DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0105; Project Identifier MCAI-2020-01422-R;
Amendment 39-21543; AD 2021-10-10]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus Helicopters Model SA330J helicopters. This AD was prompted by the failure of a second stage planet gear installed in the main gearbox (MGB). This AD requires 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 incorporated by reference. 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: For material incorporated by reference (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 final rule, 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.

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:

Background

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.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Helicopters Model SA330J helicopters. The NPRM published in the Federal Register on March 2, 2021
The NPRM was prompted by the failure of a second stage planet gear installed in the MGB. The NPRM proposed to 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 an EASA AD.

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. See the MCAI for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

• Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and

• Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

EASA AD 2018-0272 specifies 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.

**Interim Action**

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

**Costs of Compliance**

The FAA estimates that this AD affects 15 helicopters of U.S. registry. The FAA estimates the following costs to comply with this 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></td>
<td></td>
</tr>
<tr>
<td></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**

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:
2021-10-10 Airbus Helicopters: Amendment 39-21543; Docket No. FAA-2021-0105; Project Identifier MCAI-2020-01422-R.

(a) Effective Date
This airworthiness directive (AD) is effective [INSERT DATE 35 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.
(i) 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.

(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 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.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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.

(ii) [Reserved]

(3) 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.

(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. 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.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on May 3, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-10608 Filed: 5/19/2021 8:45 am; Publication Date: 5/20/2021]