



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2025-0014; Project Identifier MCAI-2024-00471-R; Amendment 39-22949; AD 2025-03-01]

RIN 2120-AA64

#### Airworthiness Directives; Airbus Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2021-04-18, which applied to Airbus Helicopters Model EC225LP helicopters. AD 2021-04-18 required repetitively inspecting the bearing in the swashplate assembly of certain main rotor (M/R) mast assemblies and, depending on the findings, replacing the M/R mast assembly. AD 2021-04-18 also prohibited installing those M/R mast assemblies unless certain requirements were met. Since the FAA issued AD 2021-04-18, it was determined that additional M/R mast assemblies are affected by the same unsafe condition and that it is necessary to distinguish the affected part numbers between M/R mast assemblies and mast swashplate assemblies. This AD continues to require the actions specified in AD 2021-04-18 and adds additional part-numbered M/R mast assemblies and distinguishes the affected part numbers between M/R mast assemblies and mast swashplate assemblies, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD also clarifies the possible consequences that could result from the unsafe condition and clarifies a requirement. 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-2025-0014; 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](mailto:ADs@easa.europa.eu); website: [easa.europa.eu](https://easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](https://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-2025-0014.

**FOR FURTHER INFORMATION CONTACT:** Tara Lucas, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (206) 231-3189; email: [Tara.Lucas@faa.gov](mailto:Tara.Lucas@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-2025-0014; Project Identifier MCAI-2024-00471-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: Tara Lucas, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (206) 231-3189; email: Tara.Lucas@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 AD 2020-23-02, Amendment 39-21318 (85 FR 73607, November 19, 2020) (AD 2020-23-02), for all Airbus Helicopters Model EC225LP helicopters. AD 2020-23-02 was prompted by an MCAI originated by EASA, which is the Technical Agent for the Member States of the European Union. EASA issued EASA AD 2020-0079, dated April 1, 2020 (EASA AD 2020-0079). EASA AD 2020-0079 was prompted by a report of a manufacturing issue involving ceramic balls of the swashplate bearing of the M/R mast assembly. EASA stated that a defective ceramic ball could lead to potential premature spalling of the ball itself and of the swashplate bearing. According to EASA, this condition, if not detected and corrected, could lead to loss of function of the bearing and overload of the main rotor mast scissor, possibly resulting in reduced control of the helicopter.

AD 2020-23-02 required repetitive inspections of the bearing in the swashplate assembly of certain M/R mast assemblies for discrepancies (ceramic balls that have a hard point or sensitive axial play or both) and, depending on the findings, replacement of an affected M/R mast assembly with a serviceable M/R mast assembly. The FAA issued AD 2020-23-02 to address defective ceramic balls in the bearing installed in the swashplate assembly of the M/R mast assembly, which could lead to premature spalling of the ball itself and of the bearing, loss of function of the bearing, and overload of the M/R mast scissor, resulting in reduced control of the helicopter.

After the FAA issued AD 2020-23-02, EASA superseded EASA AD 2020-0079 and issued EASA AD 2020-0264, dated December 2, 2020 (EASA AD 2020-0264). EASA AD 2020-0264 expanded the affected parts definition by adding an additional part-numbered M/R mast assembly.

The FAA then issued AD 2021-04-18, Amendment 39-21440 (86 FR 13637, March 10, 2021) (AD 2021-04-18) to supersede AD 2020-23-02 to add the additional part-numbered M/R mast assembly as specified in EASA AD 2020-0264.

### **Actions Since AD 2021-04-18 was Issued**

Since the FAA issued AD 2021-04-18, EASA superseded EASA AD 2020-0264 and issued EASA AD 2024-0160, dated August 16, 2024 (EASA AD 2024-0160) (also

referred to as the MCAI), to correct an unsafe condition for all Airbus Helicopters Model EC 225 LP helicopters. The MCAI states that since EASA AD 2020-0264 was issued, more additional part-numbered M/R mast assemblies affected by the same unsafe condition have been identified and that it is necessary to distinguish the affected part numbers between M/R mast assemblies and mast swashplate assemblies. The MCAI also advises of improved inspection instructions.

This AD was prompted by a report of a manufacturing and control issue regarding the ceramic balls in the bearing installed in the swashplate assembly of the main rotor mast assembly. Since the FAA issued AD 2021-04-18, the FAA also determined that it is necessary to clarify the possible consequences that could result from the unsafe condition. The FAA is clarifying that it is issuing this AD to address defective ceramic balls in the bearing installed in the swashplate assembly of the M/R mast assembly, which could lead to premature spalling of the ball itself and of the bearing, loss of function of the bearing, seizure of the M/R mast swashplate, overload of the M/R mast scissor, and subsequent loss of control of the helicopter. Lastly, since the FAA issued AD 2021-04-18, the FAA determined that it is necessary to update an exception to no longer require removing certain parts from service, since operators may repair those parts and return them to service. You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0014.

#### **Material Incorporated by Reference under 1 CFR Part 51**

The FAA reviewed EASA AD 2024-0160, which requires repetitive inspections of certain part-numbered M/R mast assemblies and mast swashplate assemblies for discrepancies (ceramic balls that have a hard point or sensitive axial play or both) and, depending on the results, replacing an affected M/R mast assembly or mast swashplate assembly with a serviceable M/R mast assembly or mast swashplate assembly. EASA AD 2024-0160 also prohibits installing those M/R mast assemblies and mast swashplate assemblies unless it is a serviceable part as defined within. 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 retains all requirements in AD 2021-14-08. This AD also adds additional part-numbered M/R mast assemblies and distinguishes the affected part numbers between M/R mast assemblies and mast swashplate assemblies as specified in EASA AD 2024-0160, described previously, except for any differences identified as exceptions in the regulatory text of this AD.

## **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 defective ceramic balls in the bearing installed in the swashplate assembly of the M/R mast assembly could lead to premature spalling of the ball itself and of the bearing, loss of function of the bearing, seizure of the M/R mast

swashplate, overload of the M/R mast scissor, and subsequent loss of control of the helicopter. This AD adds other affected M/R mast assemblies to those identified in AD 2021-04-18. In addition, the compliance time for the initial instance of the repetitive inspections is 50 hours time-in-service, a time period of less than 2 months based on the average flight-hour utilization rate of these helicopters. Accordingly, the compliance time for the required action is shorter than the time necessary for the public to comment and for publication of the final rule. Therefore, 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 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 28 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this AD:

<b>Estimated Costs of Required Actions</b>				
<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspecting the M/R mast or mast swashplate assembly	4 work-hours X \$85 per work-hour = \$340	\$0	\$340 (per inspection cycle)	\$9,520 (per inspection cycle)

The FAA estimates the following costs to do any necessary action that would be required based on the results of any inspection. The FAA has no way of determining the number of helicopters that might need this on-condition action:

<b>Estimated costs of On-Condition Actions</b>			
<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Corrective Actions	100 work-hours X \$85 per work-hour = \$8,500	\$*	\$8,500*

\* Airbus Helicopters informed the FAA that parts costs will vary for each helicopter and is determined by several factors, including the condition of a returned M/R mast assembly. Airbus Helicopters provided information indicating that costs may be as low as \$1,120,000 per helicopter. For the purposes of this AD, the FAA estimates the average cost will be between \$1,120,000 and \$3,256,000 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:

- a. Removing Airworthiness Directive 2021-04-18, Amendment 39-21440 (86 FR 13637, March 10, 2021); and

- b. Adding the following new airworthiness directive:

**2025-03-01 Airbus Helicopters:** Amendment 39-22949; Docket No. FAA-2025-0014; Project Identifier MCAI-2024-00471-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 AD 2021-04-18, Amendment 39-21440 (86 FR 13637, March 10, 2021) (AD 2021-04-18).

**(c) Applicability**

This AD applies to Airbus Helicopters Model EC225LP helicopters, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC) Code: 6230, Main Rotor Mast/Swashplate.

**(e) Unsafe Condition**

This AD was prompted by a report of a manufacturing and control issue regarding the ceramic balls in the bearing installed in the swashplate assembly of the main rotor mast assembly. The FAA is issuing this AD to address defective ceramic balls in the bearing installed in the swashplate assembly of the main rotor mast assembly, which could lead to premature spalling of the ball itself and of the bearing, loss of function of the bearing, seizure of the main rotor mast swashplate, overload of the main rotor mast scissor, 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 AD 2024-0160, dated August 16, 2024 (EASA AD 2024-0160).

**(h) Exceptions to EASA AD 2024-0160**

(1) Where EASA AD 2024-0160 requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(2) Where EASA AD 2024-0160 refers to April 15, 2020 (the effective date of EASA AD 2020-0079, dated April 1, 2020), this AD requires using December 4, 2020 (the effective date of AD 2020-23-02, Amendment 39-21318 (85 FR 73607, November 19, 2020)).

(3) Where EASA AD 2024-0160 refers to December 16, 2020 (the effective date of EASA AD 2020-0264, dated December 2, 2020), this AD requires using March 25,

2021 (the effective date of AD 2021-04-18).

(4) Where EASA AD 2024-0160 refers to its effective date, this AD requires using the effective date of this AD.

(5) Where the material referenced in EASA AD 2024-0160 specifies “work steps associated with the check are described in a video”, this AD requires a complete rotation of the swashplate in both directions using a rate of one revolution per minute.

(6) Where paragraph (2) of EASA AD 2024-0160 states “any discrepancy is detected, as defined in the ASB” this AD requires replacing that text with “there is any bearing race damage, which may be indicated by a hard point (ratcheting or blocking) or sensitive axial play on the ball bearing.”

**Note 1 to paragraph (h)(6):** A hard point sensation that disappears after back-and-forth motions is not considered a hard point.

(7) Where the material referenced in EASA AD 2024-0160 specifies to send certain parts to Airbus Helicopters, this AD does not require that action.

(8) The AD does not adopt the “Remarks” section of EASA AD 2024-0160.

**(i) No Reporting Requirement**

Although the material referenced in EASA AD 2024-0160 specifies to submit certain information to the manufacturer, this AD does not require that action.

**(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 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 (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.

**(l) Additional Information**

For more information about this AD, contact Tara Lucas, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (206) 231-3189; email: Tara.Lucas@faa.gov.

**(m) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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) AD 2024-0160, dated August 16, 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 this 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](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on February 10, 2025.

Victor Wicklund,  
Deputy Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.  
[FR Doc. 2025-02703 Filed: 2/12/2025 11:15 am; Publication Date: 2/18/2025]