DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64


AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) for Pratt & Whitney (PW) JT8D–209, –217, –217A, –217C, and –219 series turbofan engines. That AD requires initial and repetitive torque inspections of the 3rd stage and 4th stage low-pressure turbine (LPT) blades for shroud notch wear and replacement of the blade if wear limits are exceeded. That AD also requires replacing LPT-to-exhaust case bolts and nuts with bolts and nuts made of Tinidur material. This proposed AD would also require the replacement of bolts and nuts with bolts and nuts made of Tinidur material, and installation of crushable sleeve spacers on the bolts. This proposed AD results from nine reports of failure of Tinidur material LPT-to-exhaust case bolts since AD 2005–02–03 was issued, we received nine reports of failure of Tinidur material LPT-to-exhaust case bolts occurring during 3rd and/or 4th stage blade fracture events. Three of these events resulted in cowl penetration. The bolts mandated by AD 2005–02–03 do not provide enough energy absorption during a blade fracture event. PW has introduced longer bolts made of Tinidur and crushable sleeve spacers that will increase the energy absorption capability of the fasteners during a blade fracture event.

DATES: We must receive any comments on this proposed AD by August 30, 2010.

ADDRESSES: Use one of the following addresses to comment on this proposed AD.

Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the instructions for sending your comments electronically.

Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.

Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Fax: (202) 493–2251.

FOR FURTHER INFORMATION CONTACT: Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; telephone (781) 238–7117; fax (781) 238–7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA–2010–0452; Directorate Identifier 98–ANE–80–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 received 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://www.regulations.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 the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT’s complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477–78).

Examining the AD Docket

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

Discussion

The FAA proposes to amend 14 CFR part 39 by superseding AD 2005–02–03, Amendment 39–13948 (70 FR 3867, January 27, 2005). That AD requires torque inspection of the 3rd stage and 4th stage LPT blades for shroud notch wear and replacement of the blade if wear limits are exceeded. That AD also requires replacing LPT-to-exhaust case bolts and nuts with bolts and nuts made of Tinidur material. That AD was the result of reports of 194 blade fractures since 1991, with 37 of those blade fractures resulting in LPT case separation, and three reports of uncontained 3rd stage and 4th stage LPT blade failures with cowl penetration. That condition, if not corrected, could result in turbine blade failures that could result in uncontained engine debris and damage to the airplane.

Actions Since AD 2005–02–03 Was Issued

Since AD 2005–02–03 was issued, we received nine reports of failure of Tinidur material LPT-to-exhaust case bolts occurring during 3rd and/or 4th stage blade fracture events. Three of these events resulted in cowl penetration. The bolts mandated by AD 2005–02–03 do not provide enough energy absorption during a blade fracture event. PW has introduced longer bolts made of Tinidur and crushable sleeve spacers that will increase the energy absorption capability of the fasteners during a blade fracture event.

Also since AD 2005–02–03 was issued, PW revised Alert Service Bulletin (ASB) No. JT8D A6224, Revision 5, dated June 11, 2004, with Revision 6, dated May 3, 2007.

Relevant Service Information

We have reviewed and approved the technical contents of PW ASB No. JT8D A6224, Revision 6, dated May 3, 2007. That ASB describes procedures for performing torque inspections of the 3rd and 4th stage turbine blades.

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 products of this same type design. For that reason, we are proposing this AD, which would require torque inspection of the 3rd stage and 4th stage LPT blades for shroud notch wear and replacement of the blade if wear limits are exceeded. This proposed AD would also require the replacement of LPT-to-exhaust case bolts and nuts with bolts and nuts made of Tinidur material, with nuts made of Tinidur material, and installation of crushable sleeve spacers on the bolts.
Costs of Compliance

We estimate that this proposed AD would affect 1,143 engines installed on airplanes of U.S. registry. We also estimate that it would take about 1 work-hour per engine to perform the proposed blade inspection, and 1.5 work-hours per engine to replace the LPT-to-exhaust case bolts and nuts and install the crushable sleeve spacers. Required bolts, nuts, and sleeve spacers would cost about $4,576 per engine. We anticipate that 61 engines would require blade replacement each year. Required blades would cost about $131,560 per engine. The average labor rate is $85 per work-hour. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be $13,617,671.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Section 44701, Part A, Subpart III, 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 practices, methods, and procedures the FAA finds necessary for 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.

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 AD:
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. Would 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, Incorporation by reference, Safety.

The Proposed Amendment

Under the authority delegated to me by the Administrator, the Federal Aviation Administration 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 39–13948 (70 FR 3867, January 27, 2005) and by adding a new airworthiness directive to read as follows:


Comments Due Date

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by August 30, 2010.

Affected ADs

(b) This AD supersedes AD 2005–02–03.

Applicability

(c) This AD applies to Pratt & Whitney (PW) JT8D–209, –217, –217A, –217C, and –219 series turbofan engines. These engines are installed on, but not limited to, Boeing 727 series and McDonnell Douglas MD–80 series airplanes.

Unsafe Condition

(d) This AD results from nine reports of failure of Tinidur material low-pressure turbine (LPT)-to-exhaust case bolts since AD 2005–02–03 became effective. We are issuing this AD to prevent turbine blade failures that could result in uncontained engine debris and damage to the airplane.

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.

Requirements of AD 2005–02–03

Initial Torque Inspection for JT8D–209, –217, and –217A Engines

(f) For JT8D–209, –217, and –217A engines, perform the initial torque inspection of 3rd and 4th stage LPT blades for shroud notch wear. Use the procedures described in Accomplishment Instructions, Part 1, Paragraphs 1 through 3, of PW Alert Service Bulletin (ASB) No. JT8D A6224, Revision 6, dated May 3, 2007, at the applicable threshold in the following Table 1:

<table>
<thead>
<tr>
<th>Blade type</th>
<th>Hours time-in-service (TIS) as of March 3, 2005 (the effective date of AD 2005–02–03)</th>
<th>Inspection threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) New pre-Service Bulletin (SB) No. 5867 (small notch) 3rd stage turbine blades.</td>
<td>Any number .......................</td>
<td>Within 6,000 hours TIS.</td>
</tr>
<tr>
<td>(2) Refurbished pre-SB No. 5867 (small notch) 3rd stage turbine blades.</td>
<td>(i) Fewer than 3,000 ...........</td>
<td>Within 4,000 hours TIS.</td>
</tr>
<tr>
<td></td>
<td>(ii) 3,000 or more ..................</td>
<td>Within 6,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
</tr>
<tr>
<td>(3) New post-SB No. 5867 (large notch) 3rd stage turbine blades.</td>
<td>Any number .......................</td>
<td>Within 10,000 hours TIS.</td>
</tr>
<tr>
<td>(4) Refurbished post-SB No. 5867 (large notch) 3rd stage turbine blades.</td>
<td>(i) Fewer than 6,000 ...........</td>
<td>Within 7,000 hours TIS.</td>
</tr>
<tr>
<td></td>
<td>(ii) 6,000 or more ..................</td>
<td>Within 8,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
</tr>
<tr>
<td>(5) New pre-SB No. 6029 (small notch) 4th stage turbine blades.</td>
<td>Any number .......................</td>
<td>Within 6,000 hours TIS.</td>
</tr>
</tbody>
</table>
### Table 1—Initial Torque Inspection Threshold for JT8D–209, –217, and –217A Engines—Continued

<table>
<thead>
<tr>
<th>Blade type</th>
<th>Hours time-in-service (TIS) as of March 3, 2005 (the effective date of AD 2005–02–03)</th>
<th>Inspection threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6) Refurbished pre-SB No. 6029 (small notch) 4th stage turbine blades.</td>
<td>(i) Fewer than 3,000 ..........                                                      Within 4,000 hours TIS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) 3,000 or more ..........                                                      Within 6,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
<td></td>
</tr>
<tr>
<td>(7) New post-SB No. 6029 or new post-SB No. 6308 (large notch) 4th stage turbine blades.</td>
<td>Any number ..........                                                      Within 10,000 hours TIS.</td>
<td></td>
</tr>
<tr>
<td>(8) Refurbished post-SB No. 6029 or refurbished post-SB No. 6308 (large notch) 4th stage turbine blades.</td>
<td>(i) Fewer than 6,000 ..........                                                      Within 7,000 hours TIS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) 6,000 or more ..........                                                      Within 8,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
<td></td>
</tr>
</tbody>
</table>

#### Repetitive Torque Inspections for JT8D–209, –217, and –217A Engines

(g) For JT8D–209, –217, and –217A engines, perform repetitive torque inspections of 3rd and 4th stage LPT blades for shroud notch wear. Use the procedures described in Accomplishment Instructions, Part 1, Paragraph 1 of PW ASB No. JT8D A6224, Revision 6, dated May 3, 2007, at the applicable intervals in the following Table 2 and Table 3:

### Table 2—3rd Stage Repetitive Torque Inspection Intervals for JT8D–209, –217, and –217A Engines

<table>
<thead>
<tr>
<th>Inspection torque readings</th>
<th>Number of readings</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than or equal to 15 LB–IN (1.695 N.m) ..............</td>
<td>All .......................</td>
<td>Repeat torque inspection within 1,000 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 15 LB–IN (1.695 N.m) but greater than or equal to 10 LB–IN (1.130 N.m), Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m), Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m), Less than 5 LB–IN (0.565 N.m) .........................</td>
<td>One or more .......................</td>
<td>Repeat torque inspection within 500 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 10 LB–IN (0.565 N.m) .......................................</td>
<td>One or more .......................</td>
<td>Remove engine from service within 20 hours TIS since last inspection.</td>
</tr>
</tbody>
</table>

### Table 3—4th Stage Repetitive Torque Inspection Intervals for JT8D–209, –217, and –217A Engines

<table>
<thead>
<tr>
<th>Inspection torque readings</th>
<th>Number of readings</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than or equal to 15 LB–IN (1.695 N.m) ..............</td>
<td>All .......................</td>
<td>Repeat torque inspection within 1,000 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 15 LB–IN (1.695 N.m) but greater than or equal to 10 LB–IN (1.130 N.m), Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m), Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m), Less than 5 LB–IN (0.565 N.m) .........................</td>
<td>One or more .......................</td>
<td>Repeat torque inspection within 500 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 10 LB–IN (0.565 N.m) .......................................</td>
<td>One or more .......................</td>
<td>Remove engine from service within 20 hours TIS since last inspection.</td>
</tr>
</tbody>
</table>

(h) Subsequent repeat inspection intervals must not exceed the previous inspection interval.

### JT8D–209, –217, and –217A Engines Removed From Service

(i) JT8D–209, –217, and –217A engines removed from service may be returned to service after a detailed inspection and repair or replacement for all blades, of the failed stage, that exceed Engine Manual limits is done. Information on repairing or replacing turbine blades can be found in Sections 72–53–12 through 72–53–13 of the JT8D–200 Engine Manual, Part No. 773128.

### Initial Inspection for JT8D–217C and –219 Engines

(j) For JT8D–217C and –219 engines, perform the initial torque inspection of 4th stage LPT blades for shroud notch wear. Use the procedures described in Accomplishment Instructions, Part 2, Paragraphs 1 through 3 of PW ASB No. JT8D A6224, Revision 6 dated May 3, 2007, at the applicable threshold in the following Table 4:
TABLE 4—INITIAL TORQUE INSPECTION THRESHOLD FOR JT8D–217C AND –219 ENGINES

<table>
<thead>
<tr>
<th>Blade type</th>
<th>TIS as of March 3, 2005</th>
<th>Inspection threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) New pre-SB No. 6090 (small notch) 4th stage turbine blades.</td>
<td>Any number ................</td>
<td>Within 5,000 hours TIS.</td>
</tr>
<tr>
<td>(2) Refurbished pre-SB No. 6090 (small notch) 4th stage turbine blades.</td>
<td>(i) Fewer than 3,000</td>
<td>Within 4,000 hours TIS.</td>
</tr>
<tr>
<td></td>
<td>(ii) 3,000 or more</td>
<td>Within 5,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
</tr>
<tr>
<td>(3) New post-SB No. 6090, new post-SB No. 6402, or new post-SB No. 6412 (large notch) 4th stage turbine blades.</td>
<td>Any number ................</td>
<td>Within 10,000 hours TIS.</td>
</tr>
<tr>
<td>(4) Refurbished “As-Cast” post-SB No. 6090, post-SB No. 6402, or post-SB No. 6412 (large notch) 4th stage turbine blades.</td>
<td>Any number ................</td>
<td>Within 7,000 hours TIS.</td>
</tr>
<tr>
<td>(5) Refurbished “Modified” post-SB No. 6090, post-SB No. 6402, or post-SB No. 6412 (large notch) 4th stage turbine blades.</td>
<td>(i) Fewer than 3,000</td>
<td>Within 4,000 hours TIS.</td>
</tr>
<tr>
<td></td>
<td>(ii) 3,000 or more</td>
<td>Within 7,000 hours TIS, or within 1,000 hours TIS from March 3, 2005, whichever occurs first.</td>
</tr>
</tbody>
</table>

TABLE 5—REPETITIVE TORQUE INSPECTION INTERVALS FOR JT8D–217C AND –219 ENGINES

<table>
<thead>
<tr>
<th>Inspection torque readings</th>
<th>Number of readings</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than or equal to 15 LB–IN (1.695 N.m) ..................</td>
<td>All ..................</td>
<td>Repeat torque inspection within 1,000 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 15 LB–IN (1.695 N.m) but greater than or equal to 10 LB–IN (1.130 N.m).</td>
<td>One or more ................</td>
<td>Repeat torque inspection within 500 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m).</td>
<td>One to six ................</td>
<td>Repeat torque inspection within 125 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 10 LB–IN (1.130 N.m) but greater than or equal to 5 LB–IN (0.565 N.m).</td>
<td>Seven or more ................</td>
<td>Remove engine from service within 20 hours TIS since last inspection.</td>
</tr>
<tr>
<td>Less than 5 LB–IN (0.565 N.m) ..........................................</td>
<td>One or more ................</td>
<td>Remove engine from service within 20 hours TIS since last inspection.</td>
</tr>
</tbody>
</table>

What This AD Changes

LPT-to-Exhaust Case Bolts and Nuts Replacement, and Crushable Sleeve Spacer Installation

(q) At next accessibility to the LPT-to-Exhaust Case bolts and nuts, do the following:
(1) Replace the bolts with part number (P/N) MS9557–26 bolts; and
(2) Replace the nuts with P/N 375095 nuts or P/N 490270 nuts; and
(3) Install crushable sleeve spacers, P/N 822903, under the head of the bolts.
(4) Guidance on replacing the bolts and nuts and installing the crushable sleeve spacers can be found in PW ASB No. JT8D A6224, Revision 6, dated May 3, 2007.

Alternative Methods of Compliance

(v) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance (AMOCs) for this AD if requested using the procedures found in 14 CFR 39.19. AMOCs approved for the initial and repetitive inspection requirements of AD 2005–02–03 are approved as AMOCs for this AD.

Related Information

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:

- 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 regulatory evaluation, 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.


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; Directorate 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 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. 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