DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0940; Product Identifier 2017-SW-058-AD; Amendment 39-19233; AD 2018-07-02]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Agusta S.p.A. (Agusta) Model A109E, A109S, AW109SP, A119, and AW119 MKII helicopters. This AD requires inspecting the main rotor blade (MRB) tip cap for disbonding. This AD is prompted by a report of the in-flight loss of an MRB tip cap. The actions of this AD are intended to prevent an unsafe condition on these products.

DATES: This AD becomes effective April 13, 2018.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of April 13, 2018.

We must receive comments on this AD by May 29, 2018.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to http://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 http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0940; 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, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Matteo Ragazzi, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-711756; fax +39-0331-229046; or at http://www.leonardocompany.com/-/bulletins. 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. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0940.

FOR FURTHER INFORMATION CONTACT: 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 matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, 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 them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued AD No. 2017-0176-E, dated September 14, 2017, to correct an unsafe condition for Leonardo S.p.A. (previously Agusta) Model A109E, A109LUH, A109S, AW109SP, A119, and AW119 MKII helicopters. EASA advises of an in-flight loss of an MRB tip cap on an AW109SP helicopter where the pilot was able to safely land the helicopter. EASA further advises that an investigation determined the cause as incorrect bonding procedures used between specific dates and identified the affected MRBs by part number and serial number. According to EASA, this condition could result in loss of an MRB tip cap, increased pilot workload, and reduced control of the helicopter. To address this unsafe condition, the EASA AD requires repetitive inspections of the MRB tip caps and replacing certain part-numbered MRBs.

The FAA is in the process of updating Agusta's name change to Leonardo Helicopters on its type certificate. Because this name change is not yet effective, this AD specifies Agusta.
FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA 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 helicopters of these same type designs.

Related Service Information Under 1 CFR Part 51


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.

AD Requirements

For helicopters with an MRB part number 709-0104-01-111 with serial number 1307, 1320, 1346, 1365, 1372, 1380, 1414, 1426, 1436, 1475, or 1485 installed, this AD requires, within 5 hours time-in-service (TIS) and thereafter at intervals not exceeding 5 hours TIS, tap inspecting the MRB tip cap for disbonding and, if there is disbonding, removing the MRB from service before further flight. If there is no disbonding on any of the inspections, this AD requires removing the MRB from service within 25 hours TIS. After the effective date of this AD, this AD prohibits installing these serial-numbered MRBs on any helicopter.

For all other helicopters, this AD requires, within 25 hours TIS and thereafter at intervals not exceeding 25 hours TIS, tap inspecting the MRB tip cap for disbonding. If there is any disbonding, this AD requires removing the MRB from service before further flight. The repetitive inspections required for these MRBs would no longer be required after the MRB accumulates 400 hours TIS.

Differences Between This AD and the EASA AD

The EASA AD applies to Model A109LUH helicopters, while this AD does not as that model helicopter is not type-certificated in the U.S. The EASA AD requires that you contact Leonardo Helicopters, and this AD does not.

Costs of Compliance

We estimate that this AD affects 130 helicopters of U.S. Registry.

At an average labor rate of $85 per work-hour, we estimate that operators may incur the following costs in order to comply with this AD. Tap inspecting the MRB tip caps will require 1 work-hour, for a cost per helicopter of $85 and a cost of $11,050 for the U.S. fleet per inspection cycle. If required, replacing one MRB will require 4 work-hours and required parts will cost $89,179, for a cost per helicopter of $89,519.

According to Leonardo Helicopters' service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Leonardo Helicopters. Accordingly, we have included all costs in our cost estimate.
FAA's Justification and Determination of the Effective Date

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 the corrective actions required by this AD must be accomplished within 5 hours TIS and 25 hours TIS.

Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking


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 products identified in this rulemaking action.

Regulatory Findings

We 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.

For the reasons discussed, I certify that this AD:
1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. 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 Agusta S.p.A. Model A109E, A109S, AW109SP, A119, and AW119 MKII helicopters, certificated in any category:

1. With a main rotor blade (MRB) part number (P/N) 709-0104-01-111 with a serial number (S/N) 1307, 1320, 1346, 1365, 1372, 1380, 1414, 1426, 1436, 1475, or 1485;
2. With an MRB with a P/N and S/N listed in Table 1 to paragraph (a)(2) of this AD, with 400 or fewer hours time-in-service (TIS) since first installation on a helicopter; and
3. With an MRB P/N 709-0104-01-101 with a S/N K101 or DA38586004-1, or P/N 709-0104-01-111 with a S/N P451, P460, Q557, Q587, Q695, Q832, R2080, R2212 or V699, with 400 or fewer hours TIS since maintenance on the tip cap by Finmecannica between January 1, 2016, and March 31, 2017.

(b) Unsafe Condition

This AD defines the unsafe condition as disbonding of an MRB tip cap. This condition could result in loss of the MRB tip cap, severe vibrations, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective April 13, 2018.

(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

(1) For helicopters listed in paragraph (a)(1) of this AD:
   (i) Within 5 hours TIS and thereafter at intervals not exceeding 5 hours TIS, using a tap hammer or equivalent, tap inspect each MRB tip cap for disbonding in the area depicted in Figure 1 of Leonardo Helicopters Emergency Alert Service Bulletin (EASB) EASB No. 109S-077, dated September 8, 2017; EASB No. 109SP-116, dated September 8, 2017; or EASB No. 119-085, Revision A, dated September 11, 2017; as applicable for your model helicopter. If there is any disbonding, before further flight, remove the MRB from service.
   (ii) Within 25 hours TIS, remove the MRB from service.

(2) For helicopters listed in paragraph (a)(2) or (a)(3) of this AD, within 25 hours TIS and thereafter at intervals not exceeding 25 hours TIS, using a tap hammer or equivalent, tap inspect each MRB tip cap for disbonding in the area depicted in Figure 1 of Leonardo Helicopters EASB No. 109EP-157, dated September 8, 2017; EASB No. 109S-077, dated September 8, 2017; EASB No. 109SP-116, dated September 8, 2017; or EASB No. 119-085, Revision A, dated September 11, 2017; as applicable for your model helicopter. If there is any disbonding, before further flight, replace the MRB.

(3) After the effective date of this AD, do not install an MRB P/N 709-0104-01-111 with a S/N 1307, 1320, 1346, 1365, 1372, 1380, 1414, 1426, 1436, 1475, or 1485 on any helicopter.

(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, subpart K, 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


(h) Subject

Joint Aircraft Service Component (JASC) Code: 6210 Main Rotor Blades.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 the AD specifies otherwise.


(4) You may view this service information at 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.

(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, call (202) 741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on March 21, 2018.
Scott A. Horn,
Deputy Director for Regulatory Operations, Compliance & Airworthiness Division,
Aircraft Certification Service.