

Proposed Rules

Federal Register

Vol. 66, No. 61

Thursday, March 29, 2001

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. 2000-NM-302-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes Equipped With General Electric Model CF6-45 or -50 Series Engines; or Pratt & Whitney Model JT9D-3, -7, or -70 Series Engines; and 747-E4B (Military) 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 certain Boeing Model 747 series airplanes equipped with General Electric Model CF6-45 or -50 series engines; or Pratt & Whitney Model JT9D-3, -7, or -70 series engines; and all 747-E4B (military) airplanes. That AD currently requires repetitive inspections to detect cracking or fracture of the steel attachment fittings of the diagonal brace to the nacelle struts; and replacement of the attachment fittings with new steel fittings, if necessary. This action would add new repetitive inspections of the fasteners of the steel attachment fittings of the diagonal brace to the inboard and outboard nacelle struts to find discrepancies; and mandate certain one-time inspections of the existing attachment fittings, installation of new fasteners, and replacement or rework of the fittings, which would terminate the repetitive inspections. This proposal is prompted by a report of fatigue cracking in a steel attachment fitting of a diagonal brace to the number 2 nacelle strut. The actions specified by the proposed AD are intended to prevent such cracking, which could result in failure of a nacelle strut diagonal brace

load path and possible separation of the nacelle from the wing.

DATES: Comments must be received by May 14, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-302-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. 2000-NM-302-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: Tamara L. Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2771; 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 2000-NM-302-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. 2000-NM-302-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

On April 16, 1999, the FAA issued AD 99-09-11, amendment 39-11144 (64 FR 19883, April 23, 1999), applicable to certain Boeing Model 747 series airplanes and all 747-E4B (military) airplanes, to require repetitive inspections to detect cracking or fracture of the steel attachment fittings of the diagonal brace to the nacelle struts; and replacement of the attachment fittings with new steel fittings, if necessary. That action was prompted by a report indicating that a steel attachment fitting of a diagonal brace to the number 2 nacelle strut had fractured; such fracturing has been attributed to fatigue cracking. The requirements of that AD are intended to detect and correct such fatigue cracking, which could result in failure of a nacelle strut diagonal brace load path and possible separation of the nacelle from the wing.

Actions Since Issuance of AD 99-09-11

In the preamble to AD 99-09-11, the FAA indicated that the actions required by that AD were considered "interim action" and that further rulemaking action was being considered. The FAA now has determined that further rulemaking action is necessary, and this proposed AD follows from that determination.

Explanation of Relevant Service Information

Subsequent to the issuance of AD 99-09-11, the manufacturer has issued, and the FAA has reviewed and approved, Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000, which describes procedures for the accomplishment of the following actions:

- Repetitive detailed visual inspections of the inboard and outboard steel attachment fittings of the diagonal brace to the nacelle struts to detect damage (wear, fretting deposits, cracked or broken fittings, loose or broken fasteners). Such inspections would eliminate the need for the (less extensive) repetitive detailed visual inspections of the inboard and outboard steel attachment fittings of the diagonal brace to the nacelle struts specified in the existing AD;

- Replacement of damaged fasteners and inspection and rework of fastener holes;

- If cracking of the fitting is found, a high frequency eddy current inspection of the fastener holes or, for the inboard attachment fittings, an ultrasonic inspection of the area around the suspected crack locations, to verify the cracking;

- Repetitive torque checks of fasteners common to the horizontal and vertical flanges of the fittings;

- Replacement or rework of the existing steel fittings, and installation of new fasteners, which would eliminate the need for the repetitive detailed visual inspections. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

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 99-09-11 to continue to require repetitive inspections to detect cracking or fracture of the steel attachment fittings of the diagonal brace to the nacelle struts; and replacement of the attachment fittings with new steel

fittings, if necessary. This proposed AD also would add new repetitive inspections of the fasteners of the steel attachment fittings of the diagonal brace to the inboard and outboard nacelle struts to find discrepancies; and would mandate certain one-time inspections of the existing attachment fittings, the installation of new fasteners, and replacement or rework of the fittings, which would terminate the repetitive inspections. The actions would be required to be accomplished per the service bulletin described previously, except as discussed below.

Differences Between This Proposed AD and the Service Bulletin

Although the service bulletin specifies that the manufacturer may be contacted for disposition of certain conditions, this proposed AD requires those conditions to be accomplished per a method approved by the FAA, or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the FAA to make such findings.

Other Relevant Rulemaking

The FAA previously issued AD 95-10-16, amendment 39-9233 (60 FR 27008, May 22, 1995), applicable to certain Boeing Model 747 series airplanes equipped with Pratt & Whitney Model JT9D series engines (excluding Model JT9D-70 engines); and AD 95-13-07, amendment 39-9287 (60 FR 33336, June 28, 1995), applicable to certain Boeing Model 747 series airplanes equipped with General Electric Model CF6-45 or -50 series engines, or Pratt & Whitney Model JT9D-70 series engines. These AD's require modification of the nacelle strut and wing structure. Accomplishment of the modification required by the applicable AD, before the effective date of this proposed AD, extends the compliance time for certain requirements of this proposed AD.

Cost Impact

There are approximately 745 airplanes of the affected design in the worldwide fleet. The FAA estimates that 173 airplanes of U.S. registry would be affected by this proposed AD.

The inspections that are currently required by AD 99-09-11 take approximately 4 work hours per airplane to accomplish, 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 \$41,520, or \$240 per airplane, per inspection cycle.

The new detailed visual inspections/torque checks that are proposed in this AD action would take approximately 12 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the proposed inspections/torque checks of this AD on U.S. operators is estimated to be \$124,560, or \$720 per airplane, per inspection cycle.

The new terminating actions (for the inboard pylon includes inspection of the existing steel fittings for cracks or damage; replacement if cracked; rework or replacement if damaged; or installation of new fasteners if no cracks; for the outboard pylon, detailed visual inspection of the fitting for damage, high frequency eddy current inspection of fastener holes and installation of new fasteners), that are proposed in this AD action would take approximately 76 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost \$13,776 (for airplanes equipped with Pratt & Whitney JT9D series engines) or \$31,083 (for airplanes equipped with GE CF6-45 or -50 series engines). Based on these figures, the cost impact of the proposed terminating actions of this AD is estimated to be \$18,336 per airplane (for airplanes equipped with Pratt & Whitney JT9D series engines) or \$35,643 per airplane (for airplanes equipped with General Electric CF6-45 or -50 series engines).

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 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.

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 39-11144 (64 FR 19883, April 23, 1999), and by adding a new airworthiness directive (AD), to read as follows:

Boeing: Docket 2000-NM-302-AD. Supersedes AD 99-09-11, amendment 39-11144.

Applicability: Model 747 series airplanes equipped with General Electric Model CF6-45 or -50 series engines or Pratt & Whitney Model JT9D-3, -7, or -70 series engines, and all 747-E4B (military) 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 per paragraph (i)(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 prevent fatigue cracking or fracture of the steel attachment fittings of the diagonal

brace to the nacelle struts, which could result in failure of a nacelle strut diagonal brace load path and possible separation of the nacelle from the wing, accomplish the following:

Restatement of Requirements of AD99-09-11: Repetitive Inspections

(a) Gain access to the attachment fittings of the diagonal brace to the inboard and outboard nacelle struts through the aft fairing doors, and do a detailed visual inspection to find cracking or fracture of the steel attachment fittings of the diagonal brace to the inboard and outboard nacelle struts, at the applicable time specified in paragraph (a)(1) or (a)(2) of this AD.

(1) For airplanes on which the strut and wing modification required by AD 95-10-16, amendment 39-9233, or AD 95-13-07, amendment 39-9287, has not been accomplished: Within 10 days after May 10, 1999 (the effective date of AD 99-09-11, amendment 39-11144), accomplish the detailed visual inspection.

(i) For airplanes equipped with General Electric Model CF6-45 or -50 series engines and/or Pratt & Whitney JT9D-3 or -7 series engines, repeat the inspection thereafter at intervals not to exceed 180 flight cycles.

(ii) For airplanes equipped with Pratt & Whitney JT9D-70 series engines, repeat the inspection thereafter at intervals not to exceed 250 flight cycles.

(2) For airplanes on which the strut and wing modification required by AD 95-10-16, or AD 95-13-07, has been accomplished: Within 30 days after May 10, 1999, or within 150 flight cycles after accomplishment of the modification, whichever occurs later, accomplish the detailed visual inspection.

(i) For airplanes equipped with General Electric Model CF6-45 or -50 series engines or Pratt & Whitney JT9D-70 series engines, repeat the inspection thereafter at intervals not to exceed 600 flight cycles.

(ii) For airplanes equipped with Pratt & Whitney JT9D-3 or -7 series engines, repeat the inspection thereafter at intervals not to exceed 350 flight cycles.

New Requirements of this AD: Initial/Repetitive Inspections/Checks

(b) For all airplanes: Do a detailed visual inspection and a torque check of the fasteners of the steel attachment fittings of the diagonal brace to the inboard and outboard nacelle struts to find discrepancies (cracks, loose or broken fasteners, etc.), at the latest of the times specified in paragraphs (b)(1), (b)(2), and (b)(3) of this AD; per Part 2 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000. Repeat the inspections/checks thereafter as specified in paragraph (c) of this AD. Accomplishment of the inspections/checks specified in this paragraph terminates the inspections required by paragraph (a) of this AD.

(1) Before the accumulation of 3,000 total flight cycles on any diagonal brace attachment fitting.

(2) Within 30 days after the effective date of this AD.

(3) Within 150 flight cycles after accomplishment of AD 95-10-16 or AD 95-13-07.

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."

Note 3: Detailed visual inspections and torque checks accomplished before the effective date of this AD per Boeing Alert Service Bulletin 747-54A2196, dated April 2, 1999, are considered acceptable for compliance with the inspections/checks specified in paragraph (b) of this AD.

(c) Except as provided by paragraph (d) of this AD: Repeat the detailed visual inspection required by paragraph (b) of this AD, as specified in Table 1 of this AD. Repeat the torque check required by paragraph (b) of this AD at intervals not to exceed 18 months. Repeat the inspections/checks until accomplishment of paragraph (h) of this AD. Table 1 follows:

TABLE 1—REPETITIVE DETAILED VISUAL INSPECTION INTERVALS

For the . . .	For airplanes in Group. . .	Then repeat at the earlier of
(1) Inboard nacelle struts.	(i) 1 or 4 ..	Intervals not to exceed 350 flight cycles or 18 months.
	(ii) 2, 3, or 5.	Intervals not to exceed 600 flight cycles or 18 months.
(2) Outboard nacelle struts.	(i) 1, 2, or 4.	Intervals not to exceed 350 flight cycles or 18 months.
	(ii) 3 or 5 ..	Intervals not to exceed 600 flight cycles or 18 months.

(d) For the attachment fittings of the diagonal brace to the inboard nacelle struts only: Instead of doing the repetitive detailed visual inspections per paragraph (c) of this AD, before further flight following the inspections required by paragraph (b) of this AD, do an ultrasonic inspection of the fasteners of the steel attachment fittings to find discrepancies, per Part 4 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000.

(1) Repeat the ultrasonic inspection at intervals not to exceed 1,200 flight cycles, until accomplishment of paragraph (h) of this AD.

(2) Repeat the detailed visual inspection and torque check required by paragraph (b)

of this AD at intervals not to exceed 18 months, until accomplishment of paragraph (h) of this AD.

Corrective Actions

(e) If any crack indication is found during any inspection/check required by this AD, before further flight, verify the indication per Part 3 or Part 4 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000, as applicable. If any cracking is verified, before further flight, replace the fasteners with new fasteners, and rework or replace the fitting, as applicable, per Part 5 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000; which terminates the repetitive inspections required by this AD. Where the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair actions, this AD requires such repair to be done per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company designated engineering representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. 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.

(f) If any loose or broken fastener is found during any inspection/check required by this AD, before further flight, do a high frequency eddy current inspection of the fastener hole to find cracking or damage, per Figure 6 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000. If no cracking or damage is found, before further flight, oversize the fastener hole and install a new fastener per Part 5 of the Accomplishment Instructions of the service bulletin. If any cracking or damage is found, before further flight, repair per a method approved by the Manager, Seattle ACO, or per data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. 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.

(g) If any discrepancy of any attachment fitting is detected during any inspection/check required by this AD, before further flight, replace the fitting with a new steel fitting per a method approved by the Manager, Seattle ACO, or per data meeting the type certification of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. 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.

Terminating Action

(h) Do the terminating action (for the inboard nacelle struts, includes inspection of the existing steel fittings for cracks or damage

and replacement if cracked, rework or replacement if damaged, or installation of new fasteners if no cracks; for the outboard nacelle struts, includes a detailed visual inspection of the fitting for damage, HFEC inspection of fastener holes, and installation of new fasteners), per Part 5 of the Accomplishment Instructions of Boeing Service Bulletin 747-54A2196, Revision 1, dated August 17, 2000, at the times specified in paragraph (h)(1) or (h)(2) of this AD, as applicable. Accomplishment of the actions specified in this paragraph constitutes terminating action for the repetitive detailed visual inspections/torque checks specified in paragraph (c) of this AD.

(1) For steel attachment fittings of the diagonal brace to the inboard nacelle struts: Within 36 months after the effective date of this AD.

(2) For steel attachment fittings of the diagonal brace to the outboard nacelle struts: Within 48 months after the effective date of this AD.

Alternative Methods of Compliance

(i)(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 per AD 99-09-11, amendment 39-11144, are approved as alternative methods of compliance with 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

(j) Special flight permits may be issued per §§ 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 March 22, 2001.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-7707 Filed 3-28-01; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-33-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model CL-600-2B19 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 certain Bombardier Model CL-600-2B19 series airplanes, that currently requires repetitive ultrasonic inspection to detect damage of the actuator lugs of the flight spoiler center hinge; and corrective action, if necessary. This proposal would mandate the previously optional terminating action by requiring replacement of the flight spoilers with new improved spoilers. The actions specified by the proposed AD are intended to prevent uncommanded deployment of a flight spoiler, which could result in reduced controllability of the airplane. This proposed action is intended to address the identified unsafe condition.

DATES: Comments must be received by April 30, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-33-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-33-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 Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington, or at the FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York.

FOR FURTHER INFORMATION CONTACT: Serge Napoleon, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7512; fax (516) 568-2716.

SUPPLEMENTARY INFORMATION: