Proposed Rules

Federal Register
Vol. 61, No. 119
Wednesday, June 19, 1996

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. 96–NM–24–AD]

RIN 2120–AA64

Airworthiness Directives; McDonnell Douglas Model DC–10–15 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all McDonnell Douglas Model DC–10–15 airplanes. This proposal would require, among other things, inspections to detect discrepancies at various locations of pylons 1 and 3, and correction of any discrepancy found. This proposal is prompted by a report of internal structural damage to the wing engine pylon that occurred during maintenance of a Model DC–10 series airplane. The actions specified by the proposed AD are intended to ensure the integrity of the structure and attachment of the wing engine pylon.

DATES: Comments must be received by July 29, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 96–NM–24–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from McDonnell Douglas Corporation, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Department C1–L51 (2–60). This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Ron Atmur, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (310) 627–5224; fax (310) 627–5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket Number 96–NM–24–AD.'' The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 96–NM–24–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

On May 16, 1980, the FAA issued AD 80–11–05 R1, amendment 39–3981 (45 FR 35310, May 27, 1980), which is applicable to all McDonnell Douglas Model DC–10–10, –10F, –30, –30F, and –40 series airplanes. That AD requires a revision to the wing-pylon inspection programs for these airplanes, which includes various types of inspections to detect discrepancies, and the correction of any discrepancy found. That action was prompted by a report of internal structural damage to the wing engine pylon that occurred during maintenance of a Model DC–10 series airplane. The requirements of that AD are intended to ensure the integrity of the structure and attachment of the wing engine pylon.

Since the issuance of AD 80–11–05 R1, the FAA certificated McDonnell Douglas Model DC–10–15 series airplanes for operation in the U.S. Subsequently, the FAA has determined that these airplanes also are subject to the unsafe condition addressed in AD 80–11–05 R1, since they are similar in type design to the airplane models addressed in that AD.

Explanation of Relevant Service Information

The FAA has reviewed and approved McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979, which describes procedures for repetitive visual inspections to detect discrepancies at various locations of pylons 1 and 3, and correction of any discrepancy found. The service bulletin indicates that these locations include the following: the pylon aft bulkhead; the upper surface of the upper spar aft of station Yn=342.864 to the aft bulkhead; the lower surface of the upper spar and spar cap angles aft of station Yn=342.864 to the aft bulkhead; the center and lower (firewall) spar and spar cap angles; the thrust link installation; the lower and upper forward spherical bearing installation; the forward bulkhead; and the forward wing attach fitting (footstool) of the pylon.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require:

1. At each pylon removal and installation, the engine and pylon must be removed and installed separately, and the pylon aft bulkhead lug must be protected from contact with certain attach bolt heads.

2. Performance of various repetitive inspections to detect discrepancies at various locations of pylons 1 and 3, and correction of any discrepancy found.

3. Submission of a pylon maintenance program that includes specific repetitive inspections at intervals of 20,000 hours time-in-service.

Certain of these actions would be required to be accomplished in accordance with the service bulletin described previously; other actions would be required to be accomplished in accordance with the DC–10 Nondestructive Testing Manual and the DC–10 Maintenance Manual.

Cost Impact

There are approximately 7 Model DC–10–15 airplanes of the affected design in the worldwide fleet. The FAA estimates that 2 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 22 work hours per airplane to accomplish the proposed actions, and that the average labor rate is $60 per work hour. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be $2,640, or $1,320 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations proposed herein would not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that 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); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

McDonnell Douglas: Docket 96–NM–24–AD.

Applicability: All Model DC–10–15 airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (k) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure the integrity of the structure and attachment of the wing engine pylon, accomplish the following:

(a) At each pylon removal and installation that is accomplished after the effective date of this AD: The engine and pylon shall be removed and installed separately, unless such removal or installation, or both, as an assembly is accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

(b) At each pylon removal and installation that is accomplished after the effective date of this AD: Protect the pylon aft bulkhead lug from contact with the clevis-to-wing attach bolt heads using part number (P/N) DZZ7268–1 in accordance with page 417, dated January 1, 1982, and page 427, dated May 1, 1985, of Chapter 54–00–01 of the McDonnell Douglas DC–10 Maintenance Manual.

(c) Prior to further flight following any pylon reinstallation that is accomplished after the effective date of this AD: Accomplish the requirements of paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

(1) Perform an inspection of the aft pylon bulkhead to detect cracking, in accordance with page 634, dated December 1, 1979, and page 634A, dated August 1, 1990, of Chapter 54–10–11 of the McDonnell Douglas DC–10 Nondestructive Testing Manual.

(2) Perform a visual inspection of the pylon aft spherical bearing and attaching hardware to verify the security of the nut and bolt.

(3) Perform a visual inspection of the torque stripe for proper alignment.

(d) Perform the inspections required by paragraph (e) of this AD at the later of the times specified in paragraphs (d)(1) and (d)(2) of this AD. Thereafter, repeat these inspections at intervals not to exceed 3,600 hours time-in-service or 12 months, whichever occurs later.

(1) Prior to the accumulation of 3,600 total hours time-in-service.

(2) Within 3,600 hours time-in-service or 12 months after the effective date of this AD, whichever occurs later.

(e) Perform the inspections required by paragraphs (e)(1) through (e)(5) of this AD at the times indicated in paragraph (d) of this AD.

(1) Perform a visual inspection to detect cracking of the external surfaces of the thrust link forward (pylon) and aft (wing) attachment lugs, in accordance with paragraph 2.C.(1) of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(2) Perform a visual inspection to detect discrepancies of the upper surface of the pylon upper spar aft of station Yn=342.864, in accordance with paragraph 2.G. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(3) Perform a visual inspection to detect discrepancies of the center and lower (firewall) spar and spar cap angles from the aft bulkhead to the forward bulkhead, in accordance with paragraph 2.M. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(4) Perform an inspection for discrepancies at the various locations of the wing and tail specified on pages 601, 602, 602A, 604, 605, 606, and 608, all dated November 1, 1986; page 603, dated May 1, 1986; and pages 604A and 607, dated May 1, 1987; of Chapter 05–51–08 of the McDonnell Douglas DC–10 Maintenance Manual. Accomplish the inspections in accordance with the procedures specified on those pages of the McDonnell Douglas DC–10 Maintenance Manual.

(5) Perform a visual inspection of the pylon aft spherical bearing and attaching hardware to verify the security of the nut and bolt, and inspect the torque stripe for alignment.

(f) Within 30 days after the effective date of this AD: Submit a pylon maintenance program, as an amendment to the maintenance program, to the assigned FAA Principal Maintenance Inspector for approval. The pylon maintenance program shall specify that, prior to the accumulation of 20,000 total hours time-in-service, or within 20,000 hours time-in-service since the last inspection, whichever occurs later, the operator will accomplish, as a minimum, the

actions specified in paragraphs (f)(1)through (f)(9) of this AD.

(1) Perform a visual inspection to detect cracking of the pylon aft bulkhead, in accordance with paragraphs 2.E. and 2.F. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979; and an eddy current inspection to detect cracking of the pylon aft bulkhead, in accordance with page 634, dated December 1, 1979, and page 634A, dated August 1, 1990, of Chapter 54–10–11 of the McDonnell Douglas DC–10 Nondestructive Testing Manual.

(2) Perform a visual inspection to detect discrepancies of the front spar bulkhead, in accordance with paragraph 2.H. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(3) Perform a visual inspection to detect cracking of the attachment fitting-to-pylon forward bulkhead (footstool) of the wing front spar; perform a detailed visual inspection to detect cracking, and loose or missing fasteners, of the wing pylon attachment; and verify that the pre-load indicating (PLI) washers cannot be rotated; in accordance with paragraph 2.L. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(4) Perform an inspection to verify that the attach bolt PLI washers on the lower spherical bearing plug cannot be rotated; verify that no interference exists between the plug forward flange aft face, and the forward face of the spherical bearing; and perform a detailed visual inspection of the plug in situ; in accordance with paragraph 2.I. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(5) Perform a visual inspection to verify the condition, security, and torque stripe alignment of the plug assembly of the forward upper spherical bearing installation, in accordance with paragraph 2.J. of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(6) Perform a visual inspection to verify proper installation of the thrust link bolts, nuts, and retaining washers of the thrust link installation, in accordance with paragraph 2.C.(2) of McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979.

(7) Perform an inspection of the aft spherical bearing, as specified in paragraphs (f)(7)(i) through (f)(7)(iv) of this AD.

(i) Remove the aft spherical bearing through bolt. Inspect the inner bore of the bushing in situ using Magnaflux bolt and visual inspection techniques. Perform a visual inspection using a 10x (power) glass (or equivalent) to detect cracks of the forward and aft surfaces of the spherical bearing. Reinstall the through bolt.

(ii) Verify that the torque of the through bolt is 1,200 to 1,300 inch-pounds.

(iii) Inspect the clearance of the aft spherical bearing forward face/clevis.

(iv) Torque stripe the nut to bolt.

(8) Perform an ultrasonic inspection to detect cracking of the bulkhead lug and wing clevis-to-wing attachment, including the bolts, in accordance with pages 635, 636, 638, 638A, and 638B, dated December 1, 1979; page 637, dated September 1, 1993; page 651, dated February 1, 1982; and page 652, dated August 1, 1992; of Chapter 54–10–11 of the McDonnell Douglas DC–10 Nondestructive Testing Manual.

(9) Accomplish either paragraph (f)(9)(i) or (f)(9)(ii) of this AD.

(i) Perform an X-ray inspection in situ to ensure the integrity of the steel thrust links, in accordance with page 632A, dated August 1, 1984, and page 632B, dated February 1, 1981, of the McDonnell Douglas DC–10 Nondestructive Testing Manual. Or

(ii) Perform an ultrasonic inspection in situ to ensure the integrity of the steel thrust links, in accordance with page 632C, dated August 1, 1985, and page 632D, dated August 1, 1984, of the McDonnell Douglas DC–10 Nondestructive Testing Manual.

(g) Prior to further flight after a pylon has been subjected to vertical or horizontal misalignment, or both (e.g., during maintenance), perform an inspection to detect cracking of the aft pylon bulkhead, in accordance with page 634, dated December 1, 1979, and page 634A, dated August 1, 1990, of Chapter 54–10–11 of the McDonnell Douglas DC–10 Nondestructive Testing Manual.

(h) Prior to further flight following any event that produces high pylon loads: Perform an inspection of the pylon for structural integrity, in accordance with pages 601, 602, 602A, 604, 605, 606, and 608, dated November 1, 1986; page 603, dated May 1, 1986; and pages 604A and 607, dated May 1, 1987; of Chapter 05–51–08 of the McDonnell Douglas DC–10 Maintenance Manual.

Note 2: Examples of events that produce high pylon loads, include, but are not limited to, the following:

- Hard or overweight landings (for the purpose of this AD, overweight landings are made at aircraft weights in excess of 369,000 pounds);
- Severe turbulence encounters;
- Engine vibration that requires engine removal or critical engine failure, or both;
- Ground damage (work stands, etc.);
- Compressor stalls requiring engine removal; and
- Excursions from the runway of a nature that might have imposed loads more severe than those encountered normally on the runway.

(i) Prior to further flight, correct any discrepancy found during any inspection required by this AD, in accordance with a method approved by the Manager, Los Angeles ACO; the Structural Repair Manual; or McDonnell Douglas DC–10 Service Bulletin 54–74, dated December 21, 1979; as appropriate.

(j) Within 10 days after accomplishing the inspections required by this AD, report inspection results, positive or negative, to the FAA Principal Maintenance Inspector. The report shall include the information specified in paragraphs (j)(1) through (j)(5) of this AD. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120–0056.

(1) The ''N'' number of the airplane.

(2) The total number of hours time-in-service accumulated on the airplane.

(3) The pylon number of the airplane.

(4) The specific paragraph (and subparagraph) of this AD that corresponds with the inspection results being reported.

(5) Specific inspection results: For example, the location and size of cracking, specific location of discrepant fasteners, and part numbers.

(k) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(l) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on June 13, 1996.

James V. Devany,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 96–15601 Filed 6–18–96; 8:45 am]

BILLING CODE 4910–13–U

14 CFR Part 39

[Docket No. 95–NM–106–AD]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 727 and 737 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 727 and 737 series airplanes. This proposal would require replacing the fuel cap assembly with a new assembly on the inlet fitting at the inside top of the auxiliary fuel tank. The proposal would also require replacing the INOP placards with new placards. This proposal is prompted by reports that the fuel cap assembly, due to its design, became loose and allowed fuel to enter the deactivated auxiliary fuel tanks on in-service airplanes. The actions specified by the proposed AD are intended to prevent unwanted fuel transferring to the deactivated auxiliary fuel tanks, due to the problems associated with a loose fuel cap assembly.

DATES: Comments must be received by July 29, 1996.