DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-1132; Project Identifier MCAI-2020-01386-R; Amendment 39-21452; AD 2021-05-09]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2018-15-02, which applied to certain Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters. AD 2018-15-02 required repetitively inspecting the tail rotor (TR) pitch rod for a damaged elastomeric ball joint, and corrective action if necessary. This AD continues to require the repetitive inspections and allows the repetitive inspection interval to be extended under certain conditions, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD was prompted by a report of several cases of damaged TR pitch rod ball joints. 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; telephone +49 221 8999000; 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-2020-1132.

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-2020-1132; 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: Katherine Venegas, Aviation Safety Engineer, Cabin Safety, Mechanical and Environmental Systems Section, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5353; fax: 562-627-5210; email: Katherine.Venegas@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0020R1, dated May 22, 2019 (EASA AD 2017-0020R1) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Airbus Helicopters Model AS350B,
AS350BA, AS350BB, AS350B1, AS350B2, AS350B3, AS355E, AS355F, AS355 F1, AS355F2, AS355N and AS355NP helicopters. Model AS350BB helicopters are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those helicopters in the applicability.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2018-15-02, Amendment 39-19334 (83 FR 34029, July 19, 2018) (AD 2018-15-02). AD 2018-15-02 applied to certain Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters. The NPRM published in the Federal Register on December 16, 2020 (85 FR 81427). The NPRM was prompted by a report of several cases of damaged TR pitch rod ball joints. The NPRM proposed to continue to require the repetitive inspections of the TR pitch rod for a damaged elastomeric ball joint, as specified in an EASA AD. The NPRM also proposed to allow the repetitive inspection intervals specified in AD 2018-15-02 to be extended to correspond with the intervals for the inspection of the TR pitch rod specified in the airworthiness limitation section of the applicable helicopter maintenance manual, as specified in an EASA AD. The FAA is issuing this AD to address damage to the elastomeric ball joint on the TR pitch change rod. This condition could result in failure of the TR pitch change rod and subsequent loss of control of the helicopter.

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 2017-0020R1 describes procedures for repetitively inspecting the TR pitch rod for a damaged (debonding, extrusion, or cracking) elastomeric ball joint and corrective action. The corrective action includes replacing an affected TR pitch rod with a serviceable TR pitch rod. 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.

Costs of Compliance

The FAA estimates that this AD affects 955 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<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>Retained actions from AD 2018-15-02</td>
<td>0.5 work-hour X $85 per hour = $42.50</td>
<td>$0</td>
<td>$42.50</td>
<td>$40,587.50</td>
</tr>
</tbody>
</table>

This new AD adds no new costs to affected operators.
The FAA estimates the following costs to do any necessary on-condition actions 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 actions:

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 work-hour X $85 per hour = $85</td>
<td>$3,358</td>
<td>$3,443</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.

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:

   a. removing Airworthiness Directive (AD) 2018-15-02, Amendment 39-19334 (83 FR 34029, July 19, 2018); and

   b. adding the following new AD:

   2021-05-09 Airbus Helicopters: Amendment 39-21452; Docket No. FAA-2020-1132; Project Identifier MCAI-2020-01386-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


   (c) Applicability

helicopters, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2017-0020R1, dated May 22, 2019 (EASA AD 2017-0020R1).

(d) Subject

Joint Aircraft System Component (JASC) Code 6720, Tail Rotor Control System.

(e) Reason

This AD was prompted by a report of several cases of damaged tail rotor (TR) pitch rod ball joints. The FAA is issuing this AD to address damage to the elastomeric ball joint on the TR pitch change rod. This condition could result in failure of the TR pitch change rod and subsequent loss of control of the helicopter.

(f) Compliance

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

(g) New Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2017-0020R1.

(h) Exceptions to EASA AD 2017-0020R1

(1) Where EASA AD 2017-0020R1 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2017-0020R1 refers to February 9, 2017 (the effective date of EASA AD 2017-0020-E, dated February 9, 2017), this AD requires using August 3, 2018 (the effective date of AD 2018-15-02).

(3) The “Remarks” section of EASA AD 2017-0020R1 does not apply to this AD.

(4) Although the service information referenced in EASA AD 2017-0020R1 specifies to discard certain parts, this AD does not include that requirement.

(5) Where EASA AD 2017-0020R1 refers to flight hours (FH), this AD requires using hours time-in-service (TIS).
(6) Where paragraph (1) of EASA AD 2017-0020R1 specifies an initial compliance time of “Before exceeding 50 FH [flight hours] since the last inspection per ALS [airworthiness limitations] chapter 04-20-00, or within 10 FH or 7 days, whichever occurs first,” for this AD, the initial compliance time is within 10 hours TIS.

(7) For the inspections specified in paragraph (1) of EASA AD 2017-0020R1: Accomplishing the actions specified in paragraphs (h)(7)(i) and (ii) of this AD before the effective date of this AD are acceptable for compliance with the inspections specified in paragraph (1) of EASA AD 2017-0020R1. On or after the effective date of this AD, comply with the inspections as specified in paragraph (1) of EASA AD 2017-0020R1.

(i) Manually induce a flapping movement in the TR blade until the pitch change rod rotates a minimum of 10 degrees.

(ii) Inspect both faces of the blade side of the ball joint elastomer for debonding, extrusion, and cracks.

(8) Although the service information referenced in EASA AD 2017-0020R1 permits certain actions to be performed by a mechanical engineering technician or pilot, this AD requires that the actions be performed by a qualified mechanic.

(i) 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 International Validation Branch, send it to the attention of the person identified in paragraph (j) 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.

(j) Related Information

For more information about this AD, contact Katherine Venegas, Aviation Safety Engineer, Cabin Safety, Mechanical and Environmental Systems Section, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5353; fax: 562-627-5210; email: Katherine.Venegas@faa.gov.

(k) 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 2017-0020R1, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +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-2020-1132.
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:


Issued on February 19, 2021.

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

[FR Doc. 2021-05145 Filed: 3/11/2021 8:45 am; Publication Date: 3/12/2021]