DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; McDonnell Douglas Corporation Model MD–90–30 Airplanes

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 Model MD–90–30 airplanes. The existing AD currently requires a detailed inspection for certain defects of the upper fasteners of the aft mount support fittings of the left and right engines, and corrective actions if necessary. This proposed AD would instead require repetitive replacement of the upper row of fasteners of the support fittings of the engine aft mount with new fasteners; and perform repetitive general visual inspections for defects of the lower row fasteners (Row B) of the support fittings of the left and right engine aft mounts, and replacement of all clearance fit fasteners in the lower row if necessary. This proposed AD results from reports of loose, cracked, or missing fasteners in the aft mount support fitting of the left and right engines. We are proposing this AD to prevent loose, cracked, or missing fasteners in the engine aft mount support fittings, which could lead to separation of the support fittings from the pylon, and could result in separation of the engine from the airplane.

DATES: We must receive comments on this proposed AD by August 16, 2010.

ADDRESSES: You may send comments 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: 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.

For service information identified in this proposed AD, contact Boeing Commercial Airlines, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800 0019, Long Beach, California 90846–0001; telephone 206–544–5000, extension 2; fax 206 766–5683; e-mail dse.boecom@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.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the rulemaking is indeed necessary, and any comments received, and other information. The street address for the Docket Office (telephone 800–647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2010–0645; Directive Identifier 2009–NM–200–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

On August 25, 2008, we issued AD 2008–18–10, Amendment 39–15667 (73 FR 52203, September 9, 2008), for certain McDonnell Douglas Corporation Model MD–90–30 airplanes. That AD required a detailed inspection for certain defects of the upper fasteners of the aft mount support fittings of the left and right engines, and corrective actions if necessary. That AD resulted from reports of loose, cracked, or missing fasteners in the aft mount support fittings of the left and right engines. We issued that AD to detect and correct loose, cracked, or missing fasteners in the engine aft support mount fittings, which could lead to separation of the support fittings from the pylon, and could result in separation of the engine from the airplane.

Actions Since Existing AD Was Issued

The preamble to AD 2008–18–10 explains that we considered the requirements “interim action” and were considering further rulemaking. We now have determined that further rulemaking is indeed necessary, and this proposed AD follows from that determination.

We also have received additional reports of loose, cracked, or missing fasteners in the aft mount support fitting of the left and right engines on 29 McDonnell Douglas Corporation Model MD–90–30 airplanes. The airplanes had accumulated between 15,560 and 37,298 total flight hours, and between 13,995 and 31,294 total flight cycles. Results of a safety assessment of the missing fasteners indicate that loose or otherwise discrepant fasteners in the top horizontal row, common with the pylon skin, significantly decrease the margin of safety of the aft mount support installation at the design limit load. Replacement of the upper row of fasteners at new specified intervals will help minimize the possibility of these fasteners becoming an unsafe condition while in service. Inspection of the lower
row of fasteners will help ensure design integrity.

**Relevant Service Information**

We have reviewed Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010. The service bulletin describes procedures for repetitive replacement of the upper row of fasteners (Row A) of the support fittings of the left and right engine aft mount with new fasteners. The service bulletin also describes procedures for repetitive general visual inspections for defects of the lower row fasteners (Row B) of the support fittings of the left and right engine aft mounts (that includes a gap check under the head or nut, and a torque check), as necessary for defects of the lower row of fasteners (Row B) of the support fittings of the left and right engine aft mounts, and replacing all clearance fit fasteners in the lower row (Row B) with new fasteners if any defect is found. Defects include missing, loose, and damaged fasteners.

The service bulletin specifies the compliance times for the initial replacement and inspections as follows:

- For Configurations 1 and 3 airplanes, as identified in the service bulletin: Within 10,000 flight cycles after fastener replacement in accordance with Boeing Service Bulletin MD90–54A002 or Boeing Multiple Operator Message 1–893882761–2, dated July 25, 2008.
- For Configurations 2 and 4 airplanes, as identified in the service bulletin: Within 2,457 flight cycles after the original issue date on the service bulletin (August 10, 2009).

The repetitive interval for replacement and inspections is not to exceed 10,000 flight cycles.

**Estimated Costs**

<table>
<thead>
<tr>
<th>Action</th>
<th>Work hours</th>
<th>Average labor rate per hour</th>
<th>Parts</th>
<th>Cost per airplane</th>
<th>Number of U.S.-registered airplanes</th>
<th>Fleet cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement</td>
<td>14</td>
<td>$85</td>
<td>$152 per replacement.</td>
<td>$1,342 per replacement cycle.</td>
<td>13</td>
<td>$17,446 per replacement cycle.</td>
</tr>
<tr>
<td>Inspections</td>
<td>4</td>
<td>85</td>
<td>$0</td>
<td>$340 per inspection cycle.</td>
<td>13</td>
<td>$4,420 per inspection cycle.</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 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 and placed it in the AD docket. 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, 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 removing Amendment 39–15667 (73 FR 52203, September 9, 2008) and adding the following new AD:


   **Comments Due Date**

   (a) The FAA must receive comments on this AD action by August 16, 2010.

   **Affected ADs**

   (b) This AD supersedes AD 2008–18–10, Amendment 39–15667.

   **Applicability**

   (c) This AD applies to McDonnell Douglas Corporation Model MD–90–30 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010.

   **Subject**

   (d) Air Transport Association (ATA) of America Code 54: Nacelles/Pylons.
Unsafe Condition

(e) This AD results from reports of loose, cracked, or missing fasteners in the aft mount support fitting of the left and right engines. The Federal Aviation Administration is issuing this AD to prevent loose, cracked, or missing fasteners in the engine aft support mount fitting, which could lead to separation of the support fitting from the pylon, and could result in separation of the engine from the airplane.

Compliance

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

Replacement and Inspection

(g) Except as required by paragraph (i) of this AD, at the applicable time specified in paragraph 1.E. “Compliance” of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010: Replace the upper row of fasteners (Row A) of the support fittings of the left and right engine aft mounts with new fasteners, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010. Repeat the replacement thereafter at intervals not to exceed 10,000 flight cycles.

(h) Concurrently with any replacement required by paragraph (g) of this AD: Perform a general visual inspection for defects of the lower row fasteners (Row B) of the support fittings of the left and right engine aft mounts, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010. Defects include missing, loose, and damaged fasteners.

(1) If no defect is found during any general visual inspection required by paragraph (h) of this AD, before further flight, insert a 0.0015-inch feeler gauge between the washer and the structure, or between the fastener head and structure, as applicable, to detect a gap condition, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010. A gap condition is a defect identified in any location where the feeler gauge can slip completely between a washer or a fastener head and the structure.

(ii) If no defect is found during any gap check required by paragraph (h)(1) of this AD, before further flight, apply torque to the fasteners of the lower row (Row B) to determine if there is a defect, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010. A defect is any fastener that turns with the application of the specified torque. If any defect is found, before further flight, replace all clearance fit fasteners in the lower row (Row B), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–54A003, Revision 2, dated February 12, 2010.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; BAE Systems (Operations) Limited Model BAe 146 and Avro 146–RJ Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

* * * [Fuel leaks and failed fasteners have been reported in the region of the rear spar root joint attachment fitting at wing rib 2. * * * *]

The unsafe condition is stress corrosion failures in the region of the rear spar root joint attachment fitting at wing rib 2, which could lead to reduced structural integrity of the wing, and consequent reduced controllability of the airplane. The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by August 16, 2010.

ADDRESSES: You may send comments 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.

• Mail: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

• Hand Delivery: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–40, 1200 New Jersey Avenue, SE., 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 BAE Systems (Operations) Limited, Customer Information Department, Prestwick...