



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-0236; Project Identifier MCAI-2022-00066-R]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Leonardo S.p.a. Model AW189 helicopters. This proposed AD was prompted by a report of abnormal oscillatory behavior during automated glide slope approaches, due to sealant on the glide slope (G/S) antenna coaxial connectors. This proposed AD would require visually inspecting certain G/S antennas and G/S antenna coaxial connectors for the presence of any sealant; cleaning parts and removing any sealant; performing an external G/S acceptance test procedure (ATP); and taking corrective actions if necessary. This proposed AD would also prohibit installing certain G/S antennas and G/S antenna coaxial connectors. These actions are specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this NPRM 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-2024-0236; 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 NPRM, the EASA AD, 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 NPRM, 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 material 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. The EASA material is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0236.

Other Related Service Information: For Leonardo Helicopters service information identified in this NPRM, 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: Sungmo Cho, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (781) 238-7241; email: Sungmo.D.Cho@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2024-0236; Project Identifier MCAI-2022-00066-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, 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 proposal 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 NPRM.

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 NPRM 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 NPRM, 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 NPRM. Submissions containing CBI should be sent to Sungmo Cho, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (781) 238-7241; email: Sungmo.D.Cho@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

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2022-0010, dated January 20, 2022 (EASA AD 2022-0010), to correct an unsafe condition on Leonardo S.p.A. Model AW189 helicopters.

This proposed AD was prompted by a report of abnormal oscillatory behavior during automated glide slope approaches. Subsequent investigations identified sealant on the G/S antenna coaxial connectors, which isolated it from its grounding plane. The FAA is proposing this AD to detect and address the presence of sealant on or around the G/S antenna, which if not addressed, could lead to erratic signals from the G/S antenna and reduced capability of the helicopter to perform safe automated approaches. See EASA AD 2022-0010 for additional background information.

You may examine the EASA AD in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0236.

Related Service Information under 1 CFR Part 51

EASA AD 2022-0010 requires visually inspecting G/S antenna part number (P/N) 6208-88-62 and G/S antenna coaxial connectors P/N PE4958, which are both parts of G/S antenna kit P/N 8G3430F00111, for any sealant. If any sealant is found, EASA AD 2022-0010 requires removing any sealant, and performing further inspections and corrective actions.

EASA AD 2022-0010 also requires performing an ATP and depending on the results, replacing and removing certain parts, and additional tests. EASA AD 2022-0010 allows the affected G/S antenna and G/S antenna coaxial connectors to be installed on a helicopter if certain 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 ADDRESSES.

Other Related Service Information

The FAA also reviewed Leonardo Helicopters Alert Service Bulletin No. 189-295, dated November 29, 2021. This service information specifies procedures for visually inspecting the G/S antenna for the presence of sealant; removing any sealant that is detected; removing and replacing any affected parts; performing any corrective actions if necessary, performing an ATP, which includes verifying flight display, decibel milliwatts, and pass/fail information; and reporting certain information to the manufacturer.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is proposing this AD after determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in EASA AD 2022-0010, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this proposed AD and except as discussed under "Differences Between this Proposed 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, the FAA proposes to incorporate EASA AD 2022-0010 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2022-0010 AD in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in EASA AD 2022-0010 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 2022-0010. Service information referenced in EASA AD 2022-0010 for compliance will be available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0236 after the FAA final rule is published.

Differences Between this Proposed AD and the EASA AD

If any discrepancy is found during the ATP, EASA AD 2022-0010 requires replacing each affected part with a serviceable part, whereas this proposed AD would require removing each affected part from service and replacing it with a serviceable part.

Service information referenced in EASA AD 2022-0010 contains an inspection report (ANNEX B), whereas this proposed AD would not require completing that information.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 4 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 proposed AD.

Visually inspecting for sealant around the G/S antenna would take about 5 work-hours for an estimated cost of \$425 per helicopter and up to \$1,700 for the U.S. fleet.

If required, removing any sealant and cleaning any part would take about 0.5 work-hour for an estimated cost of \$43 per helicopter.

Performing an ATP would take about 1 work-hour for an estimated cost of \$85 per helicopter and up to \$340 for the U.S. fleet.

If required, removing and replacing a G/S antenna, to include removing and replacing the connectors would take about 3 work-hours and parts would cost about \$100,100 for an estimated cost of \$100,355 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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a

substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

Leonardo S.p.a.: Docket No. FAA-2024-0236; Project Identifier MCAI-2022-00066-R.

(a) Comments Due Date

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

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Leonardo S.p.a. Model AW189 helicopters, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code: 3432, Glide slope system.

(e) Unsafe Condition

This AD was prompted by a report of abnormal oscillatory behavior during automated glide slope approaches, due to sealant on the glide slope (G/S) antenna coaxial connectors. The FAA is issuing this AD to detect and address sealant on or around the G/S antenna. The unsafe condition, if not addressed, could lead to erratic signals from the G/S antenna, which could result in reduced capability of the helicopter to perform safe automated approaches.

(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 (EASA) AD 2022-0010, dated January 20, 2022 (EASA AD 2022-0010).

(h) Exceptions to EASA AD 2022-0010

(1) Where EASA AD 2022-0010 states “flight hours;” for this AD, replace that text with “hours time-in-service.”

(2) Where EASA AD 2022-0010 refers to its effective date, this AD requires using the effective date of this AD.

(3) Where paragraph (1) of EASA AD 2022-0010 states “in accordance with the instructions of Part I of the ASB;” for this AD, replace that text with “in accordance with

the Accomplishment Instructions, Part I, paragraphs 4 and 5 of the ASB.”

(4) Where paragraph (2) of EASA AD 2022-0010 states “in accordance with the instructions of Part I of the ASB;” for this AD, replace that text with “in accordance with the Accomplishment Instructions, Part I, paragraphs 6.3 (including the two cautions above paragraph 6.3) through 6.5 (but not paragraphs 6.5.1 and 6.5.2) of the ASB.”

(5) Where paragraphs (4) and (5) of EASA AD 2022-0010 state “discrepancy;” for this AD, replace that text with “discrepancy, which is one or more “fail” results in the acceptance test procedure.”

(6) Where paragraphs (4) and (5) of EASA AD 2022-0010 state to “replace the/those affected parts with serviceable parts;” for this AD, replace that text with “remove the affected part, as defined in EASA AD 2022-0010, from service and replace it with a serviceable part, as defined in EASA AD 2022-0010. Thereafter, after installing a serviceable part, as defined in EASA AD 2022-0010, before further flight, accomplish an acceptance test procedure (ATP) in accordance with the instructions of Annex A of the ASB.”

(7) Where the service information referenced in EASA AD 2022-0010 specifies discarding existing hardware, this AD requires removing the existing hardware from service.

(8) Where paragraph (4) of EASA AD 2022-0010 states “in accordance with the instructions of Part I of the ASB;” for this AD, replace that text with “in accordance with the Accomplishment Instructions, Part I, paragraphs 9 through 11 of the ASB.”

(9) Where paragraph (5) of EASA AD 2022-0010 states “in accordance with the instructions of Part II of the ASB;” for this AD, replace that text with “in accordance with the Accomplishment Instructions, Part II, paragraphs 2 through 4 of the ASB.”

(10) This AD does not adopt the “Remarks” section of EASA AD 2022-0010.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0010 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permits

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199, provided there are no passengers, and no flights are performed under instrument flight rules (IFR).

(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 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 (l) of this AD. Information may be emailed to: 9-AVS-AIR-730-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.

(l) Related Information

For more information about this AD, contact Sungmo Cho, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (781) 238-7241; email: Sungmo.D.Cho@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) AD 2022-0010, dated January 20, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0010, 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 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 February 21, 2024.

Victor Wicklund,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

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