DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001–NM–35–AD]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 777 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 Boeing Model 777 series airplanes, that currently requires repetitive inspections to detect cracking of the coveskin on the outboard leading edge slats, and corrective actions, if necessary. The existing AD also provides for an optional modification that significantly increases the repetitive inspection interval. This action would expand the applicability of this AD by mandating the currently required inspections, and corrective actions, if necessary, for additional airplanes. Also, for airplanes on which the optional modification has been accomplished, this action would require a new one-time inspection for undersized seal inserts in the spanwise bulb seals on certain slats, and replacement of seal assemblies with new assemblies, if necessary. These actions are necessary to detect and correct cracking or missing pieces of the coveskin, or undersized seal inserts installed in the spanwise bulb seals, on the outboard leading edge slats on the wings, which could result in skin separation or structural damage to the leading edge slats and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by January 14, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2001–NM–35–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. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: *9-anm-nprmcomment@faa.gov.* Comments sent via fax or the Internet must contain ''Docket No. 2001–NM–35–AD'' in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Stan Wood, Aerospace Engineer, Airframe Branch, ANM–120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2772; fax (425) 227–1181.

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 action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.,* reasons or data) for each request.

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 action must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket Number 2001–NM–35–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. 2001–NM–35–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

On September 14, 2000, the FAA issued AD 2000–19–08, amendment 39–11909 (65 FR 57282, September 22, 2000), applicable to certain Boeing Model 777 series airplanes, to require repetitive detailed visual inspections to detect cracking of the coveskin on the outboard leading edge slats, and corrective actions, if necessary. That AD also provides for an optional modification that significantly increases the repetitive inspection interval. That action was prompted by findings of increased vibration of the coveskins due to air leaking and resonating within the cavity between the fixed leading edge and the coveskin; the vibration can result in fatigue cracking and high fatigue loads. The requirements of that AD are intended to detect and correct cracking and/or missing pieces of the coveskin on the outboard leading edge slats on the wings, which could result in skin separation or structural damage to the leading edge slats and consequent reduced controllability of the airplane.

Actions Since Issuance of Previous Rule

In the preamble to AD 2000–19–08, the FAA indicated that the actions required by that AD were considered ''interim action'' and that further rulemaking action was being considered to revise the applicability of that AD to include additional airplanes. We now have determined that further rulemaking action is indeed necessary, and this proposed AD follows from that determination. Specifically, we have determined that the modification installed during production on Model 777 series airplanes with line number 266 and subsequent does not prevent the cracking of the coveskin on the outboard leading edge slats; it only improves the fatigue life of those parts. Therefore, we find it necessary to mandate that the inspections required by the existing AD be accomplished on all Boeing Model 777 series airplanes, including those manufactured in the future.

Also, since the issuance of AD 2000–19–08, we have received reports that certain kits supplied by the airplane manufacturer for the optional

modification described in that AD contained undersized seal inserts for slat numbers 4, 5, 10, and 11. The undersized seal inserts were made from raw material of an incorrect diameter. These undersized seal inserts would result in the slat being exposed to the same vibration of the coveskins, and the same consequent fatigue cracking and high fatigue loads, of an unmodified airplane. This condition, if not corrected, could result in skin separation or structural damage to the leading edge slats and consequent reduced controllability of the airplane.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 777–57A0034, Revision 5, dated January 25, 2001. (AD 2000–19–08 refers to Boeing Alert Service Bulletin 777–57A0034, Revision 2, dated November 19, 1998; Revision 3, dated May 4, 2000; and Revision 4, dated July 20, 2000; as appropriate sources of service information for required actions.) The procedures in Revision 5 of the service bulletin are similar to those in prior issues of the service bulletin. However, the service bulletin differs from the prior issues in these ways:

- The effectivity listing of Revision 5 includes airplanes with line numbers 266 and subsequent. These airplanes are identified as ''Group 3'' airplanes in the service bulletin. As explained previously, these airplanes are subject to the same repetitive inspections as other Model 777 series airplanes.
- For airplanes on which the optional modification has been accomplished in accordance with Revision 3 or 4 of the service bulletin, Part 5 of Revision 5 of the service bulletin describes procedures for a new one-time inspection for undersized seal inserts installed in the spanwise bulb seals on slat numbers 4, 5, 10, and 11. If undersized seal inserts are installed, Revision 5 specifies replacement of seal assemblies with new seal assemblies.
- Related to the new inspection in Part 5 of the service bulletin, the procedures for the optional modification in Part 4 of the service bulletin have been revised to include an inspection of the seal inserts to determine if they are the correct size.

Explanation of Changes to Requirements of AD 2000–19–08

The applicability statement of AD 2000–19–08 identifies airplanes with line numbers 1 through 265 inclusive. However, Revision 5 of the service bulletin lists the airplane with line number 1 as a Group 3 airplane because that airplane was modified during production like the other airplanes in Group 3. Therefore, line number 1 is not affected by the requirements of paragraph (a) of this proposed AD.

Also, paragraph (b) of AD 2000–19–08 states, ''The corrective actions include stop drilling the crack and performing detailed visual inspections, slat adjustment checks, and replacement of the slats.'' A reference to repairing the crack was omitted from this description. Therefore, for clarification, the description of corrective actions in paragraph (b) of this AD has been revised to read, ''The corrective actions include stop drilling and repairing the crack * * *.''

Paragraph (b) of AD 2000–19–08 stated an incorrect issue date (April 4, 2000) for Boeing Alert Service Bulletin 777–57A0034, Revision 3, dated May 4, 2000. In the ''Restatement of Requirements of AD 2000–19–08'' included in this proposed AD, paragraph (b) has been revised to refer to the correct date.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would supersede AD 2000–19–08 to continue to require repetitive detailed visual inspections to detect cracking of the coveskin on the outboard leading edge slats, and corrective actions, if necessary. The proposed AD also continues to provide for an optional modification that significantly increases the repetitive inspection interval. The proposed AD would expand the applicability of the existing AD by mandating the currently required inspections, and corrective actions, if necessary, for additional airplanes. Also, for airplanes on which the optional modification has been accomplished, the proposed AD would require a new one-time inspection for undersized seal inserts installed in the spanwise bulb seals on certain slats, and replacement of seal assemblies with new assemblies, if necessary. The actions would be required to be accomplished in accordance with Revision 5 of the service bulletin described previously, except as discussed below.

Differences Between Proposed Rule and Service Bulletin

Operators should note that, while the service bulletin refers only to an ''inspection'' for undersized seal inserts, this proposed AD would require a ''detailed visual inspection.'' The FAA has determined that the procedures in the service bulletin should be described as a detailed visual inspection. Note 2 of this proposed AD defines this type of inspection.

The service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions. However, this proposed AD would require the repair of those conditions to be accomplished in accordance with a method approved by the FAA.

Cost Impact

There are approximately 184 airplanes of the affected design in the worldwide fleet.

The detailed visual inspection for cracking specified in this proposed rule is currently required by AD 2000–19–08, which is applicable to approximately 81 airplanes of U.S. registry. Those inspections take approximately 7 work hours per airplane to accomplish, at an average labor rate of $60 per work hour. Based on the figures discussed above, the cost impact of the current requirements of that AD on U.S. operators is estimated to be $34,020, or $420 per airplane, per inspection cycle.

This proposed action would require accomplishment of the detailed visual inspection for cracking on approximately 33 additional airplanes of U.S. registry. Based on the figures discussed above, the new costs to U.S. operators that would be imposed by this AD are estimated to be $13,860.

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

Should an operator be required to accomplish the proposed new one-time inspection for undersized seal inserts, it would take approximately 2 work hours per airplane, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of this new inspection is estimated to be $120 per airplane.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

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 39–11909 (65 FR 57282, September 22, 2000), and by adding a new airworthiness directive (AD), to read as follows:

Boeing: Docket 2001–NM–35–AD. Supersedes AD 2000–19–08, Amendment 39–11909.

Applicability: All Model 777 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 (h)(1) 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 detect and correct cracking or missing pieces of the coveskin, or undersized seal inserts installed in the spanwise bulb seals, on the outboard leading edge slats on the wings, which could result in skin separation or structural damage to the leading edge slats and consequent reduced controllability of the airplane, accomplish the following:

Restatement of Requirements of AD 2000–19–08

Inspection

(a) For airplanes having line numbers 2 through 265 inclusive: At the applicable time specified by paragraph (a)(1) or (a)(2) of this AD, perform detailed visual inspections to detect cracking of the coveskin on the outboard leading edge slats of the left and right wings at slat numbers 1 through 6 inclusive, and 9 through 14 inclusive; in accordance with Boeing Alert Service Bulletin 777–57A0034, Revision 2, dated November 19, 1998; Revision 3, dated May 4, 2000; Revision 4, dated July 20, 2000, or Revision 5, dated January 25, 2001. Repeat the inspections thereafter at intervals not to exceed 100 flight cycles or 400 flight hours, whichever occurs first.

(1) For airplanes on which the repetitive inspections required by paragraph (a) of AD 99–04–19 HAVE been initiated prior to October 10, 2000 (the effective date of AD 2000–19–08, amendment 39–11909): Inspect at the earlier of the times specified by paragraphs (a)(1)(i) and (a)(1)(ii) of this AD.

(i) Within 350 flight cycles after the most recent inspection.

(ii) At the later of the times specified by paragraphs (a)(1)(ii)(A) and (a)(1)(ii)(B) of this AD.

(A) Within 100 flight cycles or 400 flight hours, whichever occurs first, after the most recent inspection.

(B) Within 30 days after October 10, 2000.

(2) For airplanes on which the repetitive inspections required by paragraph (a) of AD 99–04–19 have NOT been initiated prior to October 10, 2000: Inspect at the earlier of the times specified by paragraphs (a)(2)(i) and (a)(2)(ii) of this AD.

(i) Prior to the accumulation of 500 total flight cycles.

(ii) Prior to the accumulation of 2,000 total flight hours, or within 30 days after October 10, 2000, whichever occurs later.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: ''An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required.''

Corrective Action

(b) If any cracking is detected during any inspection required by paragraph (a) of this AD, prior to further flight, accomplish all applicable corrective actions specified by and in accordance with Boeing Alert Service Bulletin 777–57A0034, Revision 2, dated November 19, 1998; Revision 3, dated May 4, 2000; Revision 4, dated July 20, 2000; or Revision 5, dated January 25, 2001. The corrective actions include stop drilling and repairing the crack and performing detailed visual inspections, slat adjustment checks, and replacement of the slats. Where the alert service bulletin specifies to contact Boeing for appropriate Action Prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office, FAA. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD. After October 10, 2000, only Revision 4 or 5 of the alert service bulletin may be used.

Optional Modification

(c) Accomplishment of the actions specified by paragraphs (c)(1) and (c)(2) of this AD extends the repetitive inspection interval specified by paragraph (a) of this AD to 8,000 flight cycles.

(1) Install a seal insert into the spanwise bulb seals for the slats in accordance with Part 4 of Boeing Alert Service Bulletin 777–57A0034, Revision 3, dated May 4, 2000; Revision 4, dated July 20, 2000; or Revision 5, dated January 25, 2001.

(2) Within 750 days or 4,000 flight cycles, whichever occurs first, after installing the seal insert as specified by paragraph (c)(1) of this AD: Perform a detailed visual inspection of the interior structure of the coveskin at slat numbers 1 through 6 inclusive, and 9 through 14 inclusive, in accordance with Part 2 of the Accomplishment Instructions of the alert service bulletin.

New Requirements of This AD

Repetitive Inspections (Certain Airplanes)

(d) For airplanes having line numbers 1 and 266 and subsequent: Prior to the accumulation of 8,000 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later, perform a detailed visual inspection to detect cracking of the coveskin on the outboard leading edge slats of the left and right wings at slat numbers 1 through 6 inclusive, and 9 through 14 inclusive; in accordance with Boeing Alert Service Bulletin 777–57A0034, Revision 5, dated January 25, 2001. Repeat the inspection thereafter at intervals not to exceed 8,000 flight cycles.

Corrective Action

(e) If any cracking is detected during any inspection required by paragraph (d) of this AD, prior to further flight, accomplish all applicable corrective actions specified by and in accordance with Boeing Alert Service Bulletin 777–57A0034, Revision 5, dated January 25, 2001. The corrective actions include stop drilling and repairing the crack and performing detailed visual inspections, slat adjustment checks, and replacement of the slats. Where the alert service bulletin specifies to contact Boeing for appropriate action: Prior to further flight, repair in

accordance with a method approved by the Manager, Seattle ACO. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

One-Time Inspection—Undersized Seal Inserts

(f) For airplanes on which the optional modification described in paragraph (c) of this AD was accomplished prior to the effective date of this AD in accordance with Part 4 of Boeing Alert Service Bulletin 777–57A0034, Revision 3, dated May 4, 2000; or Revision 4, dated July 20, 2000: Within 500 flight cycles after the effective date of this AD, do a one-time detailed visual inspection for undersized seal inserts installed in the spanwise bulb seals of slat numbers 4, 5, 10, and 11, in accordance with Part 5 of Boeing Alert Service Bulletin 777–57A0034, Revision 5, dated January 25, 2001.

Note 3: An inspection accomplished prior to the effective date of this AD in accordance with Boeing Telegraphic Message M–7200–00–02516, ''Incorrect Insert Part Numbers in SB 777–57A0034,'' dated October 13, 2000, is considered acceptable for compliance with paragraph (f) of this AD.

(1) For any seal insert of the correct size as specified in Revision 5 of the service bulletin: No further action is required by this paragraph.

(2) For any undersized seal insert as specified in Revision 5 of the service bulletin, or for any seal insert that cannot be conclusively determined to be of correct size: Prior to further flight, replace the existing seal assembly with a new seal assembly, in accordance with Revision 5 of the service bulletin.

Spares

(g) As of the effective date of this AD, no one may install a seal insert into the spanwise bulb seals of slat numbers 4, 5, 10, and 11, unless it is inspected in accordance with Part 4 of Boeing Alert Service Bulletin 777–57A0034, Revision 5, dated January 25, 2001, and found to be of correct size.

Alternative Methods of Compliance

(h)(1) 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, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 99–04–19, amendment 39–11044, are approved as alternative methods of compliance with paragraph (b) of this AD.

(3) Alternative methods of compliance, approved previously in accordance with AD 2000–19–08, amendment 39–11909, are approved as alternative methods of compliance with corresponding requirements of this AD.

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

Special Flight Permits

(i) 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 November 21, 2001.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01–29600 Filed 11–27–01; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001–NM–186–AD]

RIN 2120–AA64

Airworthiness Directives; BAE Systems (Operations) Limited Model BAe 146 Series Airplanes and Model 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 certain BAE Systems (Operations) Limited Model BAe 146 and Avro 146–RJ series airplanes. This proposal would require modifying the engine start circuit. This action is necessary to prevent overheating of the soft start resistor of the engine start circuit, which could result in smoke and fumes in the cabin and consequent injury to passengers and crew. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by December 28, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2001–NM–186–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: *9-anm-nprmcomment@faa.gov*. Comments sent via fax or the Internet must contain ''Docket No. 2001–NM–186–AD'' in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–1175; 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 action may be changed in light of the comments received.

Submit comments using the following format:

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Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to