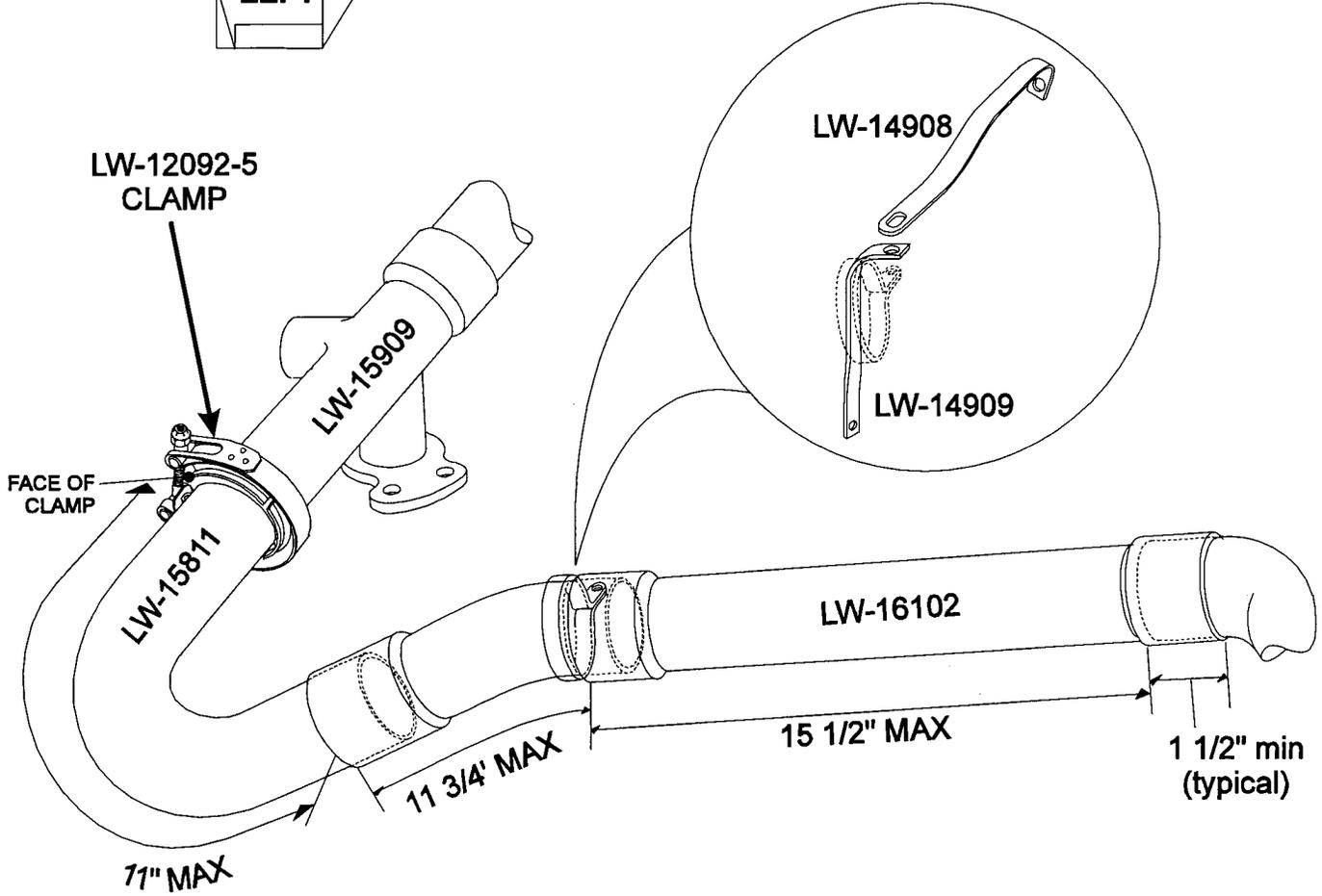
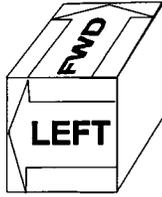


APPENDIX 1

APPENDIX I
91-21-01

VIEW-AFT LOOKING FORWARD
ON TOP OF ENGINE



NOTE: ALL DIMENSIONS TAKEN ON OUTSIDE
OF TUBE BENDS

14 CFR Part 39

[Docket No. 96-NM-111-AD; Amendment 39-9664; AD 96-12-21]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9-80 Series Airplanes, Model MD-88 Airplanes, and Model MD-90 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all McDonnell Douglas Model DC-9-80 series airplanes, Model MD-88 airplanes, and Model MD-90 airplanes. This action requires revising the Airplane Flight Manual to include limitations and procedures to address situations in which the autopilot or autothrottle fails to disengage. This amendment is prompted by incidents in which the flightcrew was unable to disconnect the autopilot or autothrottle function from the engaged position, due to a discrepancy in a microswitch that is associated with the operation of those functions. The actions specified in this AD are intended to ensure the flight crew's ability to control the airplane manually if the autopilot or autothrottle function fails to disengage.

DATES: Effective June 24, 1996.

Comments for inclusion in the Rules Docket must be received on or before August 6, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-111-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Information concerning this rulemaking action may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, Transport Airplane Directorate, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT: J. Kirk Baker, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (310) 627-5345; fax (310) 627-5210.

SUPPLEMENTARY INFORMATION: The FAA has received several reports of incidents in which either the autopilot or the

autothrottle function on McDonnell Douglas Model DC-9-80 series airplanes failed to disconnect from the engaged position. Two incidents occurred in which the flight crew was unable to disengage the autopilot function. As a result of one of these incidents, which occurred when the airplane was on final approach, the flight crew found it necessary to declare an emergency and to perform a go-around. At least two other incidents occurred in which the flight crew was unable to disengage the autothrottle function.

Investigation of these incidents revealed that the toggle/cam assembly of a microswitch, which is used for the autopilot and autothrottle functions on the Digital Flight Guidance Control Panel (DFGCP), can fail the functions in the engaged position. Further investigation revealed that the flight crew was able to disengage the autopilot or autothrottle function by depressing and holding the release button for the functions (which are located on the control column and throttle levers). However, once the release button was released, the function re-engaged.

Failure of the autopilot or autothrottle function to disconnect from the engaged position can adversely affect the flight crew's ability to control the airplane manually.

Since the toggle/cam assembly of the subject microswitch that is installed on Model DC-9-80 series airplanes may also be installed on Model MD-88 and MD-90 airplanes, all of these airplane models may be subject to this same unsafe condition.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other Model DC-9-80 series, Model MD-88, and Model MD-90 airplanes of the same type design, this AD is being issued to ensure the flight crew's ability to continue to control the airplane manually if the autopilot or autothrottle function fails to disengage. This AD requires a revision to the FAA-approved Airplane Flight Manual (AFM) to include limitations and procedures to address situations in which the autopilot or autothrottle fails to disengage.

The FAA points out that failure of the autopilot or autothrottle function to disconnect from the engaged position can occur during any phase of flight. If it occurs during cruise, the flight crew can readily address the situation and continue to fly the airplane manually with the autopilot or autothrottle engaged. However, a safety concern

arises if the failure occurs during approach, when the flight crews workload is particularly heavy and the airplane is close to the ground; the optimal environment for the flight crew during approach is one that is free from distraction. The limitation and associated abnormal procedures that are required by this AD to be included in the AFM will ensure that the flight crew is briefed on the appropriate procedures and, thereby, will be less distracted during that critical phase of flight.

The requirements of this AD are considered to be interim action until final action is identified, at which time the FAA may consider additional rulemaking.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped

postcard on which the following statement is made: "Comments to Docket Number 96-NM-111-AD." The postcard will be date stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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:

96-12-21 McDonnell Douglas: Amendment 39-9664. Docket 96-NM-111-AD.

Applicability: Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), MD-88, and MD-90 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 (c) 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 flight crew's ability to continue to control the airplane manually if the autopilot or autothrottle function fails to disengage, accomplish the following:

(a) Within 14 days after the effective date of this AD, revise the Limitations section of the FAA-approved Airplane Flight Manual (AFM) to include the following statement. This may be accomplished by inserting a copy of this AD in the AFM.

"If the autopilot or autothrottle fails to disconnect normally, press and hold the autopilot release button or either autothrottle release button, as appropriate. Refer to the Abnormal Procedures section for procedures if the autopilot or autothrottle fails to disconnect."

(b) Within 14 days after the effective date of this AD, revise the Abnormal Procedures section of the FAA-approved AFM to include the following information. This may be accomplished by inserting a copy of this AD in the AFM.

"AUTOPILOT:

If the Autopilot (A/P) disconnects when the AUTOPILOT RELEASE button on either control wheel is depressed, *and* re-engages when the AUTOPILOT RELEASE button is released, accomplish the following procedures:

PROCEDURE: Use Autopilot (as desired)

AUTOPILOT RELEASE button—PRESS AND HOLD

- Hold either yoke (yellow) Autopilot Release button while continuing to fly the aircraft manually. The A/P will remain disengaged while depressing the button.

- When the Autopilot Release button is released, the A/P will engage and all A/P functions should work normally.

TO SILENCE THE AURAL WARNING:

CAWS C/B (P-38)—PULL

- Circuit breaker is located behind the Captain's seat.

- Pulling the C/B will disable the Stall Warning SSRS-1, Landing Gear, Takeoff, Cabin Altitude, Speed Brake aural warnings, in addition to the Autopilot aural warning.

CAUTION:

Do not attempt to overpower the autopilot. When the autopilot is engaged, applying force to the column may allow the alternate trim to reposition the stabilizer. If the force

is applied long enough, it will result in an out-of-trim condition."

"AUTOTHROTTLE:

If the Autothrottle (A/T) disconnects when either throttle disconnect button is depressed, *and* re-engages when throttle disconnect button is released, accomplish the following procedures:

PROCEDURE: Use Autothrottle System (as desired)

WHEN A DISCONNECT IS NECESSARY:

AUTOTHROTTLE RELEASE BUTTON—PRESS AND HOLD

- Press and hold either button until flashing red A/T annunciation is illuminated. Flashing red light indicates autothrottle is disconnected.

- AUTOTHROTTLE RELEASE BUTTON may then be released.

- The FMA A/T window will annunciate as though the A/T is engaged.

- The flashing red A/T annunciation of the FMA cannot be extinguished with repeated depression of the autothrottle release button.

- If the throttle levers are retarded to the idle stop, the flashing red A/T annunciation will extinguish, and the A/T system will re-engage.

- If the DFGC is selected to the IAS mode and the A/T SPEED mode is selected, the A/T system will re-engage."

(c) 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.

(d) 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.

(e) This amendment becomes effective on June 24, 1996.

Issued in Renton, Washington, on June 3, 1996.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 96-14385 Filed 6-06-96; 8:45 am]

BILLING CODE 4910-13-P