



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-1132; Project Identifier MCAI-2020-01386-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 supersede Airworthiness Directive (AD)

2018-15-02, which applies to certain Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters. AD 2018-15-02 requires repetitively inspecting the tail rotor (TR) pitch rod for a damaged elastomeric ball joint, and corrective action if necessary. Since the FAA issued AD 2018-15-02, the FAA determined that the manufacturer had developed improved inspection procedures and identified conditions that would 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. This proposed AD would retain the requirements of AD 2018-15-02 and allow the repetitive inspection interval to be extended under certain conditions, as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference. 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 will be incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this IBR 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 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:** 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:**

**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-2020-1132; Project Identifier MCAI-2020-01386-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 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. 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 FAA issued AD 2018-15-02, Amendment 39-19334 (83 FR 34029, July 19, 2018) (AD 2018-15-02), which applies to certain Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters. AD 2018-15-02 requires repetitively inspecting the TR pitch rod for a damaged elastomeric ball joint, and corrective action if necessary. The FAA issued AD 2018-15-02 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.

### **Actions Since AD 2018-15-02 Was Issued**

Since the FAA issued AD 2018-15-02, the FAA determined that the manufacturer had developed improved inspection procedures and identified conditions that would allow the repetitive inspection intervals specified in AD 2018-15-02 to be expanded 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.

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 proposed AD therefore does not include those helicopters in the applicability.

This proposed AD was prompted by a report of several cases of damaged TR pitch rod ball joints. The FAA is proposing 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. See the MCAI for additional background information.

### **Comments on AD 2018-15-02**

The FAA gave the public the opportunity to comment on AD 2018-15-02. The following presents the comments received on AD 2018-15-02 and the FAA's response to those comments.

### **Request to Allow Pilots to do the Inspection**

Four commenters requested that the FAA allow pilots to do the inspection specified in the required action paragraph of AD 2018-15-02. The commenters observed that the Airbus Helicopters service information specified in AD 2018-15-02 identified qualified personnel as a mechanical engineer technician or a pilot. Three of those commenters also noted that the repetitive inspection required by AD 2018-15-02 is required at intervals not to exceed 10 hours time-in-service (TIS). These commenters explained that because many of the affected helicopters are utilized for firefighting, law enforcement, and utility applications, operators might not have access to a mechanic to do the inspection every 10 hours TIS, therefore a pilot should be allowed to perform the inspection.

The FAA disagrees. Per 14 CFR 43.3, the persons listed as authorized to perform maintenance do not include pilots. In addition, AD 2018-15-02 requires actions where a

device to measure degrees of rotation is needed. Because this precision measuring equipment must be used, a pilot is not allowed to perform the inspection. The FAA did not make any changes to AD 2018-15-02 regarding this issue. However, the FAA reviewed these comments again in light of this NPRM, which proposes to supersede AD 2018-15-02, and to incorporate EASA AD 2017-0020R1 by reference. EASA AD 2017-0020R1 identifies conditions where operators can revert to the original repetitive inspection intervals specified in the applicable airworthiness limitations section for the affected helicopters. The intervals specified in the airworthiness limitations section are every 50 flight hours, and for the purposes of this proposed AD, every 50 hours TIS.

#### **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.

#### **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.

## **Explanation of Retained Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2018-15-02, this proposed AD would retain all of the requirements of AD 2018-15-02, except this proposed AD would allow for extended repetitive intervals. Those requirements are referenced in EASA AD 2017-0020R1, which, in turn, is referenced in paragraph (g) of this proposed AD.

## **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2017-0020R1 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this 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 2017-0020R1 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2017-0020R1 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 2017-0020R1 that is required for compliance with EASA AD 2017-0020R1 will be available on the Internet at

<https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1132 after the FAA final rule is published.

**Costs of Compliance**

The FAA estimates that this proposed AD affects 955 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

**Estimated costs for required actions**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Retained actions from AD 2018-15-02	0.5 work-hour X \$85 per hour = \$42.50	\$0	\$42.50	\$40,587.50

This new proposed 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:

**Estimated costs of on-condition actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
1 work-hour X \$85 per hour = \$85	\$3,358	\$3,443

**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.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2018-15-02, Amendment 39-19334 (83 FR 34029, July 19, 2018), and adding the following new AD:

**Airbus Helicopters:** Docket No. FAA-2020-1132; Project Identifier MCAI-2020-01386-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 Directive (ADs)**

This AD replaces AD 2018-15-02, Amendment 39-19334 (83 FR 34029, July 19, 2018) (AD 2018-15-02).

#### **(c) Applicability**

This AD applies to Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP 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 required 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.

(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 time-in-service (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)**

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)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. 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**

(1) For EASA AD 2017-0020R1, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 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-2020-1132.

(2) 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.

Issued on December 11, 2020.

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

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