DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0378; Product Identifier 2018-SW-060-AD]

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 Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters. This proposed AD would require visually inspecting each main rotor gearbox (MGB) suspension bar attachment bracket bolt for missing bolt heads. Depending on the outcome of the visual inspection, measuring the tightening torque, removing certain parts, sending photos and reporting information to Airbus Helicopters, and completing an FAA-approved repair would be required. This proposed AD is prompted by a report of a missing MGB suspension bar attachment bolt head. The actions of this proposed AD are intended to address an unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:
• **Federal eRulemaking Docket:** Go to https://www.regulations.gov. Follow the online instructions for sending your comments electronically.

• **Fax:** 202-493-2251.

• **Mail:** Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

• **Hand Delivery:** Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**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-2020-0378; 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 proposed AD, the European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD, 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 service information identified in this proposed 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 the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.
FOR FURTHER INFORMATION CONTACT: Kristi Bradley, Aerospace Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email kristin.bradley@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2018-0152, dated July 18, 2018 (EASA AD 2018-
EASA advises of a reported occurrence of a missing MGB suspension bar attachment bolt head. EASA advises that investigations are ongoing to determine the root cause of this event. According to Airbus Helicopters, the missing MGB suspension bar attachment bolt head was discovered during scheduled maintenance of a Model EC 130 T2 helicopter. EASA states this condition could lead to fatigue failure of other affected bolts of the same MGB bracket, possibly resulting in loss of the MGB suspension bar and consequently loss of helicopter control. As an interim measure to address this potential unsafe condition, the EASA AD also includes Model AS 350 B, AS 350 D, AS 350 B1, AS 350 B2, AS 350 BA, AS 350 BB, AS 350 B3, EC 130 B4, EC 130 T2, AS 355 E, AS355 F, AS355 F1, AS 355 F2, AS 355 N, and AS355 NP helicopters in its applicability.

Accordingly, EASA AD 2018-0152 requires a one-time visual inspection to check that all MGB suspension bar attachment bracket bolt heads are present and depending on the outcome, measuring the tightening torque values of the bolts, removing and sending bolts, washers, and nuts to Airbus Helicopters, installing new bolts, washers, and nuts, sending photos and reporting certain information to Airbus Helicopters, and contacting Airbus Helicopters for approved repair instructions. EASA states EASA AD 2018-0152 is considered an interim action and further AD action may follow.
FAA’s Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is proposing this AD because the FAA evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type designs.

Related Service Information Under 1 CFR part 51

The FAA reviewed Airbus Helicopter Alert Service Bulletin (ASB) No. AS350-05.00.92 for Model AS350B, B1, B2, B3, BA, and D helicopters, non-FAA type-certificated Model AS350BB helicopters, and military Model AS350L1 helicopters; Airbus Helicopters ASB No. AS355-05.00.79 for Model AS355E, F, F1, F2, N, and NP helicopters; and Airbus Helicopters ASB No. EC130-05A028 for Model EC130B4 and T2 helicopters, all Revision 0 and dated July 16, 2018. This service information specifies a one-time visual inspection using a light source and a mirror, and using an endoscope for any attachment bolts that are difficult to access, for the presence of the 16 attachment bracket bolt heads of the 4 MGB suspension bars. The service information also specifies different actions depending on the results of the visual inspection.

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

The FAA also reviewed Airbus Standard Practices Manual (MTC) 20-02-05-404,
Assembly by screws and nuts Joining, dated May 23, 2017. This service information specifies instructions for installing screws and nuts, tightening procedures when installing multiple bolts, tightening torque check and readjustment procedures, tooling information, measuring locking torque procedures, standard tightening torque procedures and values, torque tightening of screws in sandwich panels information, use of consumable materials and their correction coefficient values pertaining to screws, nuts, and washers, marking torque stripes, and re-installation criteria and inspection of attachment components.

**Proposed AD Requirements**

This proposed AD would require visually inspecting each MGB suspension bar attachment bracket for missing bolt heads.

If one bolt head is missing, this proposed AD would require performing actions specified in the service information including measuring the tightening torque of the remaining bolts of that bracket, removing the attachment bracket bolts, washers, and nuts of that bracket, and sending photos and reporting certain information to Airbus Helicopters.

If two or more bolt heads are missing, this proposed AD would require repairs in accordance with an FAA-approved method as described in paragraph (e) of this AD.

**Differences between this Proposed AD and the EASA AD**

The EASA AD applies to Model AS350BB helicopters, whereas this proposed AD does not because that model is not FAA type-certificated. The EASA AD directs the operators to contact Airbus Helicopters for repairs if more than one screw head is missing, whereas this proposed AD does not.
Interim Action

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

Costs of Compliance

The FAA estimates that this proposed AD would affect 1,277 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at $85 per work-hour.

Inspecting for any missing MGB suspension bar attachment bracket bolt heads would take about 2 work-hours for an estimated cost of $170 per helicopter and $217,090 for the U.S. fleet.

Measuring the tightening torque of three MGB suspension bar attachment bracket bolts and replacing the set of four MGB suspension bar attachment bracket bolts, washers, and nuts would take about 1 work-hour and parts would cost about $50 for an estimated replacement cost of $135 per helicopter. Sending photos and reporting required information would take about 1 work-hour for an estimated cost of $85 per helicopter.

The FAA does not have the data to estimate the costs to do any FAA-approved repairs if two or more MGB suspension bar attachment bracket bolt heads are missing.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting
for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

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, 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 adding the following new airworthiness directive

(AD):

Airbus Helicopters: Docket No. FAA-2020-0378; Product Identifier 2018-SW-060-AD.
(a) Applicability


(b) Unsafe Condition

This AD defines the unsafe condition as a missing main rotor gearbox (MGB) suspension bar attachment bracket bolt head. This condition could result in fatigue failure of the other MGB suspension bar attachment bracket bolts of the same MGB bracket, which could result in loss of the MGB suspension bar and subsequent loss of control of the helicopter.

(c) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

For helicopters with less than 1035 hours time-in-service (TIS), before reaching 1200 hours TIS, and for helicopters with 1035 or more hours TIS, within 165 hours TIS or 12 months, whichever occurs first, visually inspect each MGB suspension bar attachment bracket bolt for missing bolt heads by following the Accomplishment Instructions, paragraph 3.B.2.a. of Airbus Helicopter Alert Service Bulletin (ASB) No.
If any bolt heads are missing, do the following:

(1) If one bolt head is missing, do the actions under the section “If only one screw head (a) is missing” in the Accomplishment Instructions, paragraph 3.B.2.b of ASB AS350-05.00.92, ASB AS355-05.00.79, or ASB EC130-05A028, as applicable to your model helicopter, except you are not required to return removed parts to Airbus Helicopters. You must do the repair before further flight, and you must submit the photographs and reply form to Airbus Helicopters within 30 days of completing the inspection.

(2) If two or more bolt heads are missing, before further flight, repair using a method approved by the Manager, Safety Management Section, Rotorcraft Standards Branch. For a repair method to be approved by the Manager, Safety Management Section, Rotorcraft Standards Branch, as required by this paragraph, the Manager’s approval letter must specifically refer to this AD.

Note 1 to paragraph (e) of this AD: Airbus Helicopters refers to the bolts as screws.

(f) Special Flight Permit

Special flight permits are prohibited.

(g) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a
collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177.

(h) 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: Kristi Bradley, Aerospace Engineer, 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, the FAA suggests that you 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.
(i) Additional Information

(1) Airbus Standard Practices Manual (MTC) 20-02-05-404, Assembly by screws and nuts Joining, dated May 23, 2017, which is not incorporated by reference, contains additional information about the subject of this AD. 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. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD No. 2018-0152, dated July 18, 2018. You may view the EASA AD on the Internet at https://www.regulations.gov in the AD Docket.

(j) Subject

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

Issued on April 7, 2020.

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

[FR Doc. 2020-07669 Filed: 4/10/2020 8:45 am; Publication Date: 4/13/2020]