DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0980; Product Identifier 2017-SW-123-AD; Amendment 39-19669; AD 2019-12-14]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 C-2 helicopters. This AD requires establishing or reducing the life limit of various parts. This AD was prompted by recalculations. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD is effective August 2, 2019.

ADDRESSES: 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 http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

Examining the AD Docket

You may examine the AD docket on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0980; 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 Aviation Safety Agency (EASA) AD, the economic evaluation, any comments received, and other information. The street 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.
SUPPLEMENTARY INFORMATION:

Discussion

On November 19, 2018 at 83 FR 58191, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model MBB-BK 117 C-2 helicopters with certain parts installed. The NPRM proposed to require establishing and reducing the life limit of the following parts: Main rotor head–nut, upper and lower quadruple nut, bolts, and inner sleeve; swash plate control ring assembly; rotor flight control collective bellcrank-K; cyclic control rod tube; and upper control forked lever. The proposed requirements were intended to prevent a part remaining in service beyond its fatigue life, which could result in failure of a part and loss of control of the helicopter.

The NPRM was prompted by EASA AD No. 2017-0174, dated September 12, 2017 (EASA AD 2017-0174), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Model MBB-BK 117 C-2 helicopters. EASA advises that recalculation by Airbus Helicopters has resulted in new or reduced life limits for certain parts. EASA AD 2017-0174 states the life limits are mandatory for continued airworthiness and failing to replace life-limited parts as specified could result in an unsafe condition. To address this condition, EASA AD 2017-0174 requires replacing the affected parts before exceeding their new or reduced life limit.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to our bilateral agreement with the European Union, EASA has notified us of the unsafe condition described in its AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type designs and that air safety and the public interest require adopting the AD requirements as proposed except for minor editorial changes. “Bellcrank-K (collective) (4)” was listed in Table 1 to paragraph (e) of this AD, but should have been “Bellcrank-K (collective)” instead. The cost of the parts listed in the Costs of Compliance section have also been updated to reflect current market prices. The updated costs are considered non-substantial. These minor editorial changes are consistent with the intent of the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of this AD.

Related Service Information

We reviewed Airbus Helicopters Alert Service Bulletin ASB MBB-BK117 C-2-04A-008, Revision 0, dated April 27, 2017, for Model MBB-BK 117 C-2 and C-2e helicopters. This service information specifies entering into the helicopter records the reduced and new airworthiness life limits for certain part-numbered main rotor head, swash plate, rotor flight controls, cyclic controls, and upper controls parts.
Costs of Compliance

We estimate that this AD affects 128 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs average $85 per work-hour.

Replacing a nut takes about 5 work-hours and parts cost about $3,736 for an estimated replacement cost of $4,161.

Replacing a quadruple nut upper takes about 5 work-hours and parts cost about $3,682 for an estimated replacement cost of $4,107.

Replacing a quadruple nut lower takes about 5 work-hours and parts cost about $3,819 for an estimated replacement cost of $4,244.

Replacing a bolt takes about 2 work-hours and parts cost about $418 for an estimated replacement cost of $588.

Replacing an inner sleeve takes about 2 work-hours and parts cost about $20,826 for an estimated replacement cost of $20,996.

Replacing a control ring assembly takes about 5 work-hours and parts cost about $11,500 for an estimated replacement cost of $11,925.

Replacing a bellcrank-K (collective) takes about 4 work-hours and parts cost about $3,400 for an estimated replacement cost of $3,740.

Replacing a control rod tube takes about 4 work-hours and parts cost about $1,197 for an estimated replacement cost of $1,537.

Replacing a forked lever takes about 3 work-hours and parts cost about $6,138 for an estimated replacement cost of $6,393.

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.

We are 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 helicopters 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.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.
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):

(a) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 C-2 helicopters with a part listed in Table 1 to paragraph (e) of this AD installed, certificated in any category.

Note 1 to paragraph (a) of this AD: Helicopters with an MBB-BK117 C-2e designation are Model MBB-BK117 C-2 helicopters.

(b) Unsafe Condition

This AD defines the unsafe condition as a part remaining in service beyond its fatigue life. This condition could result in failure of a part and loss of control of the helicopter.

(c) Effective Date

This AD becomes effective August 2, 2019.

(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

Before further flight, remove from service any part that has reached or exceeded its new or reduced life limit as listed in Table 1 to paragraph (e) of this AD. Thereafter, remove from service each part on or before reaching its new or reduced life limit as listed in Table 1 to paragraph (e) of this AD. For purposes of this AD, a “landing” is counted any time the helicopter lifts off into the air and then lands again regardless of the duration of the landing and regardless of whether the engine is shut down.
Table 1 to Paragraph (e)

<table>
<thead>
<tr>
<th>Part name</th>
<th>Part No. (P/N)</th>
<th>Life limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nut</td>
<td>B622M1003201</td>
<td>65,800 landings or 10,123 hours time-in-service (TIS) if the number of landings is unknown.</td>
</tr>
<tr>
<td>Quadruple nut upper</td>
<td>B622M1004201, B622M1005201</td>
<td>60,000 landings or 9,230 hours TIS if the number of landings is unknown.</td>
</tr>
<tr>
<td>Quadruple nut lower</td>
<td>B622M1004201, B622M1005201</td>
<td>60,000 landings or 9,230 hours TIS if the number of landings is unknown.</td>
</tr>
<tr>
<td>Bolt</td>
<td>B622M1006201, B622M1007201</td>
<td>31,200 landings or 4,800 hours TIS if the number of landings is unknown.</td>
</tr>
<tr>
<td>Inner sleeve</td>
<td>B622M1009201</td>
<td>13,300 hours TIS.</td>
</tr>
<tr>
<td>Control ring assembly</td>
<td>B623M2001101</td>
<td>27,600 hours TIS.</td>
</tr>
<tr>
<td>Bellcrank-K (collective)</td>
<td>B670M7021201</td>
<td>21,500 hours TIS.</td>
</tr>
<tr>
<td>Control rod tube</td>
<td>B291M1015201</td>
<td>30,000 hours TIS.</td>
</tr>
<tr>
<td>Forked lever</td>
<td>B671M7007201, B671M7007205</td>
<td>22,500 Hours TIS.</td>
</tr>
</tbody>
</table>

(f) 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: Matt Fuller, Senior Aviation Safety 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, we suggest 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.

(g) Additional Information

(1) Airbus Helicopters Alert Service Bulletin ASB MBB-BK117 C-2-04A-008, Revision 0, dated April 27, 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 http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.


(h) Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head; 6230 Main Rotor Mast/Swashplate; and 6710, Main Rotor Control.

Issued in Fort Worth, Texas, on June 18, 2019.
James A. Grigg,
Acting Deputy Director for Regulatory Operations, Compliance & Airworthiness Division,
Aircraft Certification Service.