



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2025-1102; Project Identifier MCAI-2024-00183-R; Amendment 39-23205; AD 2025-24-08]

RIN 2120-AA64

Airworthiness Directives; Hélicoptères Guimbal Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Hélicoptères Guimbal (Guimbal) Model Cabri G2 helicopters. This AD was prompted by reports of cracked main rotor swashplates (swashplates). This AD requires repetitively inspecting certain swashplates for cracks and, depending on the results, removing and replacing each cracked swashplate. This AD also prohibits installing an affected swashplate unless it has passed the inspection requirements. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 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 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No.FAA-2025-1102; 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 address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For Guimbal material identified in this AD, contact Guimbal, 1070, rue du Lieutenant Parayre, Aéroport d'Aix-en-Provence, 13290 Les Milles, France; phone: 33-04-42-39-10-88; email: support@guimbal.com; or at guimbal.com.

- 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 under Docket No. FAA-2025-1102.

FOR FURTHER INFORMATION CONTACT: George Weir, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (817) 222-4045; email: george.a.weir@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Guimbal Model Cabri G2 helicopters. The NPRM was published in the *Federal Register* on June 18, 2025 (90 FR 25906). The NPRM was prompted by AD 2024-0071, dated March 14, 2024 (EASA AD 2024-0071) (also referred to as the MCAI), issued by European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. The MCAI states that occurrences were reported where, during maintenance, cracks were found on the rotating and non-rotating part of the swashplates of two Guimbal Model

Cabri G2 helicopters. Guimbal concluded that the cracks were likely caused by aging and corrosion.

In the NPRM, the FAA proposed to require removing the paint on each swashplate and repetitively visually inspecting the six arms of the rotating and non-rotating swashplates for cracks and, depending on the results, removing and replacing any cracked swashplate or repainting the swashplate. The NPRM also prohibited installing an affected swashplate unless it has passed the proposed inspection requirements. The FAA is issuing this AD to detect and correct a cracked swashplate. The unsafe condition, if not addressed, could lead to failure of a cracked swashplate, which could result in loss of control of the helicopter.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-1102.

Comments

The FAA received comments from 12 commenters. The commenters were Austin Peay State University Aviation Science, Cabri US, Rotor Leasing LLC, Carlson Aeromotive, EASA, Hélicoptères Guimbal, Precision Support Services, and five individual commenters. The majority of the commenters expressed concerns regarding the necessity of paint removal for the initial inspection and stated that the cost estimates for the inspection and corrective actions appear to be undervalued. Additional concerns were raised about the frequency of inspections, the availability of materials, and the potential use of a magnifying glass during the process. Furthermore, there is a desire for the FAA AD to align with the information outlined in the EASA AD. Several commenters also voiced support for the opinions of their peers. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Remove Paint Removal Requirement for the Initial and Repetitive Inspections

Eleven commenters requested a revision of the required actions to remove the required action of removing the paint as part of the initial and repetitive inspections. Five of the commenters stated that the stripping and repainting is only required in cases of doubt in the required service material and not at each inspection. Several commenters stated there is a significant risk of damaging or weakening the integrity of the swashplate due to repeated paint stripping and this paint stripping will not enhance the detection of potential cracks. Guimbal stated that removing the paint at each inspection could create new corrosion areas as well as painting errors.

Austin Peay State University Aviation Science stated that the proposed AD will bypass the initial visual inspection and cause maintenance personnel to initiate invasive maintenance procedures, such as sanding paint and metal and using abrasives, which will introduce flaws and could develop into stress fractures and shorten the life of the component. Additionally, Rotor Leasing LLC stated that, if the FAA has concerns regarding an undetected crack, it would be prudent to mandate a dye penetrant inspection rather than relying solely on a visual inspection. Furthermore, several commenters stated the urethane paint will crack along with the aluminum if a crack appears and thus ensure that any cracks won't be concealed by the existing paint.

The FAA partially agrees. The FAA agrees that removing the paint in order to accomplish the initial and repetitive visual inspections is unnecessary and revised this AD by eliminating those requirements. The FAA disagrees with requiring a dye penetrant inspection instead of a visual inspection in order to accomplish the inspection of the rotating and non-rotating swashplates for a crack.

Request to Revise the Inspection Interval

Three of the commenters requested that the inspection intervals proposed in the NPRM of not exceeding 60 hours time in service (TIS) be revised to align with the 50-hour TIS, 100-hour TIS, and annual inspections as specified in the service material. The commenters stated these standard inspections already necessitate a visual inspection of the swashplate, and requiring an additional visual inspection is not cost-effective.

The FAA disagrees with revising the proposed inspection intervals from 60 hours TIS or 14 months, whichever occurs first. This final rule follows the inspection intervals specified in the MCAI and the service material. In addition, repetitive inspections may always be conducted before exceeding the 60 hours TIS to align with maintenance intervals. The FAA has not changed this AD in this regard.

Request to Revise the Cost of Compliance Paragraph

Several commenters stated the process of removing the paint, inspecting, and reapplying the paint will take a minimum of 2 hours and possibly up to 4 hours not 30 minutes as indicated in the NPRM. The commenters requested revising this estimate to increase to two hours. The commenters also suggested revising the labor rate of \$85 per hour to a range between \$125 and \$185 per hour to reflect current rates.

The FAA partially agrees. After considering the data presented by commenters, the FAA agrees that the number of work-hours required to remove the paint, inspect and reapply the paint is higher than the agency's previous estimate. The Costs of Compliance paragraph has been revised to indicate this as an on-condition cost and has increased the estimated work-hours associated with this required action to 2 work-hours. The FAA disagrees with changing the labor rate of \$85 per hour. The FAA notes that the current wage rate for aviation mechanics as provided by the Bureau of Labor Statistics, found at data.bls.gov/oesprofile, after accounting for fringe benefits that are valued at roughly 50 percent of the nominal wage, is lower than the estimated fully burdened labor rate of \$85

per hour. Therefore, the FAA is unable to justify increasing the labor rate from \$85 per hour.

Request to Revise the Materials Incorporated by Reference Under 1 CFR Part 51 Paragraph

Austin Peay State University Aviation Science stated in the section titled Material Incorporated by Reference Under 1 CFR Part 51, the statement that material is reasonably available is incorrect. The commenter states the approved paint is only available in Europe and is not readily available due to the long shipping process.

The FAA infers that the commenter assumed this paragraph was referencing the required materials (i.e. the paint) when in fact this paragraph references the required service materials (i.e. service bulletins and documents) and not the materials required to perform the actions in the AD. Based on this inference, the FAA disagrees. The FAA has not changed this AD in this regard.

Request Modification of Inspection Procedures

Austin Peay State University Aviation Science requested the visual inspection include the usage of a 10x magnifying glass to aid in the detection of a crack. In addition, they requested the wording “If operated in a severe corrosion zone” for helicopters operating in a corrosive environment, after the initial inspection and thereafter at every 2,200 hour inspection, remove the paint on the swashplate and a visually inspect for cracks.

The FAA disagrees. If there is a crack, the paint will crack with the material underneath. Therefore, requiring the usage of a magnifying glass or removing the paint at every 2,200-hour inspection is unnecessary. Cracks can occur on any helicopter regardless of the operating environment. Restricting the inspection to only those “operated in severe corrosion zone” could lead to possible missed helicopters. The FAA has not changed this AD in this regard.

Conclusion

These products have been approved by the civil 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, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed Guimbal Mandatory Service Bulletin SB 24-001, Revision C, dated March 20, 2024 (Guimbal SB 24-001 C), which specifies procedures for performing repetitive inspections of the six arms from both the rotating and non-rotating swashplate part number G41-00-000 for cracks, replacing any cracked swashplate, and contacting Guimbal support. If there is doubt about the existence of a crack or if there is paint damage or peeling, Guimbal SB 24-001 C specifies removing the paint and further inspecting for cracks. If no crack is found, Guimbal SB 24-001 C specifies touching up the paint in areas where paint was removed before approving the helicopter for return to service.

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.

Differences Between this AD and the MCAI

The material referenced in the MCAI specifies contacting Guimbal support after replacing the swashplate, whereas this AD does not require that action.

Costs of Compliance

The FAA estimates that this AD affects 59 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD.

Estimated costs

Action	Labor Cost	Parts Cost	Cost per inspection cycle	Cost on U.S. operators per inspection cycle
Inspect Swashplate	.25 work-hours x \$85 per hour = \$22	\$0	\$22	\$1,298

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

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Remove paint, inspect, and repaint Swashplate	2 work-hours x \$85 per hour = \$170	\$60	\$230
Replace Swashplate	6 work-hours x \$85 per hour = \$510	\$7,066	\$7,576

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,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will 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 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:

2025-24-08 Hélicoptères Guimbal: Amendment 39-23205; Docket No. FAA-2025-1102; Project Identifier MCAI-2024-00183-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER

DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Hélicoptères Guimbal (Guimbal) Model Cabri G2 helicopters, certificated in any category, with a main rotor swashplate part number (P/N) G41-00-000 installed.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reports of cracks on the rotating and non-rotating parts of the swashplates. The FAA is issuing this AD to detect and correct a cracked swashplate. The unsafe condition, if not addressed, could lead to failure of a cracked swashplate, which could result in loss of control of the helicopter.

(f) Compliance

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

(g) Required Actions

(1) Within the compliance time listed in table 1 to paragraph (g)(1) of this AD and thereafter at intervals not to exceed 60 hours time in service (TIS) or 14 months, whichever occurs first, visually inspect with a flashlight all six arms of both the rotating and non-rotating swashplates for a crack, paying particular attention to each face of each clevis arm as shown in the picture under paragraph (a) of Guimbal Mandatory Service Bulletin SB 24-001, Revision C, dated March 20, 2024 (Guimbal SB 24-001 C).

Table 1 to paragraph (g)(1)

Swashplate Serial Number	Initial Compliance Time
801 through 1077 inclusive	Within 30 hours TIS or 4 months, whichever occurs first, after the effective date of this AD.
1078 and higher	Within 60 hours TIS or 6 months, whichever occurs first, after the effective date of this AD.

(2) If a crack is found on a swashplate during any inspection required by paragraph (g)(1) of this AD, before further flight, remove the cracked swashplate from service and install an airworthy swashplate.

(3) If there is paint damage (i.e. scratches, fading, peeling, discoloration, staining, or cracking), found on any swashplate during an inspection required by paragraph (g)(1) of this AD, remove the paint using P600-GRIT abrasive for further crack inspection and retouch all areas of each swashplate where paint was removed by following paragraph (d) of Guimbal SB 24-001 C.

(h) Parts Installation Limitation

As of the effective date of this AD, do not install a swashplate having P/N G41-00-000 on any helicopter, unless it has been inspected in accordance with paragraph (g)(1) of this AD.

(i) Credit for Previous Actions

You may take credit for any inspection and associated actions required by paragraph (g) of this AD if you performed that inspection before the effective date of this AD using Guimbal Mandatory Service Bulletin SB 24-001, Revision A, dated February 7, 2024, or Guimbal Mandatory Service Bulletin SB 24-001, Revision B, dated March 13, 2024.

(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 (l)(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

(1) For more information about this AD, contact George Weir, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (817) 222-4045; email: george.a.weir@faa.gov.

(2) Guimbal material identified in this AD that is not incorporated by reference is available at the addresses specified in paragraph (m)(3) of this AD.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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) Guimbal Mandatory Service Bulletin SB 24-001, Revision C, dated March 20, 2024.

(ii) [Reserved]

(3) For Guimbal material identified in this AD, contact Hélicoptères Guimbal, 1070, rue du Lieutenant Parayre, Aérodrome d'Aix-en-Provence, 13290 Les Milles,

France; phone: 33-04-42-39-10-88; email: support@guimbal.com; or at guimbal.com.

(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 or email fr.inspection@nara.gov.

Issued on November 21, 2025.

Steven W. Thompson,
Acting Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.
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