

Proposed Rules

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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. 94-NM-178-AD]

Airworthiness Directives; McDonnell Douglas Model DC-10-10 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 McDonnell Douglas Model DC-10-10 airplanes. This proposal would require repetitive inspections to detect cracking of the upper caps in the front spar of the left and right wing, and repair, if necessary. This proposal is prompted by reports of fatigue cracking in the upper cap of the front spar of the wing in the forward flange area. The actions specified by the proposed AD are intended to prevent progression of fatigue cracking, which could cause reduced structural integrity of the wing front spar and damage to adjacent structures.

DATES: Comments must be received by March 7, 1995.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 94-NM-178-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90801-1771, Attention: Business Unit Manager, Technical Administrative Support, Dept. L51, M.C. 2-98. This information may be examined at the

FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT: John L. Cecil, Aerospace Engineer, Airframe Branch, ANM-121L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard., Long Beach, California 90712-4137; telephone (310) 627-5322; 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 94-NM-178-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. 94-NM-178-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has recently received reports of cracking in the upper cap of the front spar of the left and right wing between stations Xos 669 and Xos 789 on McDonnell Douglas Model DC-10-10 airplanes. In one of the reported instances, cracking went from the forward edge of the cap, through a fastener hole, and terminated at the vertical leg of the cap. Subsequent investigation has revealed that the cracking was initiated and propagated by fatigue. This condition, if not corrected, could result in reduced structural integrity of the wing front spar and damage to adjacent structures.

The FAA has reviewed and approved McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 12, 1994, which describes procedures for eddy current test high frequency (ETHF) surface inspections to detect fatigue cracking in the upper cap of the front spar of the wing, and repair of the upper cap, if cracks are found. It also provides procedures for accomplishing a modification to prevent cracking.

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 repetitive ETHF surface inspections to detect fatigue cracking, and repair of the upper cap in the front spar of the wing if any cracking is found. Additional repetitive inspections would be required after any repair of the upper cap. If the preventive modification is installed on an airplane on which no cracks were found during the initial inspection, the repetitive inspections of that airplane may be terminated. The actions would be required to be accomplished in accordance with the service bulletin described previously.

Subsequent to the issuance of the referenced service bulletin, the manufacturer conducted further crack growth analysis. Based on the results of that analysis, the FAA is proposing a shorter compliance time for the initial ETHF inspection than the time specified in the service bulletin. This will provide additional inspection intervals to ensure adequate detection of cracking in the front spar cap in a timely manner.

As a result of recent communications with the Air Transport Association (ATA) of America, the FAA has learned that, in general, some operators may

misunderstand the legal effect of AD's on airplanes that are identified in the applicability provision of the AD, but that have been altered or repaired in the area addressed by the AD. The FAA points out that all airplanes identified in the applicability provision of an AD are legally subject to the AD. If an airplane has been altered or repaired in the affected area in such a way as to affect compliance with the AD, the owner or operator is required to obtain FAA approval for an alternative method of compliance with the AD, in accordance with the paragraph of each AD that provides for such approvals. A note has been included in this notice to clarify this requirement.

There are approximately 126 Model DC 10-10 airplanes of the affected design in the worldwide fleet. The FAA estimates that 77 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 14 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 total cost impact of the proposed AD on U.S. operators is estimated to be \$64,680, or \$840 per airplane, per inspection cycle.

The total 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.

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. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

McDonnell Douglas: Docket 94-NM-178-AD.

Applicability: Model DC-10-10 airplanes, as listed in McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 12, 1994, 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 use the authority provided in paragraph (e) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition; or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any airplane from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent reduced structural integrity of the wing front spar and damage to adjacent structures due to fatigue cracking in the upper cap of the front spar of the wing, accomplish the following:

(a) Prior to the accumulation of 10,000 total landings, or within 1,800 landings after the effective date of this AD, whichever occurs later, perform an initial eddy current test high frequency (ETHF) surface inspection to detect cracks in the upper cap of the front spar of the left and right wing between stations Xos 667.678 and Xos 789.645, inclusive, in accordance with McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 12, 1994. Repeat this

inspection thereafter at intervals specified in paragraph (b) or (c) of this AD, as applicable.

(b) For airplanes on which no crack is found: Repeat the inspection required by paragraph (a) of this AD thereafter at intervals not to exceed 10,000 landings, or accomplish the crack preventative modification in accordance with McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 1994. Accomplishment of that preventative modification constitutes terminating action for the requirements of this paragraph.

(c) For airplanes on which any crack is found that is identified as "Condition II" in McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 12, 1994: Accomplish paragraphs (c)(1) and (c)(2) of this AD in accordance with that service bulletin.

(1) Prior to further flight, perform the permanent repair for cracks in accordance with the service bulletin; and

(2) Within 12,500 landings after the installation of the permanent repair specified in paragraph (c) (1) of this AD, perform an ETHF surface inspection for cracks, in accordance with the service bulletin. Repeat this inspection thereafter at intervals not to exceed 7,000 landings.

(d) For airplanes on which any crack is found that is identified as "Condition III" in McDonnell Douglas DC-10 Service Bulletin 57-129, dated August 12, 1994: Prior to further flight, repair the cracking in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

(e) 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, FAA. 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 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(f) 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 January 6, 1995.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 95-791 Filed 1-11-95; 8:45 am]

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