

# Proposed Rules

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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. FAA-2005-21356; Directorate Identifier 2004-NM-223-AD]

RIN 2120-AA64

#### Airworthiness Directives; Boeing Model 777-200 and -300 Series Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Boeing Model 777-200 and -300 series airplanes. This proposed AD would require repetitive detailed inspections of the forward lugs of the power control unit (PCU), yoke assembly, and forward attachment hardware of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs; and other specified/corrective actions if necessary. For certain airplanes, the proposed AD also would require other related concurrent actions. This proposed AD is prompted by reports indicating that operators have found worn, fretted, and fractured bolts that attach the yoke assembly to the flaperon PCU. We are proposing this AD to prevent damage and eventual fracture of the yoke assembly, pin assembly, and attachment bolts that connect the inboard and outboard PCUs to a flaperon, which could lead to the flaperon becoming unrestrained and consequently departing from the airplane. Loss of a flaperon could result in asymmetric lift and reduced roll control of an airplane. A departing flaperon could also cause damage to the horizontal and vertical stabilizers, which could result in loss of control of the airplane if damage is significant.

**DATES:** We must receive comments on this proposed AD by July 18, 2005.

**ADDRESSES:** Use one of the following addresses to submit comments on this proposed AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, room PL-401, Washington, DC 20590.

- By fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207.

You can examine the contents of this AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., room PL-401, on the plaza level of the Nassif Building, Washington, DC. This docket number is FAA-2005-21356; the directorate identifier for this docket is 2004-NM-223-AD.

**FOR FURTHER INFORMATION CONTACT:** Gary Oltman, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6443; fax (425) 917-6590.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2005-21356; Directorate Identifier 2004-NM-223-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments submitted by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You can review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you can visit <http://dms.dot.gov>.

#### Examining the Docket

You can examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the DMS receives them.

#### Discussion

We have received reports indicating that four operators have found worn, fretted, and fractured bolts that attach the yoke assembly to the flaperon power control unit (PCU) on Boeing Model 777-300 series airplanes. One of the operators also found a fractured bolt and significant damage to the PCU and yoke assembly on a Model 777-300 series airplane powered by Rolls-Royce engines. That airplane had accumulated approximately 7,500 total flight hours and 2,600 total flight cycles. Damaged and fractured bolts are caused by a combination of higher-than-expected cyclic loads at high engine thrust conditions during takeoff and the low torque with which the attachment bolts were tightened. Damage and eventual fracture of the yoke assembly, pin assembly, and attachment bolts that connect the inboard and outboard PCUs to a flaperon, if not corrected, could lead to the flaperon becoming unrestrained and consequently departing from the airplane. Loss of the

flaperon could result in asymmetric lift and reduced roll control of the airplane. A departing flaperon could also cause damage to the horizontal and vertical stabilizers, which could result in loss of control of the airplane if damage is significant.

The yoke assemblies of the flaperon PCUs on certain Model 777-200 and -300 series airplanes powered by General Electric, Pratt & Whitney, and Rolls-Royce engines are identical to those on the affected Model 777-300 series airplanes powered by General Electric, Pratt & Whitney, and Rolls-Royce engines. Therefore, all of these models may be subject to the same unsafe condition.

#### Other Related Rulemaking

On June 10, 1999, we issued AD 99-13-05, amendment 39-11198 (64 FR 33390, June 23, 1999), applicable to certain Boeing Model 777 series airplanes. That AD requires repetitive inspections to detect cracking of the upper cutout and lower flange of the outboard support assembly of the flaperons on the wings; and corrective actions, if necessary. That AD also provides an optional terminating action for the repetitive inspections. If paragraph (b) or (d) of AD 99-13-05 has been accomplished in accordance with Boeing Alert Service Bulletin 777-57A0008, dated March 25, 1999, operators do not need to replace the pins of the outboard flaperon PCUs that would be required by this proposed AD for certain airplanes. This proposed AD does not affect the requirements of AD 99-13-05.

#### Relevant Service Information

We have reviewed Boeing Service Bulletin 777-27A0056, Revision 1, dated July 8, 2004 (for Model 777-200 and -300 series airplanes). The service bulletin describes procedures for doing repetitive detailed inspections of the forward lugs of the PCU, yoke assembly, and forward attachment hardware of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs for damage; and specified and corrective actions if applicable. The other specified action includes tightening the attachment bolts to a higher torque value. The corrective actions include:

- Repairing any damaged attachment hardware;
- Repairing any damaged PCU lug; and
- Replacing the yoke assembly with a new, improved yoke assembly, if any damage to any yoke assembly is found or if a migrated or rotated bearing is found.

For certain Model 777-200 series airplanes: Boeing Service Bulletin 777-27A0056 also specifies prior or concurrent accomplishment of Boeing Service Bulletin 777-27-0009, Revision 1, dated May 8, 2003; and Boeing Service Bulletin 777-27-0049, dated August 30, 2001.

For Model 777-200 and -300 series airplanes: Boeing Service Bulletin 777-27A0056 specifies that the detailed inspections of the aft lugs of the yoke assembly for signs of wear on the anti-rotation lugs, and of the yoke assembly bearings for signs of migration or rotation are not required if an operator has accomplished Boeing Service Bulletin 777-27-0049.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

#### Concurrent Service Bulletins for Certain Model 777-200 Series Airplanes

Boeing Service Bulletin 777-27-0009 describes procedures for replacing aluminum yoke assemblies and pins of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs with new, improved steel yoke assemblies and pins. Boeing Service Bulletin 777-27-0009 also specifies that accomplishment of Boeing Service Bulletin 777-57A0008, dated March 25, 1999 (for Model 777 airplanes), which is required by AD 99-13-05, is acceptable for compliance with the requirement to replace the pins of the flaperon PCUs.

Boeing Service Bulletin 777-27-0049 describes procedures for replacing the yoke assemblies of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs with new, improved steel yoke assemblies having improved bearing retention, and doing any other specified and corrective actions. For Boeing Service Bulletin 777-27-0049, the other specified actions include the following:

- Doing an inspection of the forward lugs of the PCU for nicks, gouges, and fretting damage;
- Doing an inspection of the attachment hardware for the PCU to yoke assembly for damage; and
- Installing the new, improved pins for the yoke assemblies of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs.

For Boeing Service Bulletin 777-27-0049, the corrective action includes repairing any damaged PCU lug and any damaged attachment hardware.

#### FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. Therefore, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and Concurrent Service Bulletin."

#### Differences Between the Proposed AD and Concurrent Service Bulletins

Boeing Service Bulletin 777-27-0009 specifies installing new, improved steel yoke assemblies having part number (P/N) 251W1130-1. This proposed AD, however, would require installing new, improved steel yoke assemblies having improved bearing retention, P/N 251W1130-3. Installing P/N 251W1130-3 concurrently with doing the detailed inspections of the forward lugs of the PCU and of the attachment hardware for damage (as specified in paragraphs (f)(1) and (f)(5) of this AD), and corrective actions if necessary, in accordance with Boeing Service Bulletin 777-27A0056, Revision 1, adequately addresses the concurrent requirements identified in Boeing Service Bulletin 777-27-0049. Therefore, this proposed AD does not require concurrent accomplishment of Boeing Service Bulletin 777-27-0049. Accomplishing Boeing Service Bulletin 777-27-0049 is an optional terminating action for certain repetitive inspections.

#### Clarification of Credit for Pin Replacements

Boeing Service Bulletin 777-27-0009 specifies that if an operator accomplishes Boeing Service Bulletin 777-57A0008, then an operator does not need to replace the pins of the flaperon PCUs. (There are four pins per airplane—one each attaching the inboard and outboard PCUs to the flaperons of the left and right wings.) This AD, however, clarifies that accomplishing Boeing Service Bulletin 777-57A0008 is acceptable for compliance with replacement of the pins of the outboard flaperon PCUs on each wing, only if the service bulletin is done before the effective date of this AD.

#### Clarification of Inspection Terminology

The "inspection" specified in Boeing Service Bulletin 777-27-0049 is referred to as a "detailed inspection" in this proposed AD. Operators may refer to Boeing Service Bulletin 777-27A0056 for the definition of a detailed inspection.

**Costs of Compliance**

There are about 483 airplanes of the affected design in the worldwide fleet. This proposed AD would affect about 131 airplanes of U.S. registry. The proposed inspections would take about 4 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the proposed inspections for U.S. operators is \$34,060, or \$260 per airplane, per inspection cycle.

The proposed concurrent actions of Boeing Service Bulletin 777-27-0009, if required, would take about 7 work hours per airplane. Required parts would cost about \$12,758 per airplane. Based on these figures, the estimated cost of these proposed concurrent actions is \$13,213 per airplane.

The proposed concurrent actions of Boeing Service Bulletin 777-27-0049, if required, would take about 5 work hours per airplane. Required parts would cost about \$3,245 per airplane. Based on these figures, the estimated cost of these proposed concurrent actions is \$3,570 per airplane.

**Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

We have determined that this proposed AD would not have federalism

implications under Executive Order 13132. This proposed AD 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.

For the reasons discussed above, I certify that the 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. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

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

Air transportation, Aircraft, Aviation safety, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Boeing:** Docket No. FAA-2005-21356; Directorate Identifier 2004-NM-223-AD.

**Comments Due Date**

(a) The Federal Aviation Administration (FAA) must receive comments on this AD action by July 18, 2005.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 777-200 and -300 series airplanes, certificated in any category, as identified in Boeing Service Bulletin 777-27A0056, Revision 1, dated July 8, 2004.

**Unsafe Condition**

(d) This AD was prompted by reports indicating that operators have found worn, fretted, and fractured bolts that attach the yoke assembly to the flaperon power control unit (PCU). We are issuing this AD to prevent damage and eventual fracture of the yoke assembly, pin assembly, and attachment bolts that connect the inboard and outboard PCUs to a flaperon, which could lead to the flaperon becoming unrestrained and consequently departing from the airplane. Loss of a flaperon could result in asymmetric lift and reduced roll control of an airplane. A departing flaperon could also cause damage to the horizontal and vertical stabilizers, which could result in loss of control of the airplane if damage is significant.

**Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**Detailed Inspections**

(f) At the applicable compliance time(s) specified in Table 1 of this AD, do detailed inspections of the parts specified in paragraphs (f)(1) through (f)(5) of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs; and do any other specified and corrective actions as applicable; by doing all of the actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-27A0056, Revision 1, dated July 8, 2004. Do the applicable corrective actions before further flight.

(1) Forward lugs of the PCU for nicks, gouges, and fretting damage.

(2) Aft lugs of the yoke assembly for fretting damage.

(3) Aft lugs of the yoke assembly for signs of wear on the anti-rotation lugs, unless paragraph (g) or (h) of this AD, as applicable, has been accomplished.

(4) Aft lugs of the yoke assembly bearings for signs of migration or rotation, unless paragraph (g) or (h) of this AD, as applicable, has been accomplished.

(5) Attachment hardware for the PCU to yoke assembly for damage.

TABLE 1.—COMPLIANCE TIMES

Applicable airplanes	Initial inspection	Repetitive inspections
Model 777-200 and -300 airplanes powered by General Electric or Pratt & Whitney engines.	Before the accumulation of 5,000 total flight cycles or within 12 months after the effective date of this AD, whichever is later.	None.
Model 777-200 and -300 airplanes powered by Rolls Royce engines, line numbers (L/Ns) 1 through 297 inclusive.	Before the accumulation of 1,000 total flight cycles or within 180 days after the effective date of this AD, whichever is later.	At intervals not to exceed 5,000 flight cycles or 750 days, whichever is later.

TABLE 1.—COMPLIANCE TIMES—Continued

Applicable airplanes	Initial inspection	Repetitive inspections
Model 777-200 and -300 airplanes powered by Rolls Royce engines, L/Ns 298 and subsequent.	Before the accumulation of 5,000 total flight cycles or within 750 days after the effective date of this AD, whichever is later.	At intervals not to exceed 5,000 flight cycles or 750 days, whichever is later.

**Concurrent Actions for Certain Airplanes**

(g) For Model 777-200 series airplanes identified in Boeing Service Bulletin 777-27-0009, Revision 1, dated May 8, 2003: Before or concurrently with accomplishing paragraph (f) of this AD, replace the yoke assemblies and pins of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs with new, improved yoke assemblies and pins by doing all of the actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-27-0009, Revision 1, dated May 8, 2003; except where the service bulletin specifies installing yoke assembly having part number (P/N) 251W1130-1, install yoke assembly having P/N 251W1130-3.

**Optional Terminating Action for Certain Repetitive Inspections**

(h) For Model 777-200 and -300 series airplanes identified in Boeing Service Bulletin 777-27-0049, dated August 30, 2001: Replacing the yoke assemblies of the left inboard, left outboard, right inboard, and right outboard flaperon PCUs with new, improved yoke assemblies having improved bearing retention, and doing any other specified and corrective actions, by doing all of the actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-27-0049, dated August 30, 2001, terminates the detailed inspections required by paragraphs (f)(3) and (f)(4) of this AD.

**Credit for Pin Replacements of the Outboard Flaperon PCUs**

(i) Accomplishment of the actions specified in paragraph (b) or (d) of AD 99-13-05, amendment 39-11198, before the effective date of this AD is acceptable for compliance with the pin replacements of the left and right outboard flaperon PCUs required by paragraph (g) of this AD.

**Parts Installation**

(j) As of the effective date of this AD, no person may install on any airplane the following parts: Yoke assembly having P/N S251W115-3 or P/N 251W1130-1; and pin having P/N S251W115-2.

**Alternative Methods of Compliance (AMOCs)**

(k)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those

findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

Issued in Renton, Washington, on May 27, 2005.

**Ali Bahrami,**

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

[FR Doc. 05-11049 Filed 6-2-05; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

**[Docket No. FAA-2005-21355; Directorate Identifier 2005-NM-037-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Boeing Model 767 Series Airplanes Powered by General Electric or Pratt & Whitney Engines**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede an existing airworthiness directive (AD) that applies to certain Boeing Model 767 series airplanes. The existing AD currently requires repetitive inspections to detect discrepancies of the eight aft-most fastener holes in the horizontal tangs of the midspar fitting of the strut, and corrective actions if necessary. That AD also provides an optional terminating action for the repetitive inspections. This proposed AD would add repetitive inspections for cracks of the closeout angle that covers the two aft-most fasteners in the lower tang of the midspar fitting, and related investigative and corrective actions if necessary. This proposed AD also would reduce the inspection interval of the upper tang of the outboard midspar fitting; and would provide an optional terminating action for the repetitive inspections. This proposed AD is prompted by a report of a crack in a closeout angle that covers the two aft-most fasteners in the lower tang of the midspar fitting; and the discovery of a

crack in the lower tang of the midspar fitting under the cracked closeout angle. We are proposing this AD to prevent fatigue cracking in the primary strut structure and reduced structural integrity of the strut, which could result in separation of the strut and engine.

**DATES:** We must receive comments on this proposed AD by July 18, 2005.

**ADDRESSES:** Use one of the following addresses to submit comments on this proposed AD.

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**FOR FURTHER INFORMATION CONTACT:**

Suzanne Masterson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6441; fax (425) 917-6590.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-