

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 98-NM-27-AD]

RIN 2120-AA64

Airworthiness Directives; British Aerospace Model BAC 1-11 200 and 400 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the superseding of an existing airworthiness directive (AD), applicable to all British Aerospace Model BAC 1-11 200 and 400 series airplanes, that currently requires repetitive visual inspections to detect cracks in the flight deck canopy area, and repair, if necessary; and repetitive detailed visual and eddy current inspections to detect cracks of the top sill members at station 82.5, and replacement of cracked parts with new parts, or repair of the top sill members. This action would continue to require detailed visual and eddy current inspections to detect cracks of the top sill members at station 82.5. This action also would add a requirement for a one-time inspection to determine the type of fasteners installed in certain holes of the joint strap installation, and replacement of rivets with bolts, if necessary. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are intended to detect and correct cracking in the flight deck canopy area, which could result in reduced structural integrity of the flight deck frame and adjacent fuselage structure.

DATES: Comments must be received by February 5, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-27-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from British Aerospace, Service Support, Airbus Limited, P.O. Box 77, Bristol BS99 7AR, England. This information may be examined at the FAA, Transport

Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:**Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-NM-27-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-27-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

On March 12, 1996, the FAA issued AD 96-06-07, amendment 39-9544 (61 FR 11534, March 21, 1996), applicable to all British Aerospace Model BAC 1-11 200 and 400 series airplanes, to require repetitive visual inspections to detect cracks in the flight deck canopy area, and repair, if necessary. That AD also requires repetitive detailed visual and eddy current inspections to detect cracks of the top sill members at station 82.5, and replacement of cracked parts

with new parts, or repair of the top sill members. That action was prompted by reports of cracking found in the structural members in the flight deck canopy area of the affected airplanes. The requirements of that AD are intended to ensure that cracking in the flight deck canopy area is detected and corrected in a timely manner; such cracking could result in reduced structural integrity of the cockpit frame and the adjacent fuselage structure.

Explanation of New Service Information

Since the issuance of AD 96-06-07, British Aerospace has issued Alert Service Bulletin 53-A-PM5994, Issue 4, dated August 23, 1996, and Issue 5, dated April 18, 1997. Issue 4 of the alert service bulletin continues to describe procedures for a detailed visual inspection to detect cracks of the top sill joint strap at station 82.5, of the frame at station 113, and of the frame at station 160.5 (left-hand side only) between stringers 13 and 15; an eddy current inspection to detect cracks of the top sill members at station 82.5; replacement of cracked parts with new parts; and repair of the top sill members, if necessary. Issue 4 of the alert service bulletin also adds procedures for a one-time inspection to determine the type of fasteners installed in certain holes on the top sill members, and replacement of rivets on the top sill members with bolts, if necessary. Such replacement is to be accomplished prior to the eddy current inspection for cracking of the top sill members at station 82.5. Issue 5 of the alert service bulletin is essentially identical to Issue 4, except it corrects a part number for the replacement bolts, and clarifies the instructions for accomplishing the eddy current inspection.

Accomplishment of the actions specified in Issue 4 or Issue 5 of the alert service bulletin is intended to adequately address the identified unsafe condition. The Civil Aviation Authority (CAA), which is the foreign civil airworthiness authority of the United Kingdom, classified these issues of the alert service bulletin as mandatory in order to assure the continued airworthiness of these airplanes in the United Kingdom.

FAA's Conclusions

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. The FAA has examined the findings of the CAA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

FAA's Determination

Paragraph (a) of AD 96-06-07 requires repetitive visual inspections to detect cracks of the flight deck canopy area. Accomplishment of the repetitive detailed visual and eddy current inspections to detect cracks of the top sill members at station 82.5, required by paragraph (c) of AD 96-06-07, terminates the requirements of paragraph (a) of that AD.

The FAA has determined that because the repetitive detailed visual and eddy current inspections eliminate the need for the repetitive visual inspections, and because the initial compliance threshold is lower for the detailed visual and eddy current inspections than for the visual inspection (14,000 or 20,000 total landings versus 30,000 total landings), the repetitive visual inspections to detect cracks of the flight deck canopy area are no longer necessary to ensure the safety of the transport airplane fleet. Therefore, paragraph (a) and paragraph (b), which specifies follow-on corrective actions for paragraph (a), of AD 96-06-07 are not included in this proposal.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would supersede AD 96-06-07 to continue to require detailed visual and eddy current inspections to detect cracks of the top sill members at station 82.5, and replacement of cracked parts with new parts, or repair of the top sill members. The proposed AD also would require a one-time inspection to determine the type of fasteners installed in certain holes of the joint strap installation, and replacement of rivets with bolts, if necessary. The new actions would be required to be accomplished in accordance with Issue 5 of the alert service bulletin described previously, except as discussed below.

Differences Between the Proposed AD and the Alert Service Bulletin

Operators should note that, although the alert service bulletin specifies that the manufacturer may be contacted for

disposition of certain repair conditions, this proposal would require the repair of those conditions to be accomplished in accordance with a method approved by the FAA, or the CAA (or its delegated agent). In light of the type of repair that would be required to address the identified unsafe condition, and in consonance with existing bilateral airworthiness agreements, the FAA has determined that, for this proposed AD, a repair approved by either the FAA or the CAA (or its delegated agent) would be acceptable for compliance with this proposed AD.

Cost Impact

There are approximately 42 airplanes of U.S. registry that would be affected by this proposed AD.

The actions that are currently required by AD 96-06-07, and retained in this proposed AD, take approximately 19 work hours per airplane to accomplish (including access and close), at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$47,880, or \$1,140 per airplane, per inspection cycle.

The new inspection that is proposed in this AD action would take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the new inspection proposed by this AD on U.S. operators is estimated to be \$2,520, or \$60 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Should an operator be required to accomplish the necessary replacement of rivets with bolts, it would take approximately 3 work hours per airplane to accomplish the replacement, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of any necessary replacement of rivets is estimated to be \$180 per airplane.

Regulatory Impact

The regulations proposed herein would not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient

federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this 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) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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 removing amendment 39-9544 (61 FR 11534, March 21, 1996), and by adding a new airworthiness directive (AD), to read as follows:

British Aerospace Airbus Limited (Formerly British Aerospace Commercial Aircraft Limited, British Aerospace Aircraft Group): Docket 98-NM-27-AD. Supersedes AD 96-06-07, Amendment 39-9544.

Applicability: All Model BAC 1-11 200 and 400 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not

been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent reduced structural integrity of the flight deck frame and adjacent fuselage structure, accomplish the following:

(a) Perform a detailed visual inspection to detect cracks of the top sill joint strap at station 82.5, of the frame at station 113, and of the frame at station 160.5 (left-hand side only) between stringers 13 and 15; and an eddy current inspection to detect cracks of the top sill members at station 82.5. Perform these inspections in accordance with British Aerospace Alert Service Bulletin 53-A-PM5994, Issue 3, dated April 8, 1993; Issue 4, dated August 23, 1996; or Issue 5, dated April 18, 1997; at the time specified in paragraph (a)(1) or (a)(2) of this AD, as applicable. After the effective date of this AD, only Issue 5 shall be used.

(1) For airplanes operating at a maximum cabin differential pressure not exceeding 7.5 pounds per square inch (psi): Perform the inspections at the later of the times specified in paragraphs (a)(1)(i) and (a)(1)(ii) of this AD. Thereafter, repeat these inspections at intervals not to exceed 5,000 landings or 7,500 hours time-in-service, whichever occurs first.

(i) Prior to the accumulation of 20,000 total landings. Or

(ii) Within 1,200 landings or 12 months after April 22, 1996 (the effective date of AD 96-06-07, amendment 39-9544), whichever occurs later.

(2) For airplanes operating at a maximum cabin differential pressure greater than 7.5 psi, but not exceeding 8.2 psi, including those airplanes having incorporated British Aerospace Airbus Limited Modification PM3187: Perform the inspections at the later of the times specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this AD. Thereafter, repeat these inspections at intervals not to exceed 3,500 landings or 5,250 hours time-in-service, whichever occurs first.

(i) Prior to the accumulation of 14,000 total landings. Or

(ii) Within 800 landings or 12 months after April 22, 1996, whichever occurs later.

Note 2: British Aerospace Airbus Limited Modification PM3187 increases the cabin differential pressure from the normal 7.5 psi to 8.2 psi. If Modification PM3187 has been incorporated on the airplane, that airplane is considered to be subject to the requirements of paragraph (a)(2) of this AD.

(b) Concurrent with the next detailed visual inspection performed after the effective date of this AD in accordance with paragraph (a) of this AD, perform a one-time visual inspection to determine the type of fasteners installed in the two hole locations specified in Figure 2 of British Aerospace Alert Service Bulletin 53-A-PM5994, Issue 5, dated April 18, 1997.

(1) If bolts are found installed in the two hole locations specified in Figure 2 of the alert service bulletin: Prior to further flight, remove the bolts and perform the eddy current inspection specified in paragraph (a) of this AD to detect cracking of the top sill

members at station 82.5, in accordance with the alert service bulletin. Repeat the detailed visual and eddy current inspections thereafter as specified in paragraph (a)(1) or (a)(2) of this AD, as applicable; in accordance with the alert service bulletin.

(i) If no cracking is detected, prior to further flight, reinstall the bolts.

(ii) If any cracking is detected, prior to further flight, repair in accordance with paragraph (c) of this AD, and reinstall the bolts.

(2) If rivets are found installed in the two hole locations specified in Figure 2 of the alert service bulletin: Prior to further flight, remove the rivets, and perform the eddy current inspection specified in paragraph (a) of this AD to detect cracking of the top sill members at station 82.5, in accordance with the alert service bulletin. Repeat the detailed visual and eddy current inspections thereafter as specified in paragraph (a)(1) or (a)(2) of this AD, as applicable; in accordance with the alert service bulletin.

(i) If no cracking is detected, prior to further flight, oversize the holes specified in Figure 2 of the alert service bulletin, and install bolts in place of the rivets.

(ii) If any cracking is detected, prior to further flight, repair in accordance with paragraph (c) of this AD, oversize the holes specified in Figure 2 of the alert service bulletin, and install bolts in place of the rivets.

Note 3: As specified in British Aerospace Alert Service Bulletin 53-A-PM5994, Issue 4, dated August 23, 1996, and Issue 5, dated April 18, 1997, the procedures for the eddy current inspection necessitate removal of the bolts from the holes specified in Figure 2 of the alert service bulletin.

(c) If any crack is found during any inspection required by paragraph (a) or (b) of this AD, prior to further flight, accomplish the requirements of paragraph (c)(1), (c)(2), or (c)(3) of this AD, as applicable.

(1) For cracking of the joint strap, doubler, or angle at the sill joint at station 82.5: Replace the cracked part with a new part in accordance with British Aerospace Alert Service Bulletin 53-A-PM5994, Issue 3, dated April 8, 1993; Issue 4, dated August 23, 1996; or Issue 5, dated April 18, 1997. After the effective date of this AD, only Issue 5 shall be used.

(2) For cracking of the frame at station 113: Repair in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, or the Civil Aviation Authority (or its delegated agent).

(3) For cracking of the frame at station 160.5: Repair in accordance with the Structural Repair Manual, as specified in British Aerospace Alert Service Bulletin 53-A-PM5994, Issue 3, dated April 8, 1993; Issue 4, dated August 23, 1996; or Issue 5, dated April 18, 1997. After the effective date of this AD, only Issue 5 shall be used.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators

shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on December 30, 1998.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 99-180 Filed 1-5-99; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-ANE-76-AD]

RIN 2120-AA64

Airworthiness Directives; International Aero Engines AG (IAE) V2500-A1 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to International Aero Engines (IAE) V2500-A1 series turbofan engines. This proposal would require initial and repetitive inspections of certain High Pressure Turbine (HPT) stage 1 and stage 2 disks utilizing an improved ultrasonic method when the disks are exposed during a normal shop visit, and if a subsurface anomaly is found, removal from service and replacement with a serviceable part. This proposal is prompted by the results of a stage 1 HPT disk fracture investigation which has identified a population of HPT stage 1 and 2 disks that may have subsurface anomalies formed during a forging process. The actions specified by the proposed AD are intended to prevent