DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0455; Product Identifier 2019-SW-105-AD; Amendment 39-21130; AD 2020-11-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus Helicopters Model EC120B helicopters. This AD was prompted by a report of recurrent loss of tightening torque on several attachment bolts of the tail rotor hub body. This AD requires repetitive inspections of the tail rotor hub body for cracks and applicable corrective actions if necessary, and repetitive replacement of the attachment bolts, washers, and nuts of the tail rotor hub body. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes 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 https://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. 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. It is also available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0455.


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-2020-0455; 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 AD, the European Union Aviation Safety Agency (EASA) AD, any service information that is incorporated by reference, 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: Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218; email Kathleen.Arrigotti@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0272R1, dated November 18, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information or “the MCAI”), to correct an unsafe condition for all Airbus Helicopters EC120B helicopters. EASA advises that an inspection of the tail rotor hub body revealed a recurring loss of tightening torque on several attachment bolts. EASA advises that this condition, if not detected and corrected, could lead to cracking and potential loss of the tail rotor drive and consequent loss of yaw control of the helicopter. The MCAI requires repetitive inspections of the tail rotor hub...
body for cracks and applicable corrective actions if necessary, as well as repetitive replacement of the associated attachment bolts, washers, and nuts.

You may examine the MCAI in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0455.

**Related Service Information under 1 CFR Part 51**

Airbus Helicopters has issued Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019. This service information describes procedures for repetitive inspections of the tail rotor hub body for cracks and applicable corrective actions if necessary, and repetitive replacement of the attachment bolts, washers, and nuts of the tail rotor hub body. Corrective actions include replacing the tail rotor hub body and associated bolts, washers, and nuts, and an inspection of the splined flange and the tail rotor hub body, and, if necessary, replacing the splined flange.

This service information 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**

Airbus Helicopters has issued Emergency Alert Service Bulletin 05A020, Revision 0, dated October 29, 2019. The actions specified in this service bulletin are the same as those specified in Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019. However, Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019, revised the compliance time for repetitive inspections of the tail rotor hub body for cracks from within every 15
hours time-in-service (TIS) but not to exceed 7 days, to within every 15 hours TIS.

Airbus has issued “Detailed Check - Splined Flange,” Task 64-21-00, 6-5, Airbus Aircraft Maintenance Manual (AMM), Version B, dated April 7, 2014. This service information describes inspection criteria and inspection areas for a detailed check of the tail rotor splined flange.

**FAA’s Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD after evaluating all pertinent information and determining the unsafe condition exists and is likely to exist or develop on other products of the same type design.

**Requirements of this AD**

This AD requires accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this AD and the MCAI or Service Information.”

**Differences Between this AD and the MCAI**

Where Note 1 of the MCAI allows a non-cumulative tolerance of 100 hours TIS to be applied to the compliance times for the initial replacement of bolts, washers, and nuts (Table 1 of the MCAI) to allow for synchronization of the required inspections with other maintenance tasks, this AD does not allow a non-cumulative tolerance of 100 hours TIS to be applied to the compliance times for the initial replacement of bolts, washers,
and nuts (Figure 3 to paragraph (j) of this AD).

**FAA’s Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C.) 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 seeking comment prior to the rulemaking. Similarly, 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 waiving notice and comment prior to adoption of this rule because recurrent loss of tightening torque on several tail rotor hub body attachment bolts could lead to cracking and potential loss of the tail rotor drive and consequent loss of yaw control of the helicopter. The FAA determined a compliance time of 15 hours TIS or 7 days, whichever occurs first, is required to correct the unsafe condition. This compliance time is shorter than the time necessary for the public to comment and for publication of the final rule.

Accordingly, notice and opportunity for prior public comment are impracticable pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the reasons stated above, 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.
Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and the FAA did not precede it by notice and opportunity for public comment. However, the FAA invites you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0455; Product Identifier 2019-SW-105-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this AD. The FAA will consider all comments received by the closing date and may amend this AD based on those comments.

The FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this AD.

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 the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 90 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:
The FAA has received no definitive data that would enable it to provide cost estimates for the on-condition actions specified in this AD.

**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 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.

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**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>1 work-hour X $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>$7,650</td>
</tr>
</tbody>
</table>
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.

Adoption of 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 (AD):

   2020-11-05 Airbus Helicopters: Amendment 39-21130; Docket No. FAA-2020-0455;
   Product Identifier 2019-SW-105-AD.

   (a) Effective Date

   This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF
   PUBLICATION IN THE FEDERAL REGISTER].

   (b) Affected ADs

   None.
(c) **Applicability**

This AD applies to Airbus Helicopters Model EC120B helicopters, certificated in any category, all serial numbers.

(d) **Subject**

Joint Aircraft Service Component (JASC) Code 6400, Tail rotor system.

(e) **Reason**

This AD was prompted by a report of recurrent loss of tightening torque on several attachment bolts on the tail rotor hub body. The FAA is issuing this AD to address this condition, which could lead to cracking and potential loss of the tail rotor drive and consequent loss of yaw control of the helicopter.

(f) **Compliance**

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

(g) **Definitions**

(1) For the purposes of this AD, an affected part is any tail rotor hub body part number C642A0100103.

(2) For the purposes of this AD, a serviceable part is any affected part that is new (not previously installed on any helicopter); or any affected part on which an inspection has been done as specified in the instructions of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 0, dated October 29, 2019, or Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019, and there were no cracks.
(h) Repetitive Inspection of the Tail Rotor Hub Body

Within 15 hours time-in-service (TIS) or 7 days, whichever occurs first after the effective date of this AD: Inspect the affected part (as defined in paragraph (g)(1) of this AD) for cracking in accordance with the instructions of section 3.B.2 of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019. Thereafter, repeat the inspection at intervals not to exceed 15 hours TIS.

(i) Corrective Actions

(1) If, during any inspection required by paragraph (h) of this AD, there are any cracks, before next flight, replace the tail rotor hub body with a serviceable part (as defined in paragraph (g)(2) of this AD) and replace the bolts, washers, and nuts with new bolts, washers, and nuts, in accordance with the instructions of section 3.B.3 of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019, and inspect the tail rotor splined flange for the conditions identified in figure 1 to paragraph (i)(1) of this AD and at the areas identified in figure 2 to paragraph (i)(1) of this AD in accordance with the instructions of section 1.E.2 of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019.

Note 1 to paragraph (i)(1): You may refer to “Detailed Check - Splined Flange,” Task 64-21-00, 6-5, Airbus Aircraft Maintenance Manual (AMM) Version B, dated April 7, 2014, which pertains to the tail rotor splined flange inspection.

**Figure 1 to paragraph (i)(1) – Inspection Criteria for Tail Rotor Splined Flange**

<p>| Location as specified in figure 2 to paragraph (i)(1) of this AD | Maximum damage, which causes replacement (E1, Dia. 2, and Dia. 3 are shown in figure 2 to paragraph (i)(1) of this AD) |</p>
<table>
<thead>
<tr>
<th>Location as specified in figure 2 to paragraph (i)(1) of this AD</th>
<th>Maximum damage, which causes replacement (E1, Dia. 2, and Dia. 3 are shown in figure 2 to paragraph (i)(1) of this AD)</th>
</tr>
</thead>
</table>
| Zone A                                                        | Score, depth more than 0.2 millimeters (mm) (0.008 in.)  
Crack  
E1 less than 2.75 mm (0.108 in.)  
Dia. 3 more than 6.02 mm (0.2371 in.)  
Dia. 2 more than 33.03 mm (1.3004 in.) |
| Zone B                                                        | Sanding depth more than 0.1 mm (0.004 in.)  
Crack |
| Zone C                                                        | Crack  
Score, depth more than 0.2 mm (0.008 in.) |
Figure 2 to paragraph (i)(1) – Inspection Areas of Tail Rotor Splined Flange

(2) If, during any inspection of the tail rotor splined flange required by paragraph (i)(1) of this AD, the condition of the part exceeds the criteria as specified in figure 1 to paragraph (i)(1) of this AD, before next flight, replace the tail rotor splined flange with an airworthy tail rotor splined flange in accordance with the instructions of section 3.B.4 of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019.

(j) Replacement of Attachment Bolts, Washers, and Nuts of the Tail Rotor Hub Body

Within the applicable compliance time specified in figure 3 to paragraph (j) of this AD, replace the attachment bolts, washers, and nuts of the tail rotor hub body with
new bolts, washers, and nuts in accordance with the instructions of Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 1, dated November 8, 2019. Thereafter, repeat the replacement of the bolts, washers, and nuts at intervals not to exceed 1,000 hours TIS.

**Figure 3 to paragraph (j) – Initial Replacement of Bolts, Washers and Nuts**

<table>
<thead>
<tr>
<th>Accumulated Hours TIS on the bolts since first installation on a helicopter</th>
<th>Compliance Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9,000 hours TIS</td>
<td>Within 1,000 hours TIS since the initial inspection required by paragraph (h) of this AD was done, without exceeding 9,000 hours TIS on the bolts since first installation on a helicopter</td>
</tr>
<tr>
<td>9,000 or more hours TIS, or hours TIS unknown</td>
<td>Within 15 hours TIS or 7 days, whichever occurs first after the effective date of this AD</td>
</tr>
</tbody>
</table>

**(k) Parts Installation Limitation**

As of the effective date of this AD, it is allowed to install on any helicopter an affected part, provided it is a serviceable part, as defined in paragraph (g) of this AD.

**(l) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (h) through (j) of this AD, if those actions were performed before the effective date of this AD using Airbus Helicopters Emergency Alert Service Bulletin 05A020, Revision 0, dated October 29, 2019.

**(m) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch,
FAA, may approve AMOCs for this AD. Send your proposal to: Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, notify your principal inspector or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(n) Related Information

The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2019-0272R1, dated November 18, 2019. This EASA AD may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0455.

(o) 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 service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html.

(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.

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

Issued on May 18, 2020.

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

[FR Doc. 2020-11082 Filed: 5/21/2020 8:45 am; Publication Date: 5/22/2020]