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–2005–21137; Directorate Identifier 2002–NM–86–AD]

RIN 2120–AA64

Airworthiness Directives; BAE Systems (Operations) Limited (Jetstream) Model 4101 Airplanes

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 all BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes. This proposed AD would require repetitive detailed and specialized inspections to detect fatigue damage in the fuselage, replacement of certain bolt assemblies, and corrective actions if necessary. This proposed AD is prompted by a review of primary airframe fatigue test results and Maintenance Steering Group 3 (MSG–3) analysis. We are proposing this AD to detect and correct fatigue damage of the fuselage, door, engine nacelle, empennage, and wing structures, which could result in reduced structural integrity of the airplane.

DATES: We must receive comments on this proposed AD by June 8, 2005.

ADDRESSES: Use one of the following addresses to submit comments 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.
- By 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 British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171.

You can examine the contents of this AD docket on the Internet at *http://dms.dot.gov*, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL–401, on the plaza level of the Nassif Building, Washington, DC. The docket number is FAA–2005–21137; the directorate identifier for this docket is 2002–NM–86–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:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed under **ADDRESSES**. Include ''Docket No. FAA–2005–21137; Directorate Identifier 2002–NM–86–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 submitted 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 our docket website, 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 can review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78), or you can visit *http://dms.dot.gov*.

Examining the Docket

You can 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 DMS receives them.

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 BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes. The CAA advises that, following an extensive review of the primary airframe fatigue test results and Maintenance Steering Group 3 (MSG–3) analysis for the Model 4101 airplanes, new areas and thresholds of fatigue damage were identified. New inspections and revisions to existing inspections for fatigue damage (requirements and inspection thresholds in particular) are needed to address the findings. These inspections are necessary to maintain the structural integrity of the airplane. Fatigue damage of the fuselage, door, engine nacelle, empennage, and wing structures, if not detected and corrected in a timely manner, could result in reduced structural integrity of the airplane.

Relevant Service Information

BAE Systems (Operations) Limited has issued Service Bulletin J41–51–001, Revision 2, dated April 30, 2003. The service bulletin describes procedures for repetitive detailed and specialized inspections of the fuselage to detect fatigue damage, replacement of the bolt assemblies of the pintle bearing housing and upper club foot fitting with new bolt assemblies, and corrective actions if necessary. The specialized inspections include eddy current inspections (including high frequency and rotating), radiographic inspections, a magnetic particle inspection, and a torque measurement. The areas to be inspected

are located in or around door, fuselage, engine nacelle, empennage, and wing structures. In addition, the service bulletins specify submitting inspection reports after most of the inspection procedures are completed. The corrective actions include replacing a damaged part with a new part, and repairing damage in accordance with the service bulletin, or in accordance with a method approved by BAE Systems (Operations) Limited if damage is outside specified limits. 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 005–02–2002 to ensure the continued airworthiness of these airplanes in the United Kingdom.

FAA's Determination and Requirements of the Proposed AD

This airplane model is manufactured in the United Kingdom and is type certificated for operation in the United States under the provisions of § 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 proposing this AD, which would require accomplishing the actions specified in the service information described previously, except as discussed under ''Differences Between the Proposed AD and the Service Bulletin.''

Differences Between the Proposed AD and the Service Bulletin

Operators should note that, although the Accomplishment Instructions of the referenced service bulletin describes procedures for submitting inspection reports, this proposed AD would not require those actions. We do not need this information from operators.

The service bulletin specifies that you may contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require you to repair those conditions using a method that we or the CAA (or its delegated agent) approve. In light of the type of repair that would be required to address the unsafe condition, and consistent with existing bilateral airworthiness agreements, we have determined that, for this proposed AD, a repair we or the CAA approve would be acceptable for compliance with this proposed AD.

Grace Period

Operators should note that, although the service bulletin does not list a grace period in the compliance times for some of the actions, this proposed AD adds a grace period to the compliance times. We find that a grace period will keep airplanes from being grounded unnecessarily.

Also, although the service bulletin specifies a grace period for some actions, this proposed AD has a different grace period. We find that this modified grace period will keep airplanes from being grounded unnecessarily.

Clarification of Flight Cycle Terminology

Operators should note that, although the Accomplishment Instructions of the referenced service bulletins use ''flights'' to define some compliance times, this proposed AD uses ''total flight cycles.''

Clarification of Inspection Terminology

In this proposed AD, the ''detailed visual inspection,'' ''detailed internal visual inspection,'' ''detailed internal inspection,'' and ''detailed external visual inspection'' specified in the service bulletin are referred to as a ''detailed inspection.'' We have included the definition for a detailed inspection in Note 1 of the proposed AD.

Clarification of Initial Inspection Threshold

For airplanes not inspected previously, the service bulletin specifies inspection thresholds of 8 years and 4 years after first flight. However, for these same airplanes, paragraph (g) of this proposed AD specifies an inspection threshold of 96 months (8 years) and 48 months (4 years), as applicable, after the date of issuance of the original standard Airworthiness Certificate or the date of issuance of the original Export Certificate of Airworthiness. This decision is based on our determination that ''first flight'' may be interpreted differently by different operators. We find that our proposed terminology is generally understood within the industry and records will always exist that establish these dates with certainty.

Costs of Compliance

The following table provides the estimated costs for U.S. operators to comply with this proposed AD.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane, per inspection cycle	Number of U.S.-registered airplanes	Fleet cost
Inspections of the door structure.	17	$65	None	$1,105	57	Up to $62,985, per inspection cycle.
Inspections of the fuselage structure.	164	65	None	10,660	57	Up to $607,620, per inspection/replacement cycle.
Inspections of the engine nacelle structure.	4	65	None	260	57	Up to $14,820, per inspection cycle.
Inspections of the empennage structure.	14	65	None	910	57	Up to $51,870, per inspection cycle.
Inspections of the wing structure.	24	65	None	1,560	57	Up to $88,920, per inspection cycle.

The total proposed actions would take about 223 work hours per airplane, at an average labor rate of $65 per work hour. Based on these figures, the estimated cost of the total proposed AD for U.S. operators is up to $826,215, or $14,495 per airplane, per inspection cycle.

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. 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. 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

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 adding the following new airworthiness directive (AD):

BAE Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft): Docket No. FAA–2005–21137; Directorate Identifier 2002–NM–86–AD.

Comments Due Date

(a) The Federal Aviation Administration must receive comments on this AD action by June 8, 2005.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all BAE Systems (Operations) Limited Model Jetstream 4101 airplanes, certificated in any category.

Unsafe Condition

(d) This AD was prompted by a review of primary airframe fatigue test results and Maintenance Steering Group 3 (MSG–3) analysis. We are issuing this AD to detect and correct fatigue damage of the fuselage, door, engine nacelle, empennage, and wing structures, which could result in reduced structural integrity of 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.

Service Bulletin Reference

(f) The term ''the service bulletin,'' as used in this AD, means BAE Systems (Operations) Limited Service Bulletin J41–51–001, Revision 2, dated April 30, 2003.

Inspection and Corrective Actions

(g) At the compliance times specified in the ''Initial Compliance Time'' column of Tables 1, 2, 3, 4, and 5 of this AD: Do the applicable detailed inspections and specialized inspections to detect fatigue damage, and replacement of certain bolt assemblies, and any applicable corrective actions, in accordance with the Accomplishment Instructions of the service bulletin. Do any corrective action before further flight. Repeat the inspections and replacement thereafter at intervals specified in the ''Repetitive Intervals'' column of Tables 1, 2, 3, 4, and 5 of this AD.

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 mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate procedures may be required.''

TABLE 1.—APPENDIX 1 COMPLIANCE TIMES

Part # of actions specified in appendix 1 of the service bulletin	Initial compliance time (whichever occurs later between the times in ''inspection threshold'' and ''grace period'')		Repetitive intervals
	Inspection threshold	Grace period	
1, 6	Before the accumulation of 22,500 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 3,300 flight cycles.
2	Before the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 5,200 flight cycles.
3, 5, 7	Before the accumulation of 21,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 10,000 flight cycles.
4	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 26,000 flight cycles.

TABLE 2.—APPENDIX 2 COMPLIANCE TIMES

Part # of actions specified in appendix 2 of the service bulletin	Initial compliance time (whichever occurs later between the times in "inspection/replacement threshold" and "grace period")		Repetitive intervals
	Inspection/replacement threshold	Grace period	
1, 3, 32	Within 96 months after the date of issuance of the original standard Airworthiness Certificate or the date of issuance of the original Export Certificate of Airworthiness, whichever occurs later.	12 months after the effective date of this AD.	At intervals not to exceed 24 months.
2	Before the accumulation of 23,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 10,000 flight cycles.
4, 10, 11, 12, 13	Before the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 6,600 flight cycles.
5	Within 48 months after the date of issuance of the original standard Airworthiness Certificate or the date of issuance of the original Export Certificate of Airworthiness, whichever occurs later.	12 months after the effective date of this AD.	At intervals not to exceed 24 months.
6	Before the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 5,400 flight cycles.
7	Before the accumulation of 22,400 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 8,200 flight cycles.
8	Before the accumulation of 19,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 8,200 flight cycles.
9	Before the accumulation of 23,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 23,000 flight cycles.
14	Before the accumulation of 19,700 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 4,700 flight cycles.
15	Before the accumulation of 25,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 13,600 flight cycles.
16, 19, 20	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 25,800 flight cycles.
17, 21, 29, 30	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 30,000 flight cycles.
18	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 33,000 flight cycles.
22	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 16,500 flight cycles.
23	Before the accumulation of 22,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 7,400 flight cycles.
24	Before the accumulation of 23,600 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 15,700 flight cycles.
25	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 12,700 flight cycles.
26	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed the 21,800 flight cycles.
27	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 18,300 flight cycles.
28	Between 20,000 and 26,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 9,500 flight cycles.
31	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 16,300 flight cycles.
33	Before the accumulation of 26,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 26,000 flight cycles.

TABLE 3.—APPENDIX 3 COMPLIANCE TIMES

Part # of actions specified in appendix 3 of the service bulletin	Initial compliance time (whichever occurs later between the times in "inspection threshold" and "grace period")		Repetitive intervals
	Inspection threshold	Grace period	
1, 2	Before the accumulation of 24,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 11,000 flight cycles.

TABLE 4.—APPENDIX 4 COMPLIANCE TIMES

Part # of actions specified in appendix 4 of the service bulletin	Initial Compliance time (whichever occurs later between the times in "inspection threshold" and "grace period")		Repetitive intervals
	Inspection threshold	Grace period	
1	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 12,000 flight cycles.
2	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 30,000 flight cycles.
3, 5	Within 48 months after the date of issuance of the original standard Airworthiness Certificate or the date of issuance of the original Export Certificate of Airworthiness, whichever occurs later.	12 months after the effective date of this AD	At intervals not to exceed 48 months.
4, 6	96 months after the date of issuance of the original standard Airworthiness Certificate or the date of issuance of the original Export certificate of Airworthiness, whichever occurs later.	12 months after the effective date of this AD	At intervals not to exceed 48 months.

TABLE 5.—APPENDIX 5 COMPLIANCE TIMES

Part # of actions specified in appendix 5 of the service bulletin	Initial compliance time (whichever occurs later between the times in "inspection threshold" and "grace period")		Repetitive intervals
	Inspection threshold	Grace period	
1, 7	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 30,000 flight cycles.
2, 5, 6	Before the accumulation of 26,000 total flight cycles and after the accumulation of 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 9,000 flight cycles.
3, 4	Before the accumulation of 26,000 total flight cycles and after the accumulation 20,000 total flight cycles.	Within 500 flight cycles after the effective date of this AD.	At intervals not to exceed 7,900 flight cycles.

Repairs for Damage Beyond Service Bulletin Limits

(h) If any fatigue damage is found that exceeds the limits specified in the service bulletin: Before further flight, repair the damage according to a method approved by either the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate; or the Civil Aviation Authority (or its delegated agent).

Previous Actions

(i) Actions done before the effective date of this AD in accordance with BAE Systems (Operations) Limited Service Bulletin J41–51–001, dated February 15, 2002; and Revision 1, dated August 7, 2002, are acceptable for compliance with the requirements of paragraphs (g) and (h) of this AD.

No Report Required

(j) 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)

(k) The Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

Related Information

(l) British airworthiness directive 005–02–2002 also addresses the subject of this AD.

Issued in Renton, Washington, on April 29, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–9185 Filed 5–6–05; 8:45 am]

BILLING CODE 4910–13–P