

[Federal Register: February 11, 2004 (Volume 69, Number 28)]
[Rules and Regulations]
[Page 6542-6546]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr11fe04-14]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-238-AD; Amendment 39-13453; AD 2004-03-09]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200F, 747-200C, 747-300, 747SR, and 747SP Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200F, 747-200C, 747-300, 747SR, and 747SP series airplanes. This AD requires repetitive inspections for discrepancies of the structure near and common to the upper chord and splice fittings of the rear spar of the wing, and repair if necessary. This AD also provides for an optional modification that, if accomplished, terminates the repetitive inspection requirement, but would necessitate eventual post-modification inspections. This action is necessary to find and fix fatigue cracking of structure near and common to the upper chord and splice fittings of the rear spar of the wing, which could result in loss of structural integrity of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective March 17, 2004.

The incorporation by reference of a certain publication listed in the regulations is approved by the Director of the Federal Register as of March 17, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplanes, 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: Nick Kusz, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6432; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200F, 747-200C, 747-300, 747SR, and 747SP series airplanes was published in the Federal Register on June 18, 2003 (68 FR 36506). That action proposed to require repetitive inspections for discrepancies of the structure near and common to the upper chord and splice fittings of the rear spar of the wing, and repair if necessary. That action also proposed to provide for an optional modification that, if accomplished, would terminate the repetitive inspection requirement, but would necessitate eventual post-modification inspections.

Comments

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

Request To Change Paragraph (c) of the Proposed AD

One commenter, the manufacturer, requests a change to paragraph (c) of the proposed AD to state, "If any cracking, corrosion, or damage is found * * *" rather than "If any cracking is found * * *". The commenter states that corrosion is often present in bolt holes vacated by alloy steel bolts, and that damage can occur during removal and installation of bolts. The commenter also requests that paragraph (c) be changed to reference "Part 3–Inspection and Repair," of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003 (which is referenced in the proposed AD as the appropriate source of service information for the required actions) for the proposed repair for cracked, corroded, and damaged fastener holes.

The FAA agrees. The comments clarify the types of discrepancies for operators to look for and point out which part of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, contains the necessary instructions for repair. We have revised paragraph (c) of the final rule to include the requested changes. For the same reason, we have added reference to paragraph (d) of the final rule and Part 4 of the service bulletin.

Request To Change Paragraph (d) of the Proposed AD

The same commenter requests a change to paragraph (d) of the proposed AD to include a reference to the installation of new bushings, as required. The request is intended to make the wording in the proposed AD consistent with the wording in Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003.

The FAA agrees. The comments clarify the type of modification that is allowed in Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003. We have revised paragraph (d) of the final rule to include the requested change.

Request To Change Paragraph (e) of the Proposed AD to Reference H-11 Bolts

The same commenter requests that paragraph (e) of the proposed AD include a reference to an ultrasonic or magnetic particle inspection of removed H-11 bolts, and a reference to a detailed inspection of other non H-11 removed bolts for cracking, corrosion, or damage. The commenter states that a visual inspection of H-11 steel bolts is not adequate for finding cracks in these bolts because H-11 bolts are susceptible to stress corrosion cracking. The commenter further states that it is necessary to find small cracks by non-destructive test (NDT) methods before the cracks grow long enough to fracture the H-11 bolts and cause the loss of shear load capability in the splices. The commenter adds that a detailed visual inspection is adequate for finding damage to titanium or Inconel bolts because these bolts are not susceptible to stress corrosion cracking.

The FAA does not agree with the proposed changes to paragraph (e) of the AD. Paragraph (e) requires inspections only after the modification per paragraph (d) has been accomplished. Once the optional modification in paragraph (d) of the AD is accomplished, all H-11 bolts will have been replaced with updated Inconel bolts, thereby eliminating the need for inspections of H-11 bolts. Therefore, we have determined that no instructions referring to H-11 bolts in the post-modification instructions are necessary. No change to the final rule is necessary on this issue.

Request To Change Paragraph (e)(2) of the Proposed AD to Refer to Part 5 of the Service Bulletin

The same commenter requests a change to paragraph (e)(2) of the proposed AD to include a reference to Part 5 of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, which contains instructions for repairing cracked holes found during post modification inspections.

The FAA agrees. The comments clarify where to find the repair instructions in the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003. We have revised paragraph (e)(2) of the final rule to include the requested change.

Request To Change Paragraph (f) of the Proposed AD

The same commenter requests that the FAA change paragraph (f) of the proposed AD to include a reference to the original release of Boeing Alert Service Bulletin 747-57A2314, dated June 28, 2001. The purpose of the change would be to ensure that operators are aware that inspections, repairs, or modifications accomplished before the effective date of the proposed AD, per the original release or Revision 1 of the service bulletin are acceptable methods of compliance.

While the FAA agrees with the intent of the comment, we find that paragraph (f) of the AD already provides for acceptable use of the original release of the service bulletin. In addition, the AD implies that actions accomplished previously per Revision 1 of the service bulletin are acceptable because the proposed AD is written to address the actions required by Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, which was inadvertently listed by the commenter as having a date of June 28, 2001. Operators are given credit for work previously performed by the means of the phrase in the "Compliance" section of the AD that states, "Required as indicated, unless accomplished previously." Therefore, in the case of this AD, if the required inspections, repairs, or modifications have been accomplished before the effective date of this AD, this AD does not require that they be repeated. No change to the final rule is necessary on this issue.

Request To Change Paragraph (j) of the Proposed AD

The same commenter requests that the FAA include paragraph (e) of the proposed AD in the list in paragraph (j) of the proposed AD. Paragraph (j) of the proposed AD contains a list of paragraphs that are excepted from the restriction on the installation of any alloy steel bolt in any location specified in the proposed AD on any airplane listed in the applicability of the proposed AD. The commenter states that both paragraph (e) of the proposed AD and Figure 2, Table 3 of Boeing Service Bulletin 747-57A2314, Revision 1, allow for re-installation of alloy steel bolts provided that they have been inspected by ultrasonic or magnetic particle inspection and found to be free of cracks, corrosion, or damage. The commenter states that the requirement to replace undamaged H-11 alloy steel bolts will result in unnecessary cost to the operators and will conflict with the service bulletin. The commenter further states that airplanes may be unnecessarily grounded by the lack of replacement Inconel bolts, which are difficult to procure, and that the requirement would place an economic burden on the manufacturer to maintain a large inventory of replacement bolts.

In addition, the commenter states that the manufacturer has received no reports of multiple H-11 bolt fractures in the splice at the rear spar upper chord side of the body splice and upper surface stringer 1. As a result, the commenter states, flight safety is provided by existing maintenance. The commenter further states that Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, requires ultrasonic or magnetic particle inspection of the alloy steel bolts during each repeat inspection of the bolt holes, and that the bolts must be free of cracks before they can be re-installed in the holes. According to the commenter, the repeat inspections every 6,000 to 13,000 flight cycles, and the replacement of the alloy steel bolts with Inconel bolts during splice modification provide an additional level of safety.

The FAA does not agree with this request to add paragraph (e) of the proposed AD to the list of paragraphs that are excepted from the restriction on the installation of any alloy steel bolt in paragraph (j) of the proposed AD. In reaching this conclusion, we considered that paragraph (e) does not allow for the re-installation of alloy steel (H-11) bolts because, in order for the post-modification inspections of paragraph (e) to be necessary, the optional modification of paragraph (d) must have been previously accomplished. If the operators chooses to accomplish the optional modification of paragraph (d), all alloy steel (H-11) bolts are required to be replaced with Inconel bolts. Also, it is important that once the Inconel bolts are installed as part of the modification, they are not replaced by alloy steel (H-11) bolts in the future. No change to the final rule is necessary on this issue.

Explanation of Change Made to the Proposed AD

The FAA has changed all references to a "Boeing Alert Service Bulletin 747-57A2314, Revision 1" in the proposed AD to "Boeing Service Bulletin 747-57A2314, Revision 1" in this final rule. We have also changed the paragraph (j) to refer to the H-11 bolt for clarity.

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.

Changes to 14 CFR Part 39/Effect on the Proposed AD

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. However, for clarity and consistency in this final rule, we have retained the language of the NPRM regarding that material.

Change to Labor Rate Estimate

We have reviewed the figures we have used over the past several years to calculate AD costs to operators. To account for various inflationary costs in the airline industry, we find it necessary to increase the labor rate used in these calculations from \$60 to \$65 per work hours. The cost impact information, below, reflects this increase in the specified hourly labor rate.

Cost Impact

There are approximately 593 airplanes of the affected design in the worldwide fleet. The FAA estimates that 176 airplanes of U.S. registry are affected by this AD.

It will take approximately 8 work hours per airplane to accomplish the required inspection, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the required inspection on U.S. operators is estimated to be \$91,520, or \$520 per airplane, per inspection cycle.

The cost impact figure discussed above is 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 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 elect to accomplish the optional terminating action that is provided by this AD action, it will take approximately 22 work hours to accomplish it, at an average labor rate of \$65 per work hour. The cost of required parts will be approximately \$10,700 per airplane. Based on these figures, the cost impact of the optional terminating action will be approximately \$12,130 per airplane.

If the optional terminating action provided by this AD action is accomplished, an eventual post-modification inspection is necessary. That inspection will take approximately 8 work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the post modification inspections would be approximately \$250 per airplane, per inspection cycle.

Regulatory Impact

The regulations adopted herein will 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 final rule does not have federalism implications under Executive Order 13132.

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 adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-03-09 Boeing: Amendment 39-13453. Docket 2001-NM-238-AD.

Applicability: All Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200F, 747-200C, 747-300, 747SR, and 747SP 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 (k) 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 find and fix fatigue cracking of structure near and common to the upper chord and splice fittings of the rear spar of the wing, which could result in loss of structural integrity of the airplane, accomplish the following:

Initial Inspections

(a) Perform inspections for discrepancies of the structure near and common to the upper chord and splice fittings of the rear spar of the wing, per Part 2 of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003. The inspection procedures include removing existing bolts; performing an ultrasonic or magnetic particle inspection for cracking of removed H-11 bolts; performing a detailed inspection of all other removed bolts for cracking, corrosion, or damage; replacing cracked, corroded, or damaged bolts with new improved bolts; removing any installed repair bushings; performing an open-hole high frequency eddy current (HFEC) inspection for cracking of the bolt holes; installing new bushings, if necessary; reinstalling bolts that are not cracked, corroded, or damaged; torquing the nuts; performing a detailed inspection of the shim between the kick fitting and bulkhead strap for cracking or migration; and replacing the shim with a new shim if necessary, except as provided by paragraph (h) of this AD. Do the initial inspection at the time specified in paragraph (a)(1) or (a)(2) of this AD, whichever is later.

(1) Inspect at the earlier of the applicable times specified in the "Flights" and "Hours" columns under the heading "Initial Inspection Threshold" in Table 1 of Figure 1 of the service bulletin. Where the "Initial Inspection Threshold" column of Table 1 of Figure 1 of the service bulletin specifies "flights" and "hours," for the purposes of this paragraph the numbers in that column are considered to be the airplane's total flight cycles and total flight hours.

(2) Inspect within 18 months after the effective date of this AD.

Note 2: For the purposes of this AD, a detailed 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."

Repetitive Inspections

(b) Repeat the inspection required by paragraph (a) of this AD at intervals not to exceed the earlier of the times specified in the "Flights" and "Hours" columns under the heading "Repeat Inspection Intervals" in Table 1 of Figure 1 of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, until paragraph (d) of this AD is accomplished. Where the "Repeat Inspection Intervals" column of Table 1 of Figure 1 of the service bulletin specifies "flights" and "hours," for the purposes of this paragraph, the figures in that column are considered to be the number of flight cycles and flight hours from the time of the most recent inspection per paragraph (a) or (b) of this AD, except as provided by paragraph (g) of this AD.

Repair

(c) If any cracking, corrosion, or damage is found during any inspection required by paragraph (a), (b) or (d) of this AD, before further flight, repair per Part 3 or 4 (as applicable) of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, except as provided by paragraph (h) of this AD.

Optional Modification

(d) Accomplishment of the modification specified in Part 4 of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, constitutes terminating action for the initial inspections required by paragraph (a) of this AD and the repetitive inspections required by paragraph (b) of this AD, provided that the repetitive post-modification inspections required by paragraph (e) of this AD are initiated at the applicable time. The modification procedures include removing installed repair bushings, performing an open-hole HFEC inspection for cracking of the bolt holes, repairing any cracking that is found, oversizing bolt holes, and installing new bushings as required, and new improved bolts.

Post-Modification Inspections

(e) For airplanes on which the optional modification specified in paragraph (d) of this AD is accomplished: At the earlier of the times specified in the "Flights" and "Hours" columns under the heading "Post Modification Threshold" in Table 2 of Figure 1 of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, perform a post-modification inspection per Part 5 of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003. The inspection procedures include removing existing bolts; performing a detailed inspection of removed bolts for cracking, corrosion, or damage; replacing cracked, corroded, or damaged bolts with new bolts; removing any installed repair bushings; performing an open-hole HFEC inspection for cracking of the bolt holes; installing new bushings if necessary; reinstalling bolts that are not cracked, corroded, or damaged; torquing the nuts; performing a detailed inspection of the shim between the kick fitting and bulkhead strap for cracking or migration; and replacing the shim with a new shim if necessary; except as provided by paragraph (h) of this AD. Where the "Post Modification

Inspection Threshold" column of Table 2 of Figure 1 of the service bulletin specifies "flights" and "hours," for the purposes of this paragraph, the numbers in that column are considered to be the flight cycles and flight hours after accomplishment of the modification specified in paragraph (d) of this AD.

(1) Repeat the inspection at intervals not to exceed the earlier of the times specified in the "Flights" and "Hours" columns under the heading "Post Modification Repeat Inspection Intervals" in Table 2 of Figure 1 of the service bulletin. Where the "Post Modification Repeat Inspection Intervals" column of Table 2 of Figure 1 of the service bulletin specifies "flights" and "hours," for the purposes of this paragraph, the numbers in that column are considered to be the flight cycles and flight hours since the most recent inspection per paragraph (e) or (e)(1) of this AD.

(2) If any cracking is found during any inspection required by paragraph (e) or (e)(1) of this AD, before further flight, repair per Part 5 of the Accomplishment Instructions of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, except as provided by paragraph (h) of this AD.

Actions Accomplished per Previous Issue of Service Bulletin

(f) Inspections, repairs, or modifications accomplished before the effective date of this AD per Boeing Alert Service Bulletin 747-57A2314, including Appendix A and B, dated June 28, 2001, are considered acceptable for compliance with the corresponding action specified in this AD, except as provided by paragraph (h) of this AD.

(g) As specified in Flag Note 1 of the logic diagram in Figure 1 of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003: An inspection accomplished before the effective date of this AD per Figure 4, Step 14, of Boeing Service Bulletin 747-57-2110, Revision 6, dated November 21, 1991; or Revision 7, dated April 23, 1998; is considered acceptable, as applicable, for compliance with the initial inspection required by paragraph (a) of this AD. An inspection accomplished before the effective date of this AD per Figure 4, Step 9, of Boeing Service Bulletin 747-57-2110, Revision 3, dated February 19, 1987; Revision 4, dated May 26, 1988; and Revision 5, dated October 26, 1989; is also considered acceptable, as applicable, for compliance with the initial inspection required by paragraph (a) of this AD. The first repeat inspection per paragraph (b) of this AD must be accomplished at the applicable interval established in paragraph (b) of this AD after the most recent inspection per Figure 4, Step 14, of Boeing Service Bulletin 747-57-2110, Revision 6 or 7; or Figure 4, Step 9, of Boeing Service Bulletin 747-57-2110, Revision 3, 4, or 5.

Exception to Instructions in Service Bulletin

(h) Where Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, specifies to contact Boeing for appropriate action, before further flight, repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), 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, the approval must specifically reference this AD.

(i) Although Appendix B of Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003, refers to a reporting requirement, such reporting is not required by this AD.

Parts Installation

(j) Except as provided by paragraphs (a) and (b) of this AD, as of the effective date of this AD, no person may install any alloy steel (H-11) bolt in any location specified in this AD on any airplane listed in the applicability of this AD.

Alternative Methods of Compliance

(k) 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 3: 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

(l) 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.

Incorporation by Reference

(m) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-57A2314, Revision 1, dated January 9, 2003. This incorporation by reference 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 Airplanes, 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, DC.

Effective Date

(n) This amendment becomes effective on March 17, 2004.

Issued in Renton, Washington, on January 29, 2004.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-2571 Filed 2-10-04; 8:45 am]

BILLING CODE 4910-13-P