DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0105; Project Identifier MCAI-2020-01422-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 SA330J helicopters. This proposed AD was prompted by the failure of a second stage planet gear installed in the main gearbox (MGB). This proposed AD would require repetitively inspecting the MGB particle detector and the MGB bottom housing (oil sump) for metal particles, analyzing any metal particles that are found, and replacement of the MGB if necessary, as specified in a European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, which is proposed for incorporation by reference (IBR). 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 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.

For material that is proposed for IBR in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this material on the EASA website at https://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 in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0105.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0105; 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. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@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-2021-0105; Project Identifier MCAI-2020-01422-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 https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposal.

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 Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@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.
Discussion

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0272, dated December 13, 2018 (EASA AD 2018-0272) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all Airbus Helicopters Model SA330J helicopters.

This proposed AD was prompted by the failure of a second stage planet gear installed in the MGB of an Airbus Helicopters Model EC225LP helicopter. Airbus Helicopters Model SA330J helicopters have a similar design, therefore, these models may be subject to the unsafe condition revealed on the Model EC225LP helicopter. The FAA is proposing this AD to address failure of a second stage planet gear installed in the MGB, which could result in failure of the MGB and subsequent loss of control of the helicopter. See the MCAI for additional background information.

Related Service Information Under 1 CFR Part 51

EASA AD 2018-0272 describes procedures for repetitively inspecting the MGB particle detector and the MGB bottom housing (oil sump) for metal particles, analyzing any metal particles that are found, and replacement of the MGB if necessary. 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 and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition
described previously is likely to exist or develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2018-0272, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this proposed AD.

**Explanation of Required Compliance Information**

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, EASA AD 2018-0272 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2018-0272 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 the EASA AD 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 the EASA AD. Service information specified in EASA AD 2018-0272 that is required for compliance with EASA AD 2018-0272 will be available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0105 after the FAA final rule is published.
Interim Action

The FAA considers this proposed AD interim action. If final action is later identified, the FAA might consider further rulemaking then.

Costs of Compliance

The FAA estimates that this proposed AD affects 15 helicopters of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

### Estimated costs for required actions

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 work-hours X $85 per hour = $425</td>
<td>$0</td>
<td>$425</td>
<td>$6,375</td>
</tr>
</tbody>
</table>

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

### Estimated costs of on-condition actions

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 work-hours X $85 per hour = $3,400</td>
<td>$600,000 (overhauled)</td>
<td>$603,400</td>
</tr>
</tbody>
</table>

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. 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 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.

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

   **Airbus Helicopters:** Docket No. FAA-2021-0105; Project Identifier MCAI-2020-01422-R.
(a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected Airworthiness Directives (ADs)

None.

(c) Applicability

This AD applies to all Airbus Helicopters Model SA330J helicopters, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 6320, Main Rotor Gearbox.

(e) Reason

This AD was prompted by a failure of a second stage planet gear installed in the main gearbox (MGB). The FAA is issuing this AD to address failure of an MGB second stage planet gear, which could result in failure of the MGB 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 paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2018-0272, dated December 13, 2018 (EASA AD 2018-0272).

(h) Exceptions to EASA AD 2018-0272

(1) Where EASA AD 2018-0272 refers to its effective date, this AD requires using the effective date of this AD.
(2) Where EASA AD 2018-0272 refers to March 30, 2018 (the effective date of EASA AD 2018-0065, dated March 23, 2018), this AD requires using the effective date of this AD.

(3) The “Remarks” section of EASA AD 2018-0272 does not apply to this AD.

(4) Where EASA AD 2018-0272 refers to flight hours (FH), this AD requires using hours time-in-service.

(5) Where paragraph (1) of EASA AD 2018-0272 specifies to inspect the MGB particle detector “in accordance with the instructions of Section 3 of the ASB” for this AD use “in accordance with the instructions in step 3.B.2.a. of the ASB.”

(6) Where paragraph (2) of EASA AD 2018-0272 specifies to inspect the MGB bottom housing (oil sump) “in accordance with the instructions of Section 3 of the ASB” for this AD use “in accordance with the instructions in step 3.B.2.b. of the ASB.”

(7) Where the service information referenced in EASA AD 2018-0272 specifies to perform a metallurgical analysis and contact the manufacturer if unsure about the characterization of the particles collected, this AD does not require contacting the manufacturer to determine the characterization of the particles collected.

(8) Although the service information referenced in EASA AD 2018-0272 specifies that if any 16NCD13 particles are found to contact the manufacturer and send a 1-liter sample of oil to the manufacturer, this AD does not require that action.

(9) Although the service information referenced in EASA AD 2018-0272 specifies returning certain parts to the manufacturer, this AD does not require that action.

(10) Where EASA AD 2018-0272 specifies actions be done after the last flight of the day or “ALF,” this AD requires doing those actions before the first flight of the day.

(11) Although the service information referenced in EASA AD 2018-0272 specifies discarding certain parts, this AD requires removing the parts from service.
Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the helicopter can be modified (if the operator elects to do so), provided that the helicopter is operated during the day, under visual flight rules, and with no passengers onboard.

Alternative Methods of Compliance (AMOCs):

(1) The Manager, Strategic Policy Rotorcraft Section, 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. Send your proposal to: Manager, Strategic Policy Rotorcraft Section, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5110. Information may be emailed to: 9-ASW-FTW-AMOC-Requests@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.

Related Information

(1) For EASA AD 2018-0272, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this EASA AD on the EASA website at https://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. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0105.
(2) For more information about this AD, contact Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov.

Issued on February 19, 2021.

Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-03951 Filed: 3/1/2021 8:45 am; Publication Date: 3/2/2021]