



DATE: March 31, 2023

AD #: 2023-07-51

Emergency Airworthiness Directive (AD) 2023-07-51 is sent to owners and operators of Leonardo S.p.a. Model AB139 and AW139 helicopters.

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD 2023-0071-E, dated March 31, 2023 (EASA AD 2023-0071-E), to correct an unsafe condition on all serial-numbered Leonardo S.p.A. Model AB139 and AW139 helicopters.

This emergency AD was prompted by a report of excessive play of a bearing installed in a main rotor (M/R) pitch link upper rod end assembly part number (P/N) 3G6230A01133. EASA advises that subsequent investigation revealed that the excessive play was due to incorrect installation of the bearing during production. This emergency AD requires 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. This emergency AD also prohibits installing an affected M/R pitch link upper rod end assembly unless it passes an inspection for any gap. The FAA is issuing this emergency AD to detect incorrect installation of the 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.

Related Service Information

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.

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 S/N.

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 emergency AD

and service information described above. The FAA is issuing this emergency AD after determining that the unsafe condition described previously is likely to exist or develop on other products of these same type designs.

Emergency AD Requirements

This emergency AD requires accomplishing the actions specified in EASA AD 2023-0071-E, described previously, except for any differences identified as exceptions in the regulatory text of this emergency AD and except as discussed under “Differences Between this Emergency 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, this emergency AD requires compliance with EASA AD 2023-0071-E in its entirety, except for any differences identified as exceptions in the regulatory text of this emergency 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 emergency AD requirement refers to “all required actions and compliance times,” compliance with this emergency AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in EASA AD 2023-0071-E.

Differences Between this Emergency AD and the EASA AD

EASA AD 2023-0071-E requires a dimensional check before next flight, whereas this emergency AD requires an inspection for a gap within four calendar days. EASA AD 2023-0071-E is not clear regarding if a gap less than 0.5 mm is allowed, whereas this emergency AD prohibits any gap. 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 emergency 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 requires the immediate adoption of this emergency AD to all known U.S. owners and operators of these helicopters. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because the M/R pitch link upper rod end assembly is critical to the control of a helicopter and failure of the M/R 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. Accordingly, 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 forego notice and comment.

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.

Presentation of the Actual Emergency Airworthiness Directive

The FAA is issuing this emergency Airworthiness Directive under 49 U.S.C. 106(g), 40113, and 44701 according to the authority delegated to me by the Administrator.

2023-07-51 Leonardo S.p.a.: Project Identifier MCAI-2023-00551-R.

(a) Effective Date

This emergency Airworthiness Directive (AD) is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This emergency 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 emergency 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 emergency 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 emergency AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraphs (h) and (i) of this emergency 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 emergency AD requires using the effective date of this emergency AD.

(2) Where EASA AD 2023-0071-E requires compliance in terms of flight hours, this emergency 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 emergency AD requires an inspection for a gap.

(5) Where paragraph (2) of EASA AD 2023-0071-E states, “any discrepancy as specified in the ASB is detected;” for this emergency AD, replace that text with, “there is any gap, regardless of width.”

(6) Where paragraph (2) of EASA AD 2023-0071-E specifies contacting Leonardo for further instructions and accomplishing those instructions accordingly, and where the service information referenced in EASA AD 2023-0071-E specifies contacting LHD [Leonardo Helicopters Division] and sending a removed M/R pitch link upper rod end assembly to LHD, this emergency AD does not require those actions.

(7) 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 emergency AD, replace that text with, “Within 25 hours time-in-service.”

(8) This emergency AD does not adopt the Remarks paragraph 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 emergency 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 emergency 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)(1) of this emergency AD. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in

paragraph (l)(1) of this emergency 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

(1) For more information about this emergency AD, contact Dan McCully, Program Manager, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1701 Columbia Ave., Mail Stop: ACO, College Park, GA 30337; telephone (404) 474-5548; email william.mccully@faa.gov.

(2) 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 www.easa.europa.eu. You may find the EASA material on the EASA website at <https://ad.easa.europa.eu>.

(3) For Leonardo Helicopters service information identified in this emergency AD, 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/.

Issued on March 31, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.