Proposed Rules

Federal Register
Vol. 61, No. 203
Friday, October 18, 1996

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. 95–NM–258–AD]

RIN 2120–AA64

Airworthiness Directives; Beech (Raytheon) Model Hawker 800 and 1000 and Model DH/BH/HS/BAe 125 Series Airplanes (Including Major Variants C29A, U125, and U125A Series Airplanes)

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the supersedure of an existing airworthiness directive (AD), applicable to certain Beech (Raytheon) Model BAe 125–1A through-1000A series airplanes and Model Hawker 800 and 1000 airplanes, that currently requires repetitive inspections to detect fatigue cracking of the sidestay jack pivots of the main landing gear (MLG), and replacement of the sidestay jack pivot assemblies with new assemblies. This action would add a requirement to replace the sidestay jack pivot assemblies with new, improved assemblies; when accomplished, this replacement would terminate the inspection requirements of the AD. This proposal also would expand the applicability of the existing AD to include additional airplanes. The actions specified by this proposed AD are intended to prevent fatigue fracturing of the sidestay jack pivots of the MLG, which could result in the inability of the MLG to deploy and a consequent wheels-up landing.

DATES: Comments must be received by November 26, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 95–NM–258–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 Raytheon Aircraft Company, Manager Service Engineering, Hawker Customer Support Department, P.O. Box 85, Wichita, Kansas 67201–0085. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Tim Backman, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 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 95–NM–258–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–103, Attention: Rules Docket No. 95–NM–258–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

On December 21, 1994, the FAA issued AD 94–26–12, amendment 39–9107 (60 FR 330, January 4, 1995), applicable to Beech (Raytheon) Model BAe 125–1A through-1000A series airplanes and Model Hawker 800 and 1000 airplanes equipped with main landing gear (MLG) sidestay assemblies on which Post-Mod 252091 steel jack pivots have been installed. That AD requires a detailed visual inspection to detect cracking of the sidestay jack pivots of the MLG and repair, if necessary. In addition, that AD requires eventual replacement of the sidestay jack pivot assemblies with new assemblies. The critical fatigue load on the sidestay jack pivot occurs during the deployment and retraction of the MLG. That action was prompted by a report of fracturing of a jack pivot, which resulted in the inability of the MLG to deploy. The requirements of that AD are intended to prevent a wheels-up landing.

Actions Since Issuance of Previous Rule

Since the issuance of that AD, the manufacturer has issued Service Bulletin SB 32–233, Revision 2, dated July 28, 1995, which adds certain major variant airplanes to the effectivity listing of the service bulletin. Because these variant airplanes perform a greater number of deployments and retractions of the MLG than other airplanes, the sidestay jack pivots are exposed to more fatigue cycles per flight. Consequently, the service bulletin recommends a reduction of the inspection threshold and repetitive inspection intervals for these airplanes until replacement with new, improved sidestay jack pivot assemblies is accomplished.

This service bulletin also describes a schedule to replace the sidestay jack pivots with new, improved assemblies for certain airplanes on which Modification 252091 (the installation of a steel pivot with an eccentric bush) was installed after June 23, 1994. Those assemblies installed after June 23, 1994, were manufactured with a defective

surface finish. Identification of the installation date of the assembly is the only way to determine if the assembly was manufactured with the defective surface finish.

Additionally, the manufacturer has issued Service Bulletin SB. 32–233–3597A, dated July 28, 1995. This service bulletin describes procedures for replacement of the sidestay jack pivot assembly with a new, improved assembly. The new sidestay jack pivot assembly has an increased radii and local shot peening to further improve the fatigue performance. Accomplishment of this replacement eliminates the need for repetitive inspection and replacement of the sidestay jack pivot assemblies with the existing assemblies.

The Civil Aviation Authority (CAA) classified both of these service bulletins as mandatory in order to assure the continued airworthiness of these airplanes in the United Kingdom.

FAA's Conclusions

These airplane models are manufactured in the United Kingdom 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. 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.

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 94–26–12 to continue to require inspections to detect cracking of the sidestay jack pivots of the MLG for certain airplanes until the replacement of the sidestay jack pivot assemblies with new, improved assemblies is accomplished. The proposed AD would expand the applicability of the existing AD to include additional airplanes. It also would require installation of new, improved sidestay jack pivot assemblies, which would constitute terminating action for the inspection requirements of this AD. The actions would be required to be accomplished in accordance with the service bulletins described previously.

Differences Between AD 94–26–12 and the Proposed Rule

Operators should note that, although AD 94–26–12 permits continued flight with a single crack less than a certain length, and requires repetitive inspections not to exceed every 100 landings, this proposed AD would require that all cracked sidestay jack pivot assemblies be replaced with the new, improved assemblies within a specific amount of time. The maximum limits for cracking allowed, as recommended in the Beech (Raytheon) service bulletin (0.3 inch or 0.12 inch, depending on the crack location), are at the limits of what can be reliably detected using an ''on-airplane'' visual inspection procedure. The FAA finds that the safety implications and consequences associated with cracking of the sidestay jack pivot prohibit continued flight past 100 landings after the detection of any cracking. Additionally, the sidestay jack pivot assembly is easily replaced with the new, improved assembly, and the replacement will terminate the requirements for repetitive inspections of the existing sidestay jack pivot assemblies.

Clarification of Applicability

Beech (Raytheon) Model BAe 125 series 800B and 1000B airplanes are similar in design to the airplanes affected by this proposed rule; however, those models have not yet been certificated for operation in the United States. Therefore, a note has been included in this proposed rule to clarify this and to suggest that airworthiness authorities of countries in which Model BAe series 800B and 1000B are approved for operation consider adopting corrective action that is similar to that proposed in this AD action.

Cost Impact

There are approximately 550 Beech (Raytheon) Model BAe 125–1 through 1000A series airplanes and Model Hawker 1000 airplanes of U.S. registry that would be affected by this proposed AD.

The actions that are currently required by AD 94–26–12 take approximately 6 work hours per airplane to accomplish, at an average labor rate of $60 per work hour. The manufacturer is currently supplying required parts at no cost to the operators. Based on these figures, the cost impact on U.S. operators of the actions currently required is estimated to be $198,000, or $360 per airplane, per inspection cycle.

The new (replacement) actions that are proposed in this AD action would take approximately 4 work hours per airplane to accomplish, at an average labor rate of $60 per work hour. Required parts would cost approximately $1,200 per airplane. Based on these figures, the cost impact on U.S. operators of the proposed requirements of this AD is estimated to be $792,000, or $1,440 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.

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 39–9107 (60 FR 330, January 4, 1995), and by adding a new airworthiness directive (AD), to read as follows:

Beech (Raytheon): Docket 95–NM–258–AD. Supersedes AD 94–26–12, Amendment 39–9107.

Applicability: Model Hawker 800 and 1000 and Model DH/BH/HS/BAe 125 series airplanes (including major variants C29A, U125, and U125A series airplanes); equipped with main landing gear (MLG) sidestay assemblies on which Post-Mod 252091 steel jack pivots have been installed; 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 otherwise 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 (f) 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.

Note 2: Beech (Raytheon) Model BAe 125 series 800B and BAe 125–1000B airplanes are similar in design to the airplanes that are subject to the requirements of this AD and, therefore, also may be subject to the unsafe condition addressed by this AD. However, as of the effective date of this AD, those models are not type certificated for operation in the United States. Airworthiness authorities of countries in which the Model BAe 125 series 800B and BAe 125–1000B airplanes are approved for operation should consider adopting corrective action, applicable to those models, that is similar to the corrective action required by this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent the inability of the MLG to deploy and a consequent wheels-up landing, accomplish the following:

Note 3: Paragraph (a) of this AD restates the requirements of AD 94–26–12. As allowed by the phrase, ''unless accomplished previously,'' if the initial inspection required by that AD has been accomplished previously, paragraph (a) of this AD does not require that initial inspection to be repeated.

(a) For Beech (Raytheon) Model Hawker 800 and 1000 and Model DH/BH/HS/BAe 125–1A through—1000A series airplanes equipped with MLG sidestay assemblies on which Post-Mod 252091 steel jack pivots have been installed, except for airplanes as specified in paragraph (d) of this AD: Perform a detailed visual inspection, using a 10X magnifier, to detect cracking of the sidestay assembly jack pivot of the left and right MLG, in accordance with Raytheon Corporate Jets Service Bulletin SB 32–233, dated June 24, 1994; Revision 1, dated July 8, 1994; or Revision 2, dated July 28, 1995; at the latest of the times specified in paragraph (a)(1), (a)(2), or (a)(3) of this AD.

(1) Within 28 days after February 3, 1995 (the effective date of AD 94–26–12, Amendment 39–9107); or

(2) Prior to the accumulation of 3,000 total landings on the sidestay assembly since new; or

(3) Prior to the accumulation of 1,000 total landings since overhaul of the sidestay assembly.

(b) For Beech (Raytheon) Model Hawker 800 and 1000 and Model DH/BH/HS/BAe 125–1A through –1000A series airplanes equipped with MLG sidestay assemblies on which Post-Mod 252091 steel jack pivots (part numbers 25UM1199A 25UM1229A, and 258UM87–1A) have been installed prior to June 24, 1994, except for airplanes as specified in paragraph (d) of this AD:

(1) If no cracks are found during the inspection required by paragraph (a) of this AD, and the sidestay assembly has been overhauled prior to the accomplishment of the inspection, accomplish the requirements of paragraphs (b)(1) and (b)(2) of this AD at the times specified.

(i) Repeat the inspection specified in paragraph (a) of this AD within 1,000 landings after accomplishing the initial inspection, and thereafter at intervals not to exceed 1,000 landings, in accordance with Raytheon Corporate Jets Service Bulletin SB 32–233, dated June 24, 1994; Revision 1, dated July 8, 1994; or Revision 2, dated July 28, 1995.

(ii) Prior to the accumulation of 4,000 total landings on the jack pivot assembly since the sidestay assembly was new or last overhauled, or within 300 landings after the effective date of this AD, whichever occurs later: Replace the jack pivot assembly with a new, improved assembly, in accordance with Raytheon Corporate Jets Service Bulletin SB.32–233–3597A, dated July 28, 1995. Accomplishment of this replacement constitutes terminating action for the inspection requirements of this AD.

(2) If no cracks are found during the inspection required by paragraph (a) of this AD, and the sidestay assembly has not been overhauled prior to accomplishment of that inspection: Prior to the accumulation of 4,000 total landings on the jack pivot assembly, or within 300 landings after the effective date of this AD, whichever occurs later, replace the jack pivot assembly with a new, improved assembly, in accordance with Raytheon Corporate Jets Service Bulletin SB 32–233, Revision 2, dated July 28, 1995. Accomplishment of this replacement constitutes terminating action for the inspection requirements of this AD.

(c) For Beech (Raytheon) Model Hawker 800 and 1000 and Model DH/BH/HS/BAe 125–1A through –1000A series airplanes equipped with MLG sidestay assemblies on which Post-Mod 252091 steel jack pivots (part numbers 25UM1199A 25UM1229A, and 258UM87–1A) have been installed on June 24, 1994, or later, except for airplanes as specified in paragraph (d) of this AD: Replace the jack pivot assembly with a new, improved assembly in accordance with Raytheon Corporate Jets Service Bulletin SB.32–233–3597A, dated July 28, 1995, at the later of the times specified in paragraph (c)(1) or (c)(2) of this AD. Accomplishment of this replacement constitutes terminating action for the inspection requirements of this AD.

(1) Prior to the accumulation of 2,000 total landings since installation of Post Mod 252091 steel jack pivots. Or

(2) Within 1,000 landings after the effective date of this AD.

(d) For all Beech (Raytheon) Model BAe 125 Series 800A C29A, U125, and Hawker 800 U125A airplanes on which Post Mod 252091 steel jack pivots (part numbers 25UM1199A, 25UM1229A, and 258UM87–1A) have been installed: Accomplish paragraphs (d)(1) and (d)(2) of this AD at the times specified in those paragraphs.

(1) Perform a detailed visual inspection, using a 10X magnifier, to detect cracking of the sidestay assembly jack pivot of the left- and right-hand MLG, in accordance with Raytheon Corporate Jets Service Bulletin SB 32–233, Revision 2, dated July 28, 1995, at the later of the times specified in paragraph (d)(1)(i) or (d)(1)(ii) of this AD. Thereafter, repeat this inspection at intervals not to exceed 200 landings, until the requirements of paragraph (d)(2) of this AD are accomplished.

(i) Prior to the accumulation of 1,200 total landings since the installation of a steel jack pivot (Post Mod 252091). Or

(ii) Within 56 days or within 200 landings after the effective date of this AD, whichever occurs first.

(2) Prior to the accumulation of 2,000 total landings on the jack pivot, or within 300 landings after the effective date of this AD, whichever occurs later: Replace the sidestay jack pivot assembly with a new, improved assembly (part numbers 25UM1335–1A and 25–8UM173–1A) in accordance with Raytheon Corporate Jets Service Bulletin SB.32–233–3597A, dated July 28, 1995. Accomplishment of this replacement constitutes terminating action for the inspection requirements of this AD.

(e) If any crack is detected during any inspection required by this AD, replace the sidestay jack pivot assembly with a new, improved assembly (part numbers 25UM1335–1A and 25–8UM173–1A) in accordance with Raytheon Corporate Jets Service Bulletin SB.32–233–3597A, dated July 28, 1995, at the time specified in paragraph (f)(1) or (f)(2) of this AD, as applicable. Accomplishment of this replacement constitutes terminating action for the inspection requirements of this AD.

(1) For airplanes on which a crack is detected that does not exceed the limits specified in the service bulletin, replace the assembly at the later of the times specified in paragraph (e)(1)(i) or (e)(1)(ii) of this AD.

(i) Within 100 landings after the effective date of this AD. Or

(ii) Within 100 landings after the initial detection of the cracking.

(2) For airplanes on which a crack is detected that exceeds the limits specified in the service bulletin, prior to further flight, replace the assembly in accordance with the service bulletin.

(f) 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, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

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

(g) 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 October 10, 1996.

S.R. Miller,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 96–26710 Filed 10–17–96; 8:45 am]

BILLING CODE 4910–13–U

---

14 CFR Part 39

[Docket No. 96–NM–51–AD]

RIN 2120–AA64

Airworthiness Directives; British Aerospace Model BAe 146 and Avro 146–RJ Series Airplanes

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 all British Aerospace Model BAe 146 and Avro 146–RJ series airplanes. This proposal would require modification of the left and right elevators, and replacement of the elevator spring with a stiffer spring. This proposal is prompted by reports indicating that water and ice have accumulated at the trailing edge of the left and right elevators; this accumulation can cause the elevators to become unbalanced, and oscillate or flutter. The actions specified by the proposed AD are intended to prevent this oscillation or flutter. Elevator oscillation, if not corrected, could result in reduced controllability of the airplane. Elevator flutter, if not corrected, could couple with the natural vibrations of the airplane, and result in loss of the airplane's structural integrity.

DATES: Comments must be received by November 25, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 96–NM–51–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 Regional Aircraft Limited, Avro International Aerospace Division, Customer Support, Woodford Aerodrome, Woodford, Cheshire SK7 1QR, England. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Tim Backman, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 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 96–NM–51–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–103, Attention: Rules Docket No. 96–NM–51–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom, recently notified the FAA that an unsafe condition may exist on all British Aerospace Model BAe 146 and Avro 146–RJ series airplanes. The CAA advises that it has received reports indicating that water and ice have accumulated at the trailing edge of the left and right elevators; this accumulation can cause the elevators to become unbalanced, and to oscillate or flutter. Reduced controllability is a consequence of steady elevator oscillation which could cause uncommanded pitch (rising and falling movements) of the airplane. Reduced structural integrity of the airplane can occur if divergent elevator flutter is coupled with natural vibrations of the airplane.

Explanation of Relevant Service Information

British Aerospace has issued Service Bulletin SB.55–014–01510A, dated December 15, 1995, which describes procedures for modification of the left and right elevators by installing mass balance weights at the leading edge of the horn, forward of the hinge line, to counteract the effect of accumulated water and ice on the trailing edge of the elevator.

The manufacturer also has issued British Aerospace Service Bulletin SB.27–150–01510B, dated December 15, 1995, which describes additional procedures for modification of the left and right elevators by replacing the elevator spring with a stiffer spring. With the addition of mass balance weights to the elevators, a stiffer spring holds down the increased weight, and makes it easier for the pilot to conduct full movement and free movement checks of the elevators when the airplane is on the ground.

The CAA classified both service bulletins as mandatory and issued British airworthiness directive 002–12–95, dated January 31, 1996, in order to assure the continued airworthiness of these airplanes in the United Kingdom.

These airplane models are manufactured in the United Kingdom 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. Pursuant to this bilateral airworthiness agreement, the CAA has