the Effective Date

No airplane affected by this AD is currently on the U.S. Register. Therefore, providing notice and opportunity for public comment is unnecessary before this AD is issued, and this AD may be made effective in less than 30 days after it is published in the Federal Register.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed in the ADDRESSES section. Include "Docket No. FAA-2005-23006; Directorate Identifier 2002-NM-51-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

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 AD. Using the search function of that 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 Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

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 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 the 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 AD and placed it in the AD docket. 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, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

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

We post ADs on the internet at 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).

2005-23-22 BAE Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft): Amendment 39-14380. Docket No. FAA-2005-23006; Directorate Identifier 2002-NM-51-AD.

Effective Date

- (a) This AD becomes effective December 6, 2005.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all BAE Systems (Operations) Limited Model HS 748 series 2A and series 2B airplanes, certificated in any category.

Unsafe Condition

- (d) This AD results from a structural integrity audit of the airplane that showed the importance of inspecting for fatigue cracking and corrosion of the rear pressure bulkhead and associated areas, and of the fin attachment fittings, particularly the fin link beam. We are issuing this AD to detect and correct cracking, corrosion, and other related discrepancies of these areas, which could result in damage to the airplane structure or injury to airplane occupants.

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.

Inspections and Corrective Actions

- (f) At the applicable time in paragraph (f)(1), (f)(2), or (f)(3) of this AD: Do high frequency eddy current (HFEC), rototest eddy current, radiographic, and detailed inspections for fatigue cracking, corrosion, and other related discrepancies of the rear pressure bulkhead and associated areas, and the fin attachment fittings, particularly the fin link beam; and do applicable related investigative and corrective actions before further flight except as provided by paragraph (g) of this AD. Do all actions in accordance with the Accomplishment Instructions of BAE Systems (Operations) Limited Inspection Service Bulletin HS748-53-49, Revision 2, dated May 4, 2001.

(1) For airplanes with maximum cabin differential pressure of 5.5 psi, do the inspections at the applicable time in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD.

(i) Before the accumulation of 50,000 total flight cycles, or within 6 months after the effective date of this AD, whichever occurs later.

(ii) Before the accumulation of 83,000 total flight cycles, or within 6 months after the effective date of this AD, whichever occurs later: Extend the inspection of the fin link beam to cover the central 30 inches of the beam, and repeat this inspection at intervals not to exceed 11,000 flight cycles. If the inspection of the fin link beam indicates a defect in any rivet hole, before further flight: Repair the hole in accordance with the service bulletin, and repeat the inspection thereafter at intervals not to exceed the applicable interval in Table 1 of this AD, depending on the size of the hole following reaming during the repair process.

TABLE 1.—REPETITIVE INTERVALS FOR AIRPLANES WITH REPAIRED RIVET HOLES, MAXIMUM CABIN DIFFERENTIAL PRESSURE 5.5 PSI

Defect removed at—	Repetitive inspection interval
Hole size 3/16 inch + 1/32 inch diameter	10,000 flight cycles.
Hole size 3/16 inch + 1/16 inch diameter	7,000 flight cycles.
Hole size 3/16 inch + 5/64 inch diameter	6,000 flight cycles.

(2) For airplanes on which BAe Modification 7191 has been incorporated (reduction of cabin differential pressure from 5.5 psi to 4.2 psi) before the effective date of this AD: Do the inspections at the applicable time in paragraphs (f)(2)(i), (f)(2)(ii), and (f)(2)(iii) of this AD.

(i) If Modification 7191 is incorporated before the accumulation of 50,000 total flight cycles, do the inspections before the accumulation of 50,000 total flight cycles, or within 6 months after the effective date of this AD, whichever occurs later. Repeat the inspection thereafter at intervals not to exceed 25,000 flight cycles.

(ii) If Modification 7191 is incorporated during one of the inspections required by this AD: Repeat the inspection thereafter at intervals not to exceed 25,000 flight cycles.

(iii) If Modification 7191 is incorporated between inspections required by this AD: Do the inspection 11,000 flight cycles following the previous inspection, and repeat the inspection thereafter at intervals not to exceed 25,000 flight cycles. If the inspection of the fin link beam indicates a defect in any rivet hole, before further flight: Repair the hole in accordance with the service bulletin, and repeat the inspection thereafter at intervals not to exceed the applicable interval in Table 2 of this AD, depending on the size of the hole following reaming during the repair process.

TABLE 2.—REPETITIVE INTERVALS FOR AIRPLANES WITH REPAIRED RIVET HOLES, MAXIMUM CABIN DIFFERENTIAL PRESSURE 4.2 PSI

Defect removed at—	Repetitive inspection interval
Hole size 3/16 inch + 1/32 inch diameter	22,000 flight cycles.
Hole size 3/16 inch + 1/16 inch diameter	16,000 flight cycles.
Hole size 3/16 inch + 5/64 inch diameter	14,000 flight cycles.

(3) For series 1 airplanes, including Model 200, Constructors Number 1535 (maximum cabin differential pressure of 4.2 psi): Before the accumulation of 70,000 total flight cycles, or within 6 months after the effective date of this AD, whichever occurs later. If the inspection of the fin link beam indicates a defect in any rivet hole, before further flight: Repair the hole in accordance with the service bulletin, and repeat the inspection thereafter at intervals not to exceed the applicable interval in Table 2 of this AD, depending on the size of the hole following reaming during the repair process.

Note 1: For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

(g) Where BAE Systems (Operations) Limited Inspection Service Bulletin HS748-53-49, Revision 2, dated May 4, 2001, recommends contacting BAE Systems (Operations) Limited for appropriate action: Before further flight, do the action according to a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. Where the service bulletin is not specific regarding an inspection, corrective action, or any step necessary to complete the requirements of this AD: Before further flight, do the inspection, corrective action, or step according to a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or by the CAA (or its delegated agent).

No Reporting Required

(h) Although the service bulletin referenced in this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, International Branch, ANM-116, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

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

Related Information

(j) British airworthiness directive 002-03-83 also addresses the subject of this AD.

Material Incorporated by Reference

(k) You must use BAE Systems (Operations) Limited Inspection Service Bulletin HS748-53-49, Revision 2, dated May 4, 2001, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact British Aerospace Regional Aircraft American Support 13850 Mclearen Road, Herndon, Virginia 20171, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at 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.

Issued in Renton, Washington, on November 9, 2005.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-22790 Filed 11-18-05; 8:45 am]

BILLING CODE 4910-13-P