



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1049; Project Identifier AD-2023-00591-R; Amendment 39-22441; AD 2023-10-05]

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 superseding Emergency Airworthiness Directive (AD) 2023-07-51, which applied to all Leonardo S.p.a. Model AB139 and AW139 helicopters and which was previously sent to all known U.S. owners and operators of those helicopters. Emergency AD 2023-07-51 required inspecting for a gap between the main rotor (M/R) pitch link upper rod end assembly bearing and the pitch control lever assembly and, depending on the results, replacing or re-identifying the M/R pitch link upper rod end assembly. Emergency AD 2023-07-51 also prohibited installing an affected M/R pitch link upper rod end assembly. Since the FAA issued Emergency AD 2023-07-51, it has been determined that a gap between the M/R pitch link upper rod end assembly bearing and the pitch control lever assembly that is within a certain dimension tolerance is acceptable. This AD continues to require the actions in Emergency AD 2023-07-51, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference in this AD, but allows a gap of less than 0.5 mm. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 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 DATE 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-2023-1049; 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, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For EASA material that is incorporated by reference in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet easa.europa.eu. You may find the EASA material on the EASA website at ad.easa.europa.eu.

- You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., 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-2023-1049.

Other Related Service Information: For Leonardo Helicopters service information that is identified in this final rule, contact Leonardo S.p.A., Emanuele Bufano, Head of Airworthiness, Viale G. Agusta 520, 21017 C. Costa di Samarate (Va) Italy; telephone (+39) 0331-225074; fax (+39) 0331-229046; or at

customerportal.leonardocompany.com/en-US/. You may also view this service information at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Dan McCully, Program Manager, International Validation Branch, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (404) 474-5548; email william.mccully@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 ADDRESSES. Include “Docket No. FAA-2023-1049; Project Identifier AD-2023-00591-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](https://www.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 Dan McCully, Program

Manager, International Validation Branch, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (404) 474-5548; email william.mccully@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued Emergency AD 2023-07-51 on March 31, 2023, to address an unsafe condition on all Leonardo S.p.a. Model AB139 and AW139 helicopters. The FAA sent Emergency AD 2023-07-51 to all known U.S. owners and operators of those helicopters.

Emergency AD 2023-07-51 required inspecting for a gap between the M/R pitch link upper rod end assembly bearing and the pitch control lever assembly and, depending on the results, replacing or re-identifying the M/R pitch link upper rod end assembly. Emergency AD 2023-07-51 also prohibited installing an affected M/R pitch link upper rod end assembly.

Emergency AD 2023-07-51 was prompted by EASA Emergency AD 2023-0071-E, dated March 31, 2023 (EASA AD 2023-0071-E), issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA advises of a report of excessive play of a bearing installed in an M/R pitch link upper rod end assembly part number (P/N) 3G6230A01133. EASA also advises that subsequent investigation revealed that the excessive play was due to incorrect installation of the bearing during production. You may examine EASA AD 2023-0071-E in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1049.

The FAA issued Emergency AD 2023-07-51 to detect incorrect installation of a bearing. This condition, if not addressed, could result in a crack in the M/R pitch link upper rod end assembly, failure of the M/R pitch link upper rod end assembly, and subsequent loss of control of the helicopter.

Actions Since Emergency AD 2023-07-51 was Issued

Since the FAA issued Emergency AD 2023-07-51, Leonardo Helicopters contacted the FAA and clarified that a gap not exceeding 0.5 mm between the pitch link top bearing and associated seat is permitted in the service information required by EASA

AD 2023-0071-E to accommodate the sliding of the bushing into the lug per design.

Leonardo Helicopters also stated that prohibiting any gap may ground some helicopters that are within design parameters. Leonardo Helicopters subsequently submitted a request for a global alternative method of compliance (AMOC), which the FAA approved. The global AMOC allowed measuring the gap between the M/R pitch link upper rod end assembly bearing and the pitch control lever assembly on each side without cleaning the area or using a feeler gauge. The approved global AMOC also allowed a gap up to and including 0.5 mm in width. From additional review since issuance of the global AMOC, the FAA has determined that cleaning the inspection area and using a feeler gauge for the inspection are required. The FAA has also reduced the maximum allowable gap to less than 0.5 mm. Accordingly, the global AMOC approved for Emergency AD 2023-07-51 is not approved as an AMOC for the corresponding requirements of this AD.

Related Service Information under 1 CFR Part 51

EASA AD 2023-0071-E requires a one-time dimensional check of affected M/R pitch link upper rod end assemblies and, depending on the results, replacing or re-identifying the affected part. EASA AD 2023-0071-E also prohibits installing an affected M/R pitch link upper rod end assembly.

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 ADDRESSES.

Other Related Service Information

The FAA reviewed Leonardo Helicopters Emergency Alert Service Bulletin No. 139-754, dated March 31, 2023. This service information specifies procedures for certain serial-numbered M/R pitch link upper rod end assemblies P/N 3G6230A01133 that are not marked with the letter “R.” This service information specifies a one-time inspection by cleaning the upper M/R pitch link upper rod end assembly bearing, bolt, and pitch lever assembly; and using a feeler gauge to inspect for a gap. Depending on the results, this service information specifies procedures for replacing the M/R pitch link upper rod end assembly, completing an inspection report, contacting LHD [Leonardo Helicopters Division], and sending the removed M/R pitch link upper rod end assembly to LHD; or marking the letter “R” near the M/R pitch link upper rod end assembly serial number.

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 its AD and the service information described 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 these same type designs.

AD Requirements

This AD requires accomplishing the actions specified in EASA AD 2023-0071-E, described previously as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under "Differences Between this AD and the EASA 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 AD 2023-0071-E is incorporated by reference in this FAA final rule. This AD, therefore, requires compliance with EASA AD 2023-0071-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 AD 2023-0071-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 AD 2023-0071-E. Service information referenced in EASA AD 2023-0071-E for compliance will be available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1049 after this final rule is published.

Differences Between this AD and the EASA AD

EASA AD 2023-0071-E requires a dimensional check before next flight, whereas this AD requires inspecting for a gap within four calendar days. EASA AD 2023-0071-E

requires re-identifying an affected M/R pitch link upper rod end assembly that passed the dimensional inspection within 25 flight hours or at the next removal of an affected part, whichever occurs first, whereas this AD requires that action within 25 hours time-in-service.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(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 required the immediate adoption of Emergency AD 2023-07-51, issued on March 31, 2023, to all known U.S. owners and operators of these helicopters. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because the main rotor pitch link upper rod end assembly is critical to the control of a helicopter and failure of the main rotor pitch link upper rod end assembly could occur during any phase of flight without previous indication. The FAA has no information pertaining to how quickly the condition may propagate to failure. Thus, the required inspection must be accomplished within four calendar days. These conditions still exist, therefore, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(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 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 117 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 an M/R pitch link rod end assembly will take about 1 work-hour for an estimated cost of \$85 per helicopter and up to \$9,945 for the U.S. fleet. Re-identifying an M/R pitch link upper rod end assembly will take a minimal amount of time with a nominal parts cost. Replacing an M/R pitch link rod end assembly will take about 2 work-hours and parts will cost about \$5,698, for an estimated cost of \$5,868 per helicopter.

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:

2023-10-05 Leonardo S.p.a.: Amendment 39-22441; Docket No. FAA-2023-1049; Project Identifier AD-2023-00591-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

This AD replaces Emergency AD 2023-07-51, Project Identifier MCAI-2023-00551-R, issued on March 31, 2023.

(c) Applicability

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

(d) Subject

Joint Aircraft System Component (JASC) Code: 6200, Main Rotor System.

(e) Unsafe Condition

This AD was prompted by a report of excessive play of the bearing installed in a main rotor (M/R) pitch link upper rod end assembly. The FAA is issuing this AD to detect incorrect installation of the bearing. The unsafe condition, if not addressed, could

result in a crack in the M/R pitch link upper rod end assembly, failure of the M/R pitch link upper rod end assembly, and subsequent loss of control of the helicopter.

(f) Compliance

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

(g) Requirements

Except as specified in paragraphs (h) and (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 2023-0071-E, dated March 31, 2023 (EASA AD 2023-0071-E).

(h) Exceptions to EASA AD 2023-0071-E

(1) Where EASA AD 2023-0071-E refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2023-0071-E requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(3) Where paragraph (1) of EASA AD 2023-0071-E states, “before next flight;” for this AD, replace that text with, “within four calendar days.”

(4) Where paragraph (1) of EASA AD 2023-0071-E requires a dimensional check, this AD requires an inspection for a gap.

(5) Instead of complying with paragraph (2) of EASA AD 2023-0071-E, comply with the following: “As a result of the inspection required by paragraph (1) of EASA AD 2023-0071-E, for this AD, if there is any gap that measures 0.5 mm or more between the M/R pitch link upper rod end assembly bearing and the pitch control lever assembly on either side, before further flight, remove the affected part, as defined in EASA AD 2023-0071-E, from service and replace it with a serviceable part, as defined in EASA AD 2023-0071-E.”

(6) Where paragraph (3) of EASA AD 2023-0071-E states, “Within 25 flight hours, or at the next removal of an affected part, whichever occurs first;” for this AD, replace that text with, “Within 25 hours time-in-service.”

(7) This AD does not adopt the “Remarks” section of EASA AD 2023-0071-E.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2023-0071-E specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permits

Special flight permits are prohibited.

(k) 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 § 39.19. In accordance with § 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 certification office, send it to the attention of the person identified in paragraph (l) of this AD. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in paragraph (l) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email.

(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.

(l) Additional Information

For more information about this AD, contact Dan McCully, Program Manager, International Validation Branch, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (404) 474-5548; email william.mccully@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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) European Union Aviation Safety Agency (EASA) Emergency AD 2023-0071-E, dated March 31, 2023.

(ii) [Reserved]

(3) For EASA AD 2023-0071-E, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet easa.europa.eu. You may find the EASA material on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., 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 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, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on May 17, 2023.

Michael Linegang, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-10996 Filed: 5/19/2023 11:15 am; Publication Date: 5/23/2023]