



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-1363; Directorate Identifier 2015-CE-040-AD; Amendment 39-18496; AD 2016-08-19]

RIN 2120-AA64

Airworthiness Directives; Mitsubishi Heavy Industries, Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Mitsubishi Heavy Industries, Ltd. Models MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as reports of cracks found in the attach fittings of the main landing gear oleo strut. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-1363; or in person at Document Management Facility, U.S. Department of Transportation,

Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

For service information identified in this AD, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; Internet: <http://mu-2aircraft.com>. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2016-1363.

FOR FURTHER INFORMATION CONTACT: Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: andrew.mcanaul@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Mitsubishi Heavy Industries, Ltd. Models MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60 airplanes. The NPRM was published in the *Federal Register* on January 26, 2016 (81 FR 4217). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

The Japan Civil Aviation Bureau (JCAB), which is the aviation authority for Japan, has issued AD No. TCD-8595-2015, dated July 1, 2015 (referred to after this as “the MCAI”), to correct an unsafe condition for certain Mitsubishi Heavy Industries, Ltd. (MHI) Models MU-2B-30, MU-2B-35, and MU-2B-36 airplanes. You may examine the MCAI on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2016-1363>.

We have received reports of seven failures of the main landing gear oleo strut attach fitting on certain MHI Models MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60 airplanes. Investigation revealed that the failures resulted from improper lubrication and/or hard landings, which caused cracks to develop in the main landing gear oleo strut attach fitting.

Japan is the State of Design for MHI Models MU-2B-30, MU-2B-35, and MU-2B-36 airplanes, which the MCAI AD applies to, and the United States is the State of Design for MHI Models MU-2B-36A and MU-2B-60 airplanes.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (81 FR 4217, January 26, 2016) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (81 FR 4217, January 26, 2016) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (81 FR 4217, January 26, 2016).

Related Service Information under 1 CFR part 51

We reviewed Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 243, dated June 30, 2015, and MU-2 Service Bulletin No. 105/32-017, dated September 29, 2015. The service information describes procedures for visually inspecting the lugs of the oleo attach fittings on both sides for cracks, and if any visible cracks are found, replacing with a new fitting. We also reviewed Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 171, FAA T.C.: No. 124/32-011, dated April 27, 2012, and MU-2

Service News JCAB T.C.: No. 176, FAA T.C.: No. 128/32-013, dated July 18, 2013. This service information specifies doing repetitive ultrasound inspections of the main landing gear oleo upper attach fittings for cracks and ensuring proper lubrication of the main landing gear oleo fitting. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of the AD.

Differences Between This AD and the MCAI

We have determined that the repetitive visual inspections specified in the MCAI are not adequate for detecting cracks in the main landing gear oleo strut attach fitting. Repetitive ultrasonic inspections of the main landing gear oleo strut attach fitting have been added into the maintenance requirement manual for these airplanes, which is not considered mandatory in the FAA's airworthiness regulatory system. Therefore, we are incorporating that requirement through the rulemaking process.

Costs of Compliance

We estimate that this AD will affect 95 products of U.S. registry. We also estimate that it will take about 5 work-hours per product to comply with the visual inspection requirement of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the visual inspection requirements of this AD on U.S. operators to be \$40,375, or \$425 per product.

We also estimate that it will take about 3 work-hours per product to comply with the ultrasound inspection requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the ultrasound inspection requirements of this AD on U.S. operators to be \$24,225, or \$255 per product.

Owner/operators have the option to do an ultrasound inspection in lieu of the required visual inspection.

In addition, we estimate that any necessary follow-on actions will take about 24 work-hours and require parts costing \$5,220, for a cost of \$7,260 per product to replace the left-hand main landing gear oleo strut. We have no way of determining the number of products that may need this action.

In addition, we also estimate that any necessary follow-on actions will take about 45 work-hours and require parts costing \$5,220, for a cost of \$9,045 per product to replace the right-hand main landing gear oleo strut. We have no way of determining the number of products that may need this action.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify this AD:

(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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-1363; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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. The FAA amends § 39.13 by adding the following new AD:

2016-08-19 **Mitsubishi Heavy Industries, Ltd.:** Amendment 39-18496; Docket No. FAA-2016-1363; Directorate Identifier 2015-CE-040-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Mitsubishi Heavy Industries, Ltd. Models MU-2B-30, MU-2B-35, and MU-2B-36 airplanes, serial numbers 502 through 696, except 652 and 661, and Models MU-2B-36A and MU-2B-60 airplanes, serial numbers 661SA, and 697SA through 1569SA, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as reports of cracks found in the upper attach fittings of the main landing gear oleo strut. We are issuing this AD to prevent failure of the main landing gear oleo strut attach fitting, which could cause the landing gear to fail and result in loss of control.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Within the next 100 hours time-in-service (TIS) after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first, do a visual inspection of the main landing gear oleo upper attach fittings for cracks. Do the inspection following the INSTRUCTIONS section

in Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 243, dated June 30, 2015, and the INSTRUCTIONS section in Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 105/32-017, dated September 29, 2015, as applicable.

(2) Before further flight after the inspection required in paragraph (f)(1) of this AD, if no signs of cracks are found, lubricate the pin assembly attached to the main landing gear oleo attach fitting as specified in Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 171, FAA T.C.: No. 124/32-011, dated April 27, 2012.

(3) Within the next 100 hours TIS after doing the initial visual inspection required in paragraph (f)(1) of this AD or within the next 12 months after doing the initial visual inspection required in paragraph (f)(1) of this AD, whichever occurs first, do an ultrasound inspection of the main landing gear oleo upper attach fittings for cracks as specified in Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 176, FAA T.C.: No. 128/32-013, dated July 18, 2013. This ultrasound inspection may also be done in place of the visual inspection required in paragraph (f)(1) of this AD if done within the next 100 hours TIS after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first. Repetitively thereafter ultrasound inspect the attach fittings every 600 hours TIS or 36 months, whichever occurs first, and any time a hard landing or overweight landing occurs.

(4) Before further flight after any inspection required in paragraph (f)(3) of this AD, if no signs of cracks are found, lubricate the pin assembly attached to the main landing gear oleo attach fitting as specified in Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 171, FAA T.C.: No. 124/32-011, dated April 27, 2012, and Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 176, FAA T.C.: No. 128/32-013, dated July 18, 2013.

(5) Before further flight after any inspection required in paragraph (f)(1) and (f)(3) of this AD where cracks are found, replace the main landing gear oleo upper attach fittings following the INSTRUCTIONS section in Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 243, dated June 30, 2015, and the INSTRUCTIONS sections in Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 105/32-017, dated September 29, 2015, as applicable. After replacement, continue with the repetitive ultrasound inspection requirements of paragraph (f)(3) and lubrication requirements of paragraph (f)(4) of this AD.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: andrew.mcanaul@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI Japan Civil Aviation Bureau (JCAB) AD No. TCD-8585-2015, dated July 1, 2015, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2016-1363>.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 105/32-017, dated September 29, 2015.

(ii) Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 243, dated June 30, 2015.

(iii) Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 176, FAA T.C.: No. 128/32-013, dated July 18, 2013.

(iv) Mitsubishi Heavy Industries, Ltd. MU-2 Service News JCAB T.C.: No. 171, FAA T.C.: No. 124/32-011, dated April 27, 2012.

(3) For Mitsubishi Heavy Industries, Ltd service information identified in this AD, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; Internet: <http://mu-2aircraft.com>.

(4) You may view this service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-1363.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.
Issued in Kansas City, Missouri, on April 14, 2016.

Robert P. Busto,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

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