



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

**[Docket No. FAA-2024-2719; Project Identifier MCAI-2024-00664-R; Amendment
39-22923; AD 2024-26-08]**

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Leonardo S.p.a. Model AB139 and AW139 helicopters. This AD was prompted by reports of broken main landing gear (MLG) shock absorber piston rod eye ends. This AD requires repetitively inspecting the MLG shock absorber piston rod eye ends, reporting the results of the inspection, and, depending on the results, replacing the MLG shock absorber assembly. It also prohibits installing certain MLG shock absorber assemblies unless specific requirements are met, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT 15 DAYS AFTER DATE OF PUBLICATION
IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS
AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2719; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email:

ADs@easa.europa.eu; website: easa.europa.eu. You may find the EASA material on the EASA website at ad.easa.europa.eu.

- You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2719.

FOR FURTHER INFORMATION CONTACT: Adam Hein, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (316) 946-4116; email: Adam.Hein@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2024-2719; Project Identifier MCAI-2024-00664-R” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public

docket of this AD. Submissions containing CBI should be sent to Adam Hein, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued a series of ADs, the most recent being EASA Emergency AD 2024-0211-E, dated November 7, 2024 (EASA Emergency AD 2024-0211-E) (also referred to as the MCAI), to correct an unsafe condition on all Leonardo S.p.a. Model AB139 and AW139 helicopters. The MCAI states that there have been reports of broken MLG shock absorber piston rod eye ends and the consequent investigation determined that the cause was fatigue cracking. The FAA is issuing this AD to address fatigue cracking of the MLG shock absorber piston rod eye ends. The unsafe condition, if not detected and corrected, could result in structural failure of the MLG possibly resulting in damage to the helicopter and injury to occupants.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2719.

Material Incorporated by Reference under 1 CFR Part 51

The FAA reviewed EASA Emergency AD 2024-0211-E, which requires repetitive ultrasonic inspections of the piston rod eye ends of MLG shock absorber assembly having part number (P/N) 3G3210V00333 or P/N 3G3210V01031 (vendor P/N 1654B0000-01 or P/N 1654C0000-01 respectively) and, depending on findings, replacing the MLG shock absorber assembly. EASA Emergency AD 2024-0211-E also requires reporting the inspection results to Leonardo. Lastly, EASA Emergency AD 2024-0211-E prohibits installing an affected MLG shock absorber assembly on any helicopter unless its requirements are met.

This material 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.

FAA's Determination

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

AD Requirements

This AD requires accomplishing the actions specified in the MCAI, described previously, except for any differences identified as exceptions in the regulatory text of this AD.

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, EASA Emergency AD 2024-0211-E is incorporated by reference in this AD. This AD requires compliance with EASA Emergency AD 2024-0211-E in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Using common terms that are the same as the heading of a particular section in EASA Emergency AD 2024-0211-E does not mean that operators need comply only with that section. For example, where the AD requirement refers to "all required actions and compliance times," compliance with this AD requirement is not limited to the section

titled “Required Action(s) and Compliance Time(s)” in EASA Emergency AD 2024-0211-E. Material required by EASA Emergency AD 2024-0211-E for compliance will be available at regulations.gov under Docket No. FAA-2024-2719 after this AD is published.

Interim Action

The FAA considers that this AD is an interim action. If final action is later identified, the FAA might consider further rulemaking then.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because the MLG shock absorber assembly is part of an assembly that is critical to the control of a helicopter during landings, which is a critical phase of flight. The FAA has no information pertaining to the extent of fatigue damage in MLG shock absorber piston rod eye ends that may currently exist in helicopters or how quickly the condition may propagate to failure, therefore, the initial instance of the inspections must be accomplished within 10 to 100 hours time-in-service, a time period of approximately 10 days to three months based on the average flight-hour utilization rates

of these helicopters. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 144 helicopters of U.S. registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Inspecting the MLG shock absorber piston rod takes 1 work-hour for a cost of \$85 per helicopter and \$12,240 for the U.S. fleet, per inspection cycle. Reporting the results takes 1 work-hour for a cost of \$85 per helicopter and \$12,240 for the U.S. fleet, per inspection cycle.

If required, replacing a MLG shock absorber assembly takes 20 work-hours and parts cost up to \$39,105 for a cost of up to \$40,805 per assembly.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a

collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to take approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

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.

The FAA is 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

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 that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

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

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 airworthiness directive:

2024-26-08 Leonardo S.p.a. Helicopters: Amendment 39-22923; Docket No. FAA-2024-2719; Project Identifier MCAI-2024-00664-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Leonardo S.p.a. Model AB139 and AW139 helicopters, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 3210, Main Landing Gear.

(e) Unsafe Condition

This AD was prompted by reports of broken main landing gear (MLG) shock absorber piston rod eye ends. The FAA is issuing this AD to address fatigue cracking of the MLG shock absorber piston rod eye ends. The unsafe condition, if not addressed, could result in structural failure of the MLG and consequent damage to the helicopter and injury to occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definition

For the purpose of this AD, a landing is counted anytime the helicopter lifts off into the air and then lands again regardless of the duration of the landing and regardless of whether the engine is shutdown.

(h) Requirements

Except as specified in paragraph (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with European Union Aviation Safety Agency Emergency AD 2024-0211-E, dated November 7, 2024 (EASA Emergency AD 2024-0211-E).

(i) Exceptions to EASA Emergency AD 2024-0211-E

(1) Where EASA Emergency AD 2024-0211-E requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(2) Where EASA Emergency AD 2024-0211-E refers to its effective date, this AD requires using the effective date of this AD.

(3) Where Note 2 of EASA Emergency AD 2024-0211-E specifies procedures for calculating the number of landings if the number of landings since new is not known: if

the “FH” (total hours time-in-service) accumulated on the affected part, as defined in EASA Emergency AD 2024-0211-E, cannot be determined, this AD requires using the total hours-time-in-service on the helicopter for that calculation.

(4) Where paragraph (1) of EASA Emergency AD 2024-0211-E specifies accomplishing special detailed inspections (SDIs), this AD requires the landing gear in the fully extended position for the SDIs.

(5) Where paragraph (1) of EASA Emergency AD 2024-0211-E specifies accomplishing SDIs and the material referenced in EASA Emergency AD 2024-0211-E specifies that the ultrasonic testing inspections must be performed by personnel qualified in accordance with the non-destructive testing requirements of EN4179/NAS410 for Level II or higher, or of an equivalent standard recognized by the competent authority, this AD requires the ultrasonic testing inspections be accomplished by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel.

Note 1 to paragraph (i)(5): Advisory Circular 65-31B contains examples of FAA-acceptable Level II and Level III qualification standards criteria for inspection personnel doing nondestructive test inspections.

(6) Where paragraph (2) of EASA Emergency AD 2024-0211-E states “discrepancies, as identified in the EASB, are,” this AD requires replacing that text with “a cracked or broken piston rod eye end, or an ultrasonic testing inspection indication equal to or greater than 80% full screen height (FSH) within the recording gate, as defined in the material referenced in EASA Emergency AD 2024-0211-E, of an upper or lower piston rod eye end, is.”

(7) Where the material referenced in EASA Emergency AD 2024-0211-E specifies sending parts to Leonardo Helicopters [LH], this AD does not require that action.

(8) Where paragraph (3) of EASA Emergency AD 2024-0211-E allows credit for the initial instance of the (ultrasonic testing) inspection required by paragraph (1) of EASA Emergency AD 2024-0211-E, this AD allows that credit if the ultrasonic testing inspection that was previously done was accomplished by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel.

Note 2 to paragraph (i)(8): Advisory Circular 65-31B contains examples of FAA-acceptable Level II and Level III qualification standards criteria for inspection personnel doing nondestructive test inspections.

(9) Where paragraph (5) of EASA Emergency AD 2024-0211-E specifies reporting inspection results to Leonardo within 10 days after accomplishment of any inspection required by paragraph (1) of EASA Emergency AD 2024-0211-E, this AD requires reporting inspection results of each instance of the inspection required by paragraph (1) of EASA Emergency AD 2024-0211-E at the applicable compliance times specified in paragraph (i)(9)(i) or (ii) of this AD. This AD does not require submitting information to Liebherr.

(i) For an inspection done on or after the effective date of this AD: Submit the report within 10 days after the inspection.

(ii) For an inspection done before the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

(10) This AD does not adopt the “Remarks” section of EASA Emergency AD 2024-0211-E.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD and email to: AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Additional Information

(1) For more information about this AD, contact Adam Hein, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (316) 946-4116; email: Adam.Hein@faa.gov.

(2) For advisory circular material identified in this AD that is not incorporated by reference, go to faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1023552.

(l) Material Incorporated by Reference

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

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

(i) European Union Aviation Safety Agency (EASA) Emergency AD 2024-0211-E, dated November 7, 2024.

(ii) [Reserved]

(3) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find the EASA material on the

EASA website at ad.easa.europa.eu.

(4) You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on December 23, 2024.

Steven W. Thompson,
Acting Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2024-31511 Filed: 12/30/2024 11:15 am; Publication Date: 1/2/2025]