Proposed Rules

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 777 airplanes. This proposed AD was prompted by reports of corrosion damage on the outer diameter chrome surface of the horizontal stabilizer pivot pins. Micro cracks in the chrome plating of the pivot pin, some of which extended into the base metal, were also reported. This condition, if not corrected, could result in a fractured horizontal stabilizer pivot pin, which may cause excessive horizontal stabilizer freeplay and structural damage significant enough to result in loss of control of the airplane. This proposed AD would require replacing the existing horizontal stabilizer pivot pins with new or reworked pivot pins having improved corrosion resistance, doing repetitive inspections after installing the pivot pins, and doing corrective actions if necessary. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by January 20, 2012.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
• Fax: (202) 493–2251.
• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2011–1259; Directorate Identifier 2011–NM–181–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received reports of corrosion damage on the outer diameter chrome surface of the horizontal stabilizer pivot pins. Micro cracks in the chrome plating of the pivot pin, some of which extended into the base metal, were also reported. This condition, if not corrected, could result in a fractured horizontal stabilizer pivot pin, which may cause excessive horizontal stabilizer freeplay and structural damage significant enough to result in loss of control of the airplane.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011. The service information describes procedures for replacing the inner and outer pivot pins of the horizontal stabilizer with new or reworked pivot pins, including replacing the spacer with a new spacer or with one that has been determined to be without corrosion damage or other irregularities. That service bulletin also describes procedures for doing repetitive ultrasonic inspections for cracks of the outer pivot pins after their replacement, and doing corrective actions if necessary. Corrective actions include replacing any pivot pin having cracking, corrosion damage, or other irregularities, with a new or serviceable pivot pin.

The compliance time for replacing the inner and outer pivot pins is the later of: (1) Before the accumulation of 16,000 total flight cycles, or within 3,000 days after the issuance of the original certificate of airworthiness or the original export certificate (whichever occurs first); and (2) within 750 days.
“after the original issue date of this service bulletin.” The first post-replacement inspection is within 32,000 flight cycles or 6,000 days (whichever occurs first after the pin replacement). The repetitive inspection interval is 16,000 flight cycles or 3,000 days (whichever occurs first); or 12,000 flight cycles or 3,000 days (whichever occurs first); depending on airplane group.

FAA’s Determination
We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements
This proposed AD would require accomplishing the actions specified in the service information described previously.

Costs of Compliance
We estimate that this proposed AD affects 155 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement of horizontal stabilizer pivot pins.</td>
<td>16 work-hours × $85 per hour = $1,360.</td>
<td>$11,452</td>
<td>$12,812</td>
<td>$1,985,860.</td>
</tr>
<tr>
<td>Repetitive inspections</td>
<td>22 work-hours × $85 per hour = $1,870 per inspection cycle.</td>
<td>0</td>
<td>$1,870 per inspection cycle ...</td>
<td>$289,850 per inspection cycle.</td>
</tr>
</tbody>
</table>

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspections. We have no way of determining the number of aircraft that might need these replacements.

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pivot pin or spacer replacement</td>
<td>16 work-hours × $85 per hour = $1,360.</td>
<td>$11,452</td>
<td>$12,812</td>
</tr>
</tbody>
</table>

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 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 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),
(3) Will not affect intrastate aviation in Alaska, and
(4) 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.

List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Incorporation by reference, 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):


(a) Comments Due Date
We must receive comments by January 20, 2012.

(b) Affected ADs
None.

(c) Applicability

(d) Subject
Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition
This AD was prompted by reports of corrosion damage on the outer diameter chrome surface of the horizontal stabilizer pivot pins. Micro cracks in the chrome plating of the pivot pin, some of which extended into the base metal, were also reported. This condition, if not corrected, could result in a fractured horizontal stabilizer pivot pin, which may cause excessive horizontal stabilizer freeplay and
structural damage significant enough to result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Pivot Pin Replacement

At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011, except as required by paragraph (i)(2) of this AD, replace the pivot pins of the horizontal stabilizer with new or reworked pivot pins, including replacing the spacer with a new spacer or with one that has been determined to be without corrosion damage or other irregularities; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011.

(h) Repetitive Inspections

At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011: Do detailed inspections for cracks, corrosion damage, or other irregularity of the outer and inner pivot pins; and an ultrasonic inspection for cracking of the outer pivot pins; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011, except as provided by paragraph (i)(1) of this AD.

Note 1: The Accomplishment Instructions of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011, might refer to other procedures. When the words “refer to” are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used to comply with the AD. When the words “in accordance with” are included in the instruction, the procedure in the design approval holder document must be used to comply with the AD.

(i) Exceptions

The following exceptions to Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011, apply to this AD.

(1) Where the Repeat Interval column of tables 2 and 3 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 777–55A0018, dated July 27, 2011, specify a compliance time, this AD requires compliance within the specified compliance time “after the effective date of this AD.”

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: 9-AMN-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/ certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that 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.

(k) Related Information

(1) For more information about this AD, contact James Sutherland, Aerospace Engineer, Airframe Branch, ANM–120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057–3356; phone: (425) 917–6535; fax: (425) 917–6590; email: james.sutherland@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, Washington 98124–2207; telephone (206) 544–5000, extension 1; fax (206) 766–5680; email: boeeconf@boeing.com; Internet: https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call (425) 227–1221.

Issued in Renton, Washington, on November 23, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Eurocopter Deutschland GmbH Model BO–105A, BO–105C, BO–105LS A–1, BO–105LS A–3, and BO–105S helicopters. This proposed AD would require inspecting certain main rotor blades for debonding of the erosion protective shell. If the erosion protective shell is debonded, you would be required to replace the main rotor blade with an airworthy main rotor blade. This proposed AD is prompted by the results of an inspection on a BO–105 helicopter where debonding was discovered on a main rotor blade erosion protective shell, and it was determined that the debonding was due to incorrect installation of the erosion protective shell. Subsequently, an incident occurred where a BO–105 helicopter lost its main rotor blade erosion protective shell during flight. The actions specified by this proposed AD are intended to detect debonding of the main rotor blade erosion protective shell which could lead to an unbalanced main rotor, high vibrations, damage to the tail boom or tail rotor, and loss of control of the helicopter.

DATES: Comments must be received on or before February 6, 2012.

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

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
• Fax: (202) 493–2251.
• Hand Delivery: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.