[Federal Register: August 28, 2008 (Volume 73, Number 168)]
[Rules and Regulations]
[Page 50718-50720]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr28au08-8]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27339; Directorate Identifier 2006-NM-280-AD; Amendment 39-15654; AD 2008-17-16]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-10-10 and DC-10-10F Airplanes, Model DC-10-15 Airplanes, Model DC-10-30 and DC-10-30F (KC-10A and KDC-10) Airplanes, Model DC-10-40 and DC-10-40F Airplanes, Model MD-10-10F and MD-10-30F Airplanes, and Model MD-11 and MD-11F Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain transport category airplanes identified above. This AD requires modifying the fuel boost pumps. This AD results from a fuel boost pump found with blown thermal fuses and a fractured thrust washer. We are issuing this AD to prevent failure of the fuel boost pumps, which could lead to the potential of ignition sources inside fuel tanks. This condition, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD becomes effective October 2, 2008.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 2, 2008.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024).

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 AD, the regulatory evaluation, any comments received, and

other information. The address for the Docket Office (telephone 800-647-5527) is the Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain McDonnell Douglas Model DC-10-10 and DC-10-10F airplanes, Model DC-10-15 airplanes, Model DC-10-30 and DC-10-30F (KC-10A and KDC-10) airplanes, Model DC-10-40 and DC-10-40F airplanes, Model MD-10-10F and MD-10-30F airplanes, and Model MD-11 and MD-11F airplanes. That supplemental NPRM was published in the Federal Register on March 7, 2008 (73 FR 12301). That supplemental NPRM proposed to require modifying the fuel boost pumps.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Support for the Supplemental NPRM

FedEx agrees with the technical aspects of the supplemental NPRM.

Request to Allow Use of Parts Manufacture Approval (PMA) Parts

Wencor West requests that we revise the supplemental NPRM to allow the use of PMA part numbers (P/Ns) 60-84744WE, 60-06561WE, 60-01317WE, and 60-02927WE as acceptable means of compliance for the replacement of Hydro-Aire fuel boost pumps having P/Ns 60-84744, 60-06561, 60-01317, and 60-02927, respectively. Wencor West states that these PMA parts were developed through the test and computation method governed by section 21.303 ("Replacement and modification parts") of the Federal Aviation Regulations (14 CFR 21.303) and FAA Order 8110-42B. Wencor West also states that the FAA found the PMA parts to be equal to and interchangeable with the Hydro-Aire parts. In addition, Wencor West requests that we clarify that certain other PMA parts, which may be used when doing further maintenance or overhaul of the pump, continue to be approved as equivalents to the original equipment manufacturer parts.

We disagree with revising this AD. Boeing conducted safety assessments of the fuel tank systems approved by the Los Angeles Aircraft Certification Office (ACO). As a result, we issued AD 2008-06-21, amendment 39-15433 (73 FR 14673, March 19, 2008), to require revising the FAA-approved maintenance program to incorporate new Airworthiness Limitations for the fuel tank systems to satisfy the requirements of Special Federal Aviation Regulation No. 88. That AD, in part, addressed maintenance of the fuel boost pumps. Any deviation from the safety assessment conducted by Boeing, including the use of PMA parts on the fuel boost pumps, must be approved by the Manager, Los Angeles ACO. Consequently, all previously approved PMA parts must be re-evaluated to determine whether an equivalent level of safety for each part meets the approved safety assessment. Therefore, engineering design approval of the PMA parts manufactured by Wencor West

must be approved as an alternative method of compliance (AMOC) under the provisions of paragraph (h) of this AD. We will consider requests for approval of an AMOC if sufficient data are submitted to substantiate that the design change would provide an acceptable level of safety. We have not changed the AD in this regard.

Request to Revise Cost of Compliance

FedEx requests that we revise the Costs of Compliance section of the supplemental NPRM to reflect a figure that is more representative of an operator's cost. FedEx points out that Crane Hydro-Aire Service Bulletin 60-847-28-3, dated July 2, 2007, estimates that replacement parts cost $639.64, labor costs $445.50, and removal and installation of the fuel pump cost $107.80. These figures total $1,192.94 per fuel pump. Given that this AD affects about 360 airplanes of U.S. registry equipped with 10 to 19 fuel pumps, FedEx estimates that the total fleet cost is between $4,294,584 and $8,159,709, or between $11,929 and $22,665 per airplane.

FedEx also points out that Crane Hydro-Aire Service Bulletin 60-847-28-3 states that if a pump assembly requires additional repair, then the repair will be quoted separately. FedEx states that it would be unrealistic to think that there will not be repair/overhaul costs associated with this modification. FedEx's experience has shown that about 80 percent of the fuel pumps, removed due to inspection or modification, resulted in repair or overhaul of the pump. FedEx, therefore, estimates that at least 50 percent of the fuel pumps in-service will need to be repaired or overhauled at a cost of $5,000 per pump. FedEx estimates that repair/overhaul will cost at least $9,000,000 (360 airplanes x 5 pumps x $5,000). FedEx states that this cost for repair/overhaul of the fuel pump should also be included in the Costs of Compliance section.

We disagree with revising the Costs of Compliance section. When developing the Costs of Compliance for an AD we take into account the estimated work hours and parts cost provided by the manufacturer. Paragraph 1.G. of Crane Hydro-Aire Service Bulletin 60-847-28-3 estimates that the modification would take about 3 work hours, which we used with our estimated average labor rate of $80 per work hour to determine the total labor costs. The economic analysis, however, is limited only to the cost of actions actually required by the rule. It does not consider the costs of routine maintenance. We have not changed the AD in this regard.

Clarification of AMOC Paragraph

We have revised this action to clarify the appropriate procedure for notifying the principal inspector before using any approved AMOC on any airplane to which the AMOC applies.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the change described previously. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

There are about 512 airplanes of the affected design in the worldwide fleet. This AD affects about 360 airplanes of U.S. registry. The required modification takes about 3 work hours per fuel boost pump, at an average labor rate of $80 per work hour. Required parts cost about $640 per fuel boost pump. Depending on the airplane configuration, there are between 10 and 19 fuel boost pumps per airplane. Based on these figures, the estimated cost of this AD for U.S. operators is between $3,168,000 and $6,019,200, or between $8,800 and $16,720 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 AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866;

(2) Is not a "significant rule" under 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 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.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2008-17-16 McDonnell Douglas: Amendment 39-15654. Docket No. FAA-2007-27339; Directorate Identifier 2006-NM-280-AD.

Effective Date

(a) This AD becomes effective October 2, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) McDonnell Douglas Model DC-10-10 and DC-10-10F airplanes, Model DC-10-15 airplanes, Model DC-10-30 and DC-10-30F (KC-10A and KDC-10) airplanes, Model DC-10-40 and DC-10-40F airplanes, and Model MD-10-10F and MD-10-30F airplanes; as identified in Boeing Alert Service Bulletin DC10-28A254, Revision 1, dated September 12, 2007.

(2) McDonnell Douglas Model MD-11 and MD-11F airplanes, as identified in Boeing Alert Service Bulletin MD11-28A134, Revision 1, dated September 6, 2007.

Unsafe Condition

(d) This AD results from a fuel boost pump found with blown thermal fuses and a fractured thrust washer. We are issuing this AD to prevent failure of the fuel boost pumps, which could lead to the potential of ignition sources inside fuel tanks. This condition, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Compliance

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

Service Bulletin Reference Paragraph

(f) The term "service bulletin," as used in this AD, means the following service bulletins, as applicable:

(1) For the airplanes identified in paragraph (c)(1) of this AD, Boeing Alert Service Bulletin DC10-28A254, Revision 1, dated September 12, 2007.

(2) For the airplanes identified in paragraph (c)(2) of this AD, Boeing Alert Service Bulletin MD11-28A134, Revision 1, dated September 6, 2007.

Note 1: Boeing Alert Service Bulletin DC10-28A254, Revision 1, dated September 12, 2007; and Boeing Alert Service Bulletin MD11-28A134, Revision 1, dated September 6, 2007; refer to Crane Hydro-Aire Service Bulletin 60-847-28-3, Revision 1, dated July 2, 2007, as an additional source of service information for accomplishing the modification in paragraph (g) of this AD.

Modification

(g) At the applicable compliance time specified in paragraph (g)(1) or (g)(2) of this AD, modify the fuel boost pumps having part numbers 60-847-1A, -2, or -3, in accordance with the Accomplishment Instructions of the applicable service bulletin.

(1) For fuel boost pumps identified as Configuration 1 or 2 in Table 1 of paragraph 1.E. of the applicable service bulletin, do the modification within 120 months after the effective date of this AD.

(2) For fuel boost pumps identified as Configuration 3 in Table 1 of paragraph 1.E. of the applicable service bulletin, do the modification within 72 months after the effective date of this AD.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, ATTN: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210; has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(i) You must use Boeing Alert Service Bulletin DC10-28A254, Revision 1, dated September 12, 2007; or Boeing Alert Service Bulletin MD11-28A134, Revision 1, dated September 6, 2007; as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024), for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on August 12, 2008.
Michael J Kaszycki,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. E8-19381 Filed 8-27-08; 8:45 am]