



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-1297; Project Identifier MCAI-2022-00736-R]

RIN 2120-AA64

Airworthiness Directives; Airbus 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 Airbus Helicopters Model EC225LP helicopters. This proposed AD was prompted by a report of water in the oil of a main gearbox (MGB). This AD requires replacing certain main rotor (M/R) mast upper stops assembly screws. This proposed AD would also require inspecting certain M/R mast cover plates and accomplishing MGB oil analyses and, depending on the results, replacing the M/R mast cover plate, accomplishing an additional inspection, or replacing the MGB. This proposed AD would also prohibit installing certain M/R mast upper stops assembly screws, M/R masts with an affected M/R mast upper stops assembly screw installed, or used M/R mast cover plates on any helicopter. Lastly, this proposed AD would prohibit installing affected M/R masts unless the inspections are done. 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 proposed 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-2024-1297; 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, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For EASA material, 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. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-1297.

Other Related Service Information: For Airbus Helicopters service information identified in this NPRM, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; phone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at airbus.com/en/products-services/helicopters/hcare-services/airbusworld. You may also view this service information at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Dan McCully, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (404) 474-5548; email william.mccully@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-2024-1297; Project Identifier MCAI-2022-00736-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 Dan McCully, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (404) 474-5548; email william.mccully@faa.gov. Any commentary that the FAA receives that 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 2022-0104, dated June 9, 2022 (EASA AD 2022-0104), to correct an unsafe condition on Airbus Helicopters Model EC 225 LP helicopters.

This proposed AD was prompted by a report of water in the oil of an MGB, due to an incorrect installation of the upper M/R mast cover plate. According to Airbus Helicopters, a detailed inspection of the MGB showed corrosion on the M/R mast and inside the MGB. The upper M/R mast cover plate was deformed. Also, according to Airbus Helicopters, a different M/R mast had damaged upper stop screws installed, also due to an incorrect installation. The FAA is issuing this proposed AD to prevent water in the MGB oil. The unsafe condition, if not addressed, could result in corrosion of the M/R mast and inside the MGB, degradation of the MGB, degradation of the upper stops assembly, failure of a critical part, and subsequent loss of control of the helicopter.

You may examine EASA AD 2022-0104 in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-1297.

Related Service Information Under 1 CFR Part 51

EASA AD 2022-0104 requires replacing each M/R mast upper stops assembly screw, except those marked with “BC” on the screw head. For certain helicopters, EASA AD 2022-0104 requires inspecting a certain part-numbered M/R mast cover plate and depending on the results, replacing the cover plate and accomplishing an additional inspection. For those same certain helicopters, EASA AD 2022-0104 also requires accomplishing MGB oil analyses and, depending on the results, accomplishing an additional inspection. Depending on the results of the additional inspection following the M/R mast cover plate inspection or MGB oil analyses, EASA AD 2022-0104 requires replacing the MGB. As an option, EASA AD 2022-0104 allows replacing the MGB as an acceptable alternative method to comply with the required MGB oil sample analyses.

Lastly, EASA AD 2022-0104 prohibits installing M/R mast upper stops assembly screws – except those marked with “BC” on the screw head, M/R masts with an affected M/R mast upper stops assembly screw installed, and used M/R mast cover plates on any helicopter. EASA AD 2022-0104 also prohibits installing an affected M/R mast unless its required inspections are done.

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.

Other Related Service Information

The FAA also reviewed Airbus Helicopters No. EC225-62A016, Revision 1, dated February 28, 2023. This service information specifies procedures for inspecting the M/R mast upper stops assembly screws to determine if they’re marked with “BC” on the screw head and depending on the results, replacing those screws one by one. This service information also specifies procedures for checking the flatness of the M/R mast cover plate and, depending on the results, removing and discarding that cover plate, installing a flat cover plate, draining the MGB, writing to Airbus Helicopters to do a detailed MGB inspection, and removing the M/R mast. Depending on the detailed MGB inspection results, this service information specifies filling the MGB with oil and installing the M/R

mast; or replacing the MGB with an airworthy MGB, sending the removed MGB to an approved D-level center for repair, and installing the M/R mast.

This service information also specifies procedures for collecting an MGB oil sample and sending the sample to an Airbus Helicopters approved laboratory for water content analysis. Depending on the analysis results, this service information specifies draining the MGB, writing to Airbus Helicopters to do a detailed MGB inspection, and removing the M/R mast. Depending on the detailed MGB inspection results, this service information specifies filling the MGB with oil and installing the M/R mast; or replacing the MGB with an airworthy MGB, sending the removed MGB to an approved D-level center for repair, and installing the M/R mast.

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 about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and 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 2022-0104, 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 2022-0104 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2022-0104 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 2022-0104 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 2022-0104. Service information referenced in EASA AD 2022-0104 for compliance will be available at regulations.gov under Docket No. FAA-2024-1297 after the FAA final rule is published.

Differences Between this Proposed AD and the EASA AD

For certain helicopters, EASA AD 2022-0104 specifies sending oil samples to an Airbus Helicopters approved laboratory for an analysis of the water content, whereas this proposed AD would require sending the main gearbox oil sample for water content analysis. Additionally, for those helicopters, EASA AD 2022-0104 specifies taking and analyzing the second MGB oil sample within 110 FH or 3 months after the initial oil sample, whereas this proposed AD would require collecting the second main gearbox oil sample and sending it for water content analysis within 110 hours time-in-service or 3 months after accomplishing the initial instance of those actions, whichever occurs later. Depending on the results of the cover plate inspection or an oil sample analysis, EASA AD 2022-0104 specifies contacting Airbus Helicopters to request to accomplish a detailed inspection, which shall be accomplished by authorized Airbus Helicopters staff and the Airbus Helicopters qualified staff identify any discrepancies, whereas this proposed AD would require a detailed inspection, which must define what is considered a discrepancy and be done in accordance with a method approved by the FAA, EASA, or Airbus Helicopters’ EASA Design Organization Approval.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 32 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.

Replacing the M/R mast upper stops assembly screws (up to 10 screws) would take up to approximately 0.5 work-hour and parts would cost up to approximately \$250

(for 10 screws) for an estimated cost of up to \$293 per helicopter and \$9,376 for the U.S. fleet.

For certain helicopters, inspecting the M/R mast cover plate would take approximately 0.5 work-hour for an estimated cost of \$43 per helicopter and up to \$1,376 for the U.S. fleet. Collecting an MGB oil sample and sending the MGB oil sample for water content analysis, which is considered a reporting requirement in this proposed AD, would take approximately 1.5 work-hours (0.5 work-hour for collecting and 1 work-hour for sending) for an estimated cost of \$128 per helicopter and up to \$4,096 for the U.S. fleet, per instance.

If required, replacing the M/R mast cover plate would take approximately 2 work-hours and parts would cost approximately \$276 for an estimated cost of \$446 per helicopter. The detailed inspection that may be needed could vary significantly from helicopter to helicopter. The FAA has no data to determine the costs to accomplish the detailed inspection or the number of helicopters that may need it. Replacing an MGB would take approximately 40 work-hours and parts would cost approximately \$998,595 (overhauled) for an estimated cost of \$1,001,995 per helicopter.

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 current 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 1.5 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

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:

Airbus Helicopters: Docket No. FAA-2024-1297; Project Identifier MCAI-2022-00736-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 Airbus Helicopters Model EC225LP helicopters, certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report of water in the oil of a main gearbox (MGB), due to an incorrect installation of the upper main rotor mast cover plate. The FAA is issuing this AD to prevent water in the MGB oil. The unsafe condition, if not addressed, could result in corrosion of the main rotor mast and inside the MGB, degradation of the MGB, degradation of the upper stops assembly, failure of a critical part, 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 (EASA) AD 2022-0104, dated June 9, 2022 (EASA AD 2022-0104).

(h) Exceptions to EASA AD 2022-0104

(1) Where EASA AD 2022-0104 requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(2) Where EASA AD 2022-0104 refers to its effective date, this AD requires using the effective date of this AD.

(3) Where the service information referenced in paragraph (2) of EASA AD 2022-0104 specifies using a rule (item zz), this AD requires using a straight edge.

(4) Instead of complying with paragraph (3) of EASA AD 2022-0104, comply with the following, “For Group 2 helicopters: Within 110 hours time-in-service or 3 months after the effective date of this AD, whichever occurs first, collect a main gearbox oil sample and send the main gearbox oil sample for water content analysis. Thereafter, within 110 hours time-in-service or 3 months after accomplishing the initial instance of those actions, whichever occurs later, collect another main gearbox oil sample and send the main gearbox oil sample for water content analysis.”

(5) Where the service information referenced in EASA AD 2022-0104 specifies discarding a part, this AD requires removing that part from service.

(6) Where paragraphs (4.2) and (5) of EASA AD 2022-0104 specify contacting AH [Airbus Helicopters] with a request to accomplish a DET, this AD requires a detailed inspection done in accordance with a method approved by the Manager, International Validation Branch, FAA; or EASA; or Airbus Helicopters’ EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature. The detailed inspection must define what is considered a discrepancy.

(7) Instead of complying with paragraph (6) of EASA AD 2022-0104, comply with the following, “If there is a discrepancy as a result of the detailed inspection, before further flight, replace the main gearbox with an airworthy main gearbox.”

(8) This AD does not adopt the “Remarks” section of EASA AD 2022-0104.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0104 specifies to submit certain information to the manufacturer, this AD does not require that action.

(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) 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.

(k) Related Information

For more information about this AD, contact Dan McCully, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (404) 474-5548; email william.mccully@faa.gov.

(l) 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 this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0104, dated June 9, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0104, 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 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.

(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 April 30, 2024.

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

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