DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [62 FR 27941 NO. 99 05/22/97]

Docket No. 96-NM-201-AD; Amendment 39-10036; AD 97-11-07

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-90-30 Airplanes

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all McDonnell Douglas Model MD-90-30 airplanes, that requires revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness [MD-90-30 Airworthiness Limitations Instructions (ALI)]. The revision will incorporate certain compliance times for inspections to detect fatigue cracking of principal structural elements (PSE) and to add PSE's to the ALI. This amendment is prompted by analysis of data that identified reduced initial inspection thresholds, reduced repetitive inspection intervals for PSE's, and other PSE's to be added to the ALI. The actions specified by this AD are intended to ensure that fatigue cracking of various PSE's are detected and corrected; such fatigue cracking could adversely affect the structural integrity of these airplanes.

EFFECTIVE DATE: June 26, 1997.

ADDRESSES: Information pertaining to this rulemaking action may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Brent Bandley, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (562) 627-5237; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all McDonnell Douglas Model MD-90-30 airplanes was published in the **Federal Register** on March 7, 1997 (62 FR 10490). That action proposed to require operators to revise the Airworthiness Limitations Section of the Instructions for Continued Airworthiness [MD-90-30 Airworthiness Limitations Instructions (ALI)]. The revision would incorporate certain compliance times for inspections to detect

fatigue cracking of principal structural elements (PSE) and to add PSE's to the ALI.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the two comments received.

Both commenters support the proposed rule.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 15 McDonnell Douglas Model MD-90-30 airplanes of the affected design in the worldwide fleet. The FAA estimates that 11 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$660, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the 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 adopted herein will 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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from 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.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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:



AIRWORTHINESS DIRECTIVE

Aircraft Certification Service Washington, DC



U.S. Department of Transportation Federal Aviation Administration

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, Part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference FAR Subpart 39.3).

97-11-07 MCDONNELL DOUGLAS: Amendment 39-10036. Docket 96-NM-201-AD.

Applicability: All Model MD-90-30 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 (d) 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 continued structural integrity of these airplanes, accomplish the following:

(a) Within 180 days after the effective date of this AD, revise the Airworthiness Limitations Section of the Instructions for Continued Airworthiness [Airworthiness Limitations Instructions (ALI), McDonnell Douglas Report No. MDC-94K9000, dated November 1994] to incorporate the Item, Location, and Inspection Interval of the following principal structural elements: This may be accomplished by inserting a copy of Revision 1 of the ALI, dated January 1995, or a copy of this AD into the ALI.

		Inspection Interval (in landings)	
Item	Location	Initial	Repeat
Item 53.30.02.3	Skin Panels, STA 237 to 1395 Fuselage Skin in Constant Section from Longeron 3 Left to Longeron 3 Right	60,000	11,000
Item 53.30.02.4	Skin Panels, STA 237 to 1395 Fuselage Hoop Skin Splice in Constant Section from Longeron 5 Left to Longeron 5 Right	60,000	30,000
Item 54.10.04.1	Thrust Bulkhead, Pylon - STA Yn 170.5 - Rear Spar and Engine Thrust Support Fitting (Upper and Lower)	15,000	4,500

(b) Within 180 days after the effective date of this AD, revise the Airworthiness Limitations Section of the Instructions for Continued Airworthiness [Airworthiness Limitations Instructions (ALI), McDonnell Douglas Report No. MDC-94K9000, dated November 1994] to incorporate the Item, Location, and Inspection Interval of the following principal structural elements: This may be accomplished by inserting a copy of Revision 2 to the ALI, dated July 1996, or a copy this AD into the ALI.

		Inspection Interval (in landings)	
Item	Location	Initial	Repeat
Item 55.13.01.1	Plates/Skin - Upper STA Xh 27.2	60,000	8,100
	Left to Xh 27.2 Right - Upper Aft		
	Skin Plank with Integral Stringers		
	from Xh 7.234 to Xh 26.859		

- (c) Except as provided in paragraph (d) of this AD: After the actions specified in paragraphs (a) and (b) of this AD have been accomplished, no alternative inspections or inspection intervals may be approved for the parts specified in paragraph (a) and (b) of this AD.
- d) 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 Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. 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.

(e) 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.



