

# Proposed Rules

Federal Register

Vol. 65, No. 2

Tuesday, January 4, 2000

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. 99-NM-346-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 adoption of a new airworthiness directive (AD) that is applicable to certain Boeing 777 series airplanes. This proposal would require a one-time inspection to detect cracking of the fastener holes common to the upper wing skins and trailing edge panels of both wings, and corrective actions, if necessary. This proposal also would require coldwork of the fastener holes and installation of new or serviceable fasteners. This proposal is prompted by a report indicating that fatigue cracks have been found in the upper wing skin of both wings. The actions specified by the proposed AD are intended to prevent fatigue cracking of the upper wing skin, which could result in reduced structural integrity of the wing.

**DATES:** Comments must be received by February 18, 2000.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-346-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from 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, Transport Airplane Directorate, 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 notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-346-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. 99-NM-346-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

##### Discussion

The FAA has received a report indicating that fatigue cracks have been found in the upper wing skin of both

wings on a Boeing Model 777 test airplane. During fatigue testing of the airplane, two cracks were detected at 80,813 flight cycles. Both cracks were detected at the tab out for the outboard support fitting of the main landing gear beam. The crack found on the left upper wing skin was 1.5 inches in length, and the crack found in the right upper wing skin was 5.1 inches in length.

Examination of the cracked parts was inconclusive as to when the cracks had initiated. Such fatigue cracking, if not detected and corrected, could result in reduced structural integrity of the wing.

##### Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 777-57A0022, dated August 26, 1999, which describes procedures for a one-time eddy current inspection to detect cracking of the fastener holes common to the upper wing skins and trailing edge panels of both wings, and corrective actions, if necessary. The corrective actions involve rework and re-inspection of the fastener hole. Additionally, for any fastener hole that may require rework and re-inspections, the corrective actions also involve measurement of the fastener hole diameter and edge margin to ensure specific limits are maintained. The alert service bulletin also describes procedures for coldwork of the fastener holes and installation of new or serviceable fasteners. Accomplishment of the actions specified in the alert 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 require accomplishment of the actions specified in the alert service bulletin described previously, except as discussed below.

##### Differences Between Proposed Rule and Alert Service Bulletin

Operators should note that, although the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain conditions, this proposal would require the repair of those conditions to be accomplished in

accordance with a method approved by the FAA.

#### Cost Impact

There are approximately 82 airplanes of the affected design in the worldwide fleet. The FAA estimates that 33 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 13 work hours per airplane to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$216 per airplane. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$32,868, or \$996 per airplane.

The cost impact figure discussed above is 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.

#### Regulatory Impact

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part

39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

##### § 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

**Boeing:** Docket 99-NM-346-AD.

**Applicability:** Model 777 series airplanes having line numbers 1 through 119 inclusive, except line numbers 94, 102, 104, and 118, 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 (d) 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 of the upper wing skin, which could result in reduced structural integrity of the wing, accomplish the following:

##### Eddy Current Inspection of Fastener Holes

(a) Prior to the accumulation of 16,000 total flight cycles or 40,000 total flight hours, whichever occurs earlier, perform a one-time eddy current inspection to detect cracking of the fastener holes common to the upper wing skins and trailing edge panels of both wings, in accordance with Boeing Alert Service Bulletin 777-57A0022, dated August 26, 1999.

##### Rework and Re-Inspection of Fastener Hole

(b) If any cracking is detected during the inspection required by paragraph (a) of this AD, prior to further flight, oversize the fastener hole and perform additional eddy current inspections to detect cracking of the fastener holes until all cracking is no longer detectable by means of eddy current inspection. Perform the actions in accordance with Boeing Alert Service Bulletin 777-57A0022, dated August 26, 1999. Prior to further flight, oversize the fastener hole an additional 1/32-inch minimum and measure the starting hole diameter and edge margin of the fastener hole, in accordance with the alert service bulletin.

(1) If the fastener hole diameter or the edge margin of any fastener hole is not within the limits specified in the alert service bulletin, prior to further flight, repair in accordance

with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, or a Boeing Company Designated Engineering Representative who has been authorized by the FAA 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.

(2) If the fastener hole diameter and edge margin of all the fastener holes are within the limits specified in the alert service bulletin, prior to further flight, accomplish the requirements of paragraph (c) of this AD.

##### Coldwork of Fastener Holes

(c) If no cracking is detected during the eddy current inspection required by paragraph (a), or the fastener hole diameter and edge margin of all the fastener holes are within the limits required by paragraph (b) of this AD, prior to further flight, coldwork the fastener holes and install new or serviceable fasteners, in accordance with Boeing Alert Service Bulletin 777-57A0022, dated August 26, 1999.

##### Alternative Methods of Compliance

(d) 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 2:** 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

(e) 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 December 28, 1999.

**D.L. Riggan,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 00-50 Filed 1-3-00; 8:45 am]

**BILLING CODE 4910-13-U**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-NM-186-AD]

RIN 2120-AA64

#### Airworthiness Directives; Fokker Model F27 Mark 050, 200, 500, and 600 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.