DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 96-NM-25-AD; Amendment 39-9783; AD 96-21-06]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.
ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing 767 series airplanes, that currently requires inspections and various follow-on actions to detect cracking and corrosion of the aft trunnion of the outer cylinder of the main landing gear (MLG). That action also provides for the optional termination of the inspections by repairing the outer cylinder and installing new aft trunnion bushings. That AD was prompted by reports of failure of several MLG due to fracture of the aft trunnion outer cylinder. This amendment requires operators to implement the previously optional terminating action. The actions specified by this AD are intended to prevent the collapse of the MLG due to stress corrosion cracking of the aft trunnion of the outer cylinder.

DATES: Effective November 29, 1996.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 29, 1996.

The incorporation by reference of certain other publications listed in the regulations was approved previously by the Director of the Federal Register as of February 16, 1996 (61 FR 3552, February 1, 1996).

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: James G. Rehrl, Aerospace Engineer, Airframe Branch, ANM–120S, Seattle Aircraft Certification Office, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2783; fax (206) 227–1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 96-03-02 R1, amendment 39-9526 (61 FR 7694, February 29, 1996), which is applicable to certain Boeing Model 767 series airplanes, was published in the Federal Register on May 14, 1996 (61 FR 24250). The action proposed to supersede AD 96–03–02 R1 to continue to require various inspections and various followon actions to detect cracking and corrosion of the aft trunnion of the outer cylinder of the MLG. The action also proposed to require repair of the outer cylinder and replacement of the bushings in the aft trunnion and crossbolt of the MLG with new bushings.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for the Proposed Rule

Two commenters support the proposal.

Request to Limit the Applicability of the AD

One commenter, the manufacturer, requests that the applicability of the AD be revised to reflect line numbers 1 through 605, instead of line numbers 1 through 609. The manufacturer states that line numbers 606 through 609 were reworked on the production line to incorporate the terminating action specified by the proposed AD.

The FAA concurs, and the applicability of the final rule has been revised accordingly.

Request to Refer to the Revised CMM

The manufacturer states that the current wording of the proposed rule indicates that the Component Maintenance Manual (CMM) contains only one acceptable configuration for certain associated procedures; specifically, that of plugging the aft trunnion lubrication fitting. The manufacturer states that the CMM has been revised since the issuance of the proposed rule and now includes another acceptable configuration. The alternative configuration entails not plugging the aft trunnion lubrication fitting. The manufacturer, therefore, requests that the proposed rule be revised to reflect the inclusion of both configurations in the CMM.

The FAA concurs. The FAA considers that either of the two configurations specified by the CMM is an acceptable

configuration, and has revised NOTE 4 of the final rule, accordingly.

Request to Delete 5 and ½ year Compliance Time for Category 3 Airplanes

One commenter notes that the compliance time for repair/replacement for Category 3 airplanes, as specified in paragraph (e)(1) of the proposed rule, indicates that those actions are to be accomplished "prior to the accumulation of 5 and $^{1}\!/_{2}$ years since the MLG outer cylinders were new or last overhauled, or within 18 months after the effective date of the AD." However, the commenter points out that, since the age of the outer cylinders are determined from the date of February 16, 1996, there will never be a situation in which a Category 3 cylinder will reach 5 and ½ years of age within 18 months from the effective date of the final rule. Therefore, the commenter requests that reference to the 5 and 1/2year compliance time be deleted.

The FAA concurs, and has revised paragraph (e)(1) of the final rule accordingly.

Request to Add Requirements for Follow-on Actions

One commenter notes that the compliance time for repetitive inspections specified in paragraph (a) of the proposal requires inspections at intervals specified in Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995. The commenter states that the proposed compliance time (of within 18 months after the effective date of the AD) for the terminating action required by paragraph (e) of this AD would permit a period of time (approximately 5 to 6 months) in which Category 3 airplanes would not be required to perform any inspections. Therefore, the commenter requests that the proposed rule be revised to require certain follow-on actions until the terminating action required by paragraph (e) of the proposed rule is accomplished.

The FAA does not concur. Two other AD's [namely, AD 95–19–10, amendment 39–9372 (60 FR 47689, September 14, 1995); and AD 95–20–51, amendment 39–9398 (60 FR 53109, October 12, 1995)] currently exist that require similar inspections to detect cracking and corrosion and certain other follow-on actions of the aft trunnion of the outer cylinder of the MLG. The FAA has determined that the subject unsafe condition will be positively addressed by those actions in the interim until the terminating action of this AD is accomplished. Therefore, the FAA finds

that it is unnecessary to add additional inspection requirements in this AD.

Request to Reference Later Revisions of Cited Service Bulletins

The manufacturer stated that it has revised Boeing Service Bulletin 767–32A0151 and Boeing Service Bulletin 767–32A0148 to provide further clarification of the inspection and modification procedures. Therefore, the manufacturer requests that the FAA refer to these later revisions as being acceptable methods of compliance with the AD.

The FAA concurs. The FAA has reviewed and approved Revision 1 of both service bulletins, each dated October 10, 1996, and has revised the AD to cite these revisions as an additional source of service information.

Request to Correct Referenced AD Number

One commenter requests that the reference to "AD 93–03–02 R1" in paragraph (h)(2) of the proposed rule be corrected to read "AD 96–03–02 R1." The FAA has noted this typographical error and has revised paragraph (h)(2) of the final rule accordingly.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 605 Boeing Model 767 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 200 airplanes of U.S. registry will be affected by this proposed AD.

The actions that are currently required by AD 96–03–02 R1, and retained in this AD, take approximately 34 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact on U.S. operators of the actions currently required is estimated to be \$408,000, or \$2,040 per airplane.

The new actions that are required by this AD action will take approximately 218 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$9,510 per airplane. Based on these figures, the cost impact on U.S. operators of the requirements of

this AD is estimated to be \$4,518,000 or \$22,590 per airplane.

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

Regulatory Impact

The regulations adopted herein will 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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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 39–9526 (61 FR 7694, February 29, 1996), and by adding

a new airworthiness directive (AD), amendment 39–9783, to read as follows:

96–21–06 Boeing: Amendment 39–9783. Docket 96–NM–25–AD. Supersedes AD 96–03–02 R1, Amendment 39–9526.

Applicability: Model 767 series airplanes having line numbers 001 through 605 inclusive, on which the terminating action required by paragraph (e) of this AD has not been accomplished; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise 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 (g) 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 the collapse of the main landing gear (MLG) due to stress corrosion cracking of the aft trunnion of the outer cylinder, accomplish the following:

(a) Perform the inspections described in paragraph III, Accomplishment Instructions, of Boeing Alert Service Bulletin 767-32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996, to detect cracking and corrosion of the aft trunnion of the outer cylinder of the MLG at the time specified in paragraph (a)(1), (a)(2), or (a)(3) of this AD, as applicable. These inspections are to be accomplished in accordance with Figure 1 of the alert service bulletin. Repeat these inspections thereafter at the intervals specified in that alert service bulletin. To determine the category in which an airplane falls, the age of the outer cylinder of the MLG is to be calculated as of February 16, 1996, (the effective date of AD 96-03-02 R1, amendment 39-9526). For airplanes on which the age of the right MLG differs from the age of the left MLG, an operator may place the airplane into a category that is the higher (numerically) of the two categories to ease its administrative burden, and to simplify the recordkeeping requirements imposed by this AD. Once the category into which an airplane falls is determined, operators must obtain approval from the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, to move that airplane into another category.

Note 2: The broken (dash) lines used in Figure 1 of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, and Revision 1, dated October 10, 1996, denote "go to" actions for findings of discrepancies detected during any of the inspections required by this AD.

Note 3: Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, and Revision 1, dated October 10, 1996, refer to

Boeing Alert Service Bulletin 767–32A0148, dated December 21, 1995, and Revision 1, dated October 10, 1996, for procedures to repair the outer cylinder and replace the bushings in the outer cylinder of the MLG with new bushings.

(1) For airplanes identified as Category 3 in paragraph I.C. of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996: Perform the initial inspections within 30 days after February 16, 1996 (the effective date of AD 96–03–02 R1, amendment 39–9526)

(2) For airplanes identified as Category 2 in paragraph I.C. of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996: Perform the initial inspections within 90 days after February 16, 1996.

(3) For airplanes identified as Category 1 in paragraph I.C. of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996: Perform the initial inspections prior to the accumulation of 2–½ years since the MLG outer cylinder was new or last overhauled, or within 150 days after February 16, 1996, whichever occurs later.

(b) If no cracking or corrosion is detected during the inspections required by paragraph (a) of this AD, accomplish the follow-on actions described in the Boeing Alert Service Bulletin 767–32A0151, November 30, 1995, or Revision 1, dated October 10, 1996, at the time specified in the alert service bulletin. These follow-on actions are to be accomplished in accordance with that alert service bulletin.

(c) If any cracking is detected during the inspections required by paragraph (a) of this AD, prior to further flight, replace the outer cylinder with a new or serviceable outer cylinder in accordance with Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996.

(d) If any corrosion is detected during the inspections required by paragraph (a) of this AD, accomplish the follow-on actions at the time specified in the "Corrosion Flowchart," in Figure 1 of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996. The follow-on actions are to be accomplished in accordance with that alert service bulletin.

(e) At the time specified in either paragraph (e)(1) or (e)(2), as applicable, repair the outer cylinder and replace the bushings in the aft trunnion and crossbolt of the MLG with new bushings, in accordance with Boeing Alert Service Bulletin 767–32A0148, dated December 21, 1995, or Revision 1, dated October 10, 1996. Accomplishment of this repair and replacement constitutes terminating action for this AD, and for the requirements of AD 95–19–10, amendment 39–9372; and AD 95–20–51, amendment 39–9398.

Note 4: Boeing Alert Service Bulletin 767–32A0148 refers to Component Maintenance Manual (CMM) 32–11–40 for certain procedures. Operators should note that this AD does not require that one or the other of the two configurations/actions be accomplished in order to terminate the

requirements of this AD, AD 95–19–10, or AD 95–20–51. The use of either configuration specified in the CMM is considered to be the operator's prerogative.

(1) For airplanes identified as Category 3 in paragraph I.C. of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996: Accomplish the repair and replacement within 18 months after the effective date of this AD.

(2) For airplanes identified as either Category 1 or Category 2 in paragraph I.C. of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996: Accomplish the repair and replacement at the time specified in either paragraph (e)(2)(i) or (e)(2)(ii) of this AD:

(i) Prior to the accumulation of 5-and-1/2 years since the MLG outer cylinders were new or last overhauled, or within 18 months after the effective date of this AD, whichever occurs later. Or

(ii) Prior to the accumulation of 7 years since the MLG outer cylinders were new or last overhauled, provided that accomplishment of visual and non-destructive testing (NDT) inspections at the times specified in Figure 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996, are repeated until the repair and replacement are accomplished.

(f) Accomplishment of the inspection requirements of this AD (in accordance with Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, or Revision 1, dated October 10, 1996) is considered acceptable for compliance with AD 95–19–10, amendment 39–9372; and AD 95–20–51, amendment 39–9398.

(g)(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.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(2) Alternative methods of compliance, approved in accordance with AD 96–03–02, amendment 39–9497; AD 96–03–02 R1, amendment 39–9526; AD 95–19–10, amendment 39–9372; or AD 95–20–51, amendment 39–9398; are approved as alternative methods of compliance with this AD.

(h) 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.

(i) The actions shall be done in accordance with Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995; Boeing Service Bulletin 767–32A0151, Revision 1, dated October 10, 1996; Boeing Alert Service Bulletin 767–32A0148, dated December 21,

1995, and Boeing Service Bulletin 767-32A0148, Revision 1, dated October 10, 1996. The incorporation by reference of Boeing Alert Service Bulletin 767–32A0151, dated November 30, 1995, and Boeing Alert Service Bulletin 767-320148, dated December 21, 1995, was approved previously by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51, as of February 16, 1996 (61 FR 3552, February 1, 1996). The incorporation by reference of Boeing Service Bulletin 767-32A0151, Revision 1, dated October 10, 1996, and Boeing Service Bulletin 767-32A0148, Revision 1, dated October 10, 1996, was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington,

(j) This amendment becomes effective on November 29, 1996.

Issued in Renton, Washington, on October 10, 1996.

S.R. Miller,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 96–26722 Filed 10–23–96; 8:45 am] BILLING CODE 4910–13–U

14 CFR Part 39

[Docket No. 96-NM-41-AD; Amendment 39-9786; AD 96-21-09]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all British Aerospace Model BAe 146 series airplanes and certain Model Avro 146-RJ series airplanes, that requires a one-time inspection to detect corrosion of the direction link subassembly of the main landing gear (MLG) assembly, and repair or replacement of the direction link subassembly with a serviceable unit, if necessary. This amendment is prompted by a report of failure of the direction link subassembly due to corrosion. The actions specified by this AD are intended to prevent such failures, which can result in directional control problems of the airplane during landing. DATES: Effective November 29, 1996.