

[4910-13-U]  
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration  
14 CFR Part 39 [65 FR 5422 2/4/2000]

[Docket No. 99-CE-38-AD; Amendment 39-11543; AD 2000-02-25]

RIN 2120-AA64

Airworthiness Directives; Mitsubishi Heavy Industries, Ltd. Model MU-2B Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This document adopts a new airworthiness directive (AD) that applies to all Mitsubishi Heavy Industries, Ltd. (Mitsubishi) Model MU-2B series airplanes. This AD requires you to revise the Airplane Flight Manual (AFM) to include requirements for activating the airframe pneumatic deicing boots. This AD is the result of reports of in-flight incidents and an accident that occurred in icing conditions where the airframe pneumatic deicing boots were not activated. The actions specified by this AD are intended to assure that flightcrews have the information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation. Without this information, flightcrews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

**DATE:** Effective March 24, 2000.

**ADDRESSES:** You may examine related information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 99-CE-38-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

**FOR FURTHER INFORMATION CONTACT:** Mr. John P. Dow, Sr., Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 506, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-0090.

**SUPPLEMENTARY INFORMATION:**

#### **Events Leading to the Issuance of This AD**

**What caused this AD?:** This AD is the result of reports of in-flight incidents and an accident that occurred in icing conditions where the airframe pneumatic deicing boots were not activated.

**What is the potential impact if the FAA took no action?:** The information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation is critical for flight in icing conditions. If we did not take action to include this information, flight crews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

**Has the FAA taken any action to this point?:** Yes. We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all Mitsubishi Model MU-2B series airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on October 8, 1999 (64 FR 54822). The NPRM proposed to require revising the Limitations Section of the AFM to include requirements for activating the pneumatic deicing boots at the first indication of ice accumulation on the airplane.

Was the public invited to comment?: Yes. Interested persons were afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

What is the FAA's Final Determination on this Issue?: We carefully reviewed all available information related to the subject presented above and determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We determined that these minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden upon the public than was already proposed.

### **Cost Impact**

How many airplanes does this AD impact?: We estimate that 415 airplanes in the U.S. registry will be affected.

What is the cost impact of the affected airplanes on the U.S. Register?: There is no dollar cost impact. We estimate that to accomplish the AFM revision it will take you less than 1 workhour. You can accomplish this action if you hold at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7). You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9). The only cost impact of this AD is the time it will take you to insert the information into the AFM.

### **Regulatory Impact**

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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. The FAA has prepared a final evaluation and placed it in the Rules Docket. You can get a copy of this evaluation at the location listed 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 a new airworthiness directive (AD) to read as follows:

# AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION  
P.O. BOX 26460  
OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) 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 14 CFR part 39, subpart 39.3).

**2000-02-25 MITSUBISHI HEAVY INDUSTRIES, LTD.:** Amendment 39-17043; Docket No. 99-CE-38-AD.

(a) What airplanes are affected by this AD?: The following Model MU-2B series airplanes, all serial numbers, that are:

- (1) equipped with pneumatic deicing boots; and
- (2) certificated in any category.

## Models

MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-26A, MU-2B-36A, MU-2B-40, MU-2B-40A

(b) Who must comply with this AD?: Anyone who wishes to operate any of the above airplanes on the U.S. Register. The AD does not apply to your airplane if it is not equipped with pneumatic de-icing boots.

(c) What problem does this AD address?: The information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation is critical for flight in icing conditions. If we did not take action to include this information, flight crews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

(d) What must I do to address this problem?: To address this problem, you must revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. You must accomplish this action within the next 10 calendar days after the effective date of this AD, unless already accomplished. You may insert a copy of this AD in the AFM to accomplish this action:

"• Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

• Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:

- At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and

- The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.

• The wing and tail leading edge pneumatic deicing boot system may be deactivated only after leaving icing conditions and after the airplane is determined to be clear of ice."

(e) Can the pilot accomplish the action?: Yes. Anyone who holds at least a private pilot certificate, as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), may incorporate the AFM revisions required by this AD. You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(f) Can I comply with this AD in any other way?: Yes.

(1) You may use an alternative method of compliance or adjust the compliance time if:

(i) Your alternative method of compliance provides an equivalent level of safety; and

(ii) The Manager, Small Airplane Directorate, approves your Alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager.

(2) 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 (f)(1) 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 you have not eliminated the unsafe condition, specific actions you propose to address it.

(g) Where can I get information about any already-approved alternative methods of compliance?: Contact the Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4091.

(h) What if I need to fly the airplane to another location to comply with this AD?: The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(i) When does this amendment become effective?: This amendment becomes effective on March 24, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Mr. John P. Dowd Sr., Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 506, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on January 25, 2000.

Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service