



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0204; Product Identifier 2018-SW-082-AD]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.A (type certificate previously held by Agusta S.p.A) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2018-07-08, which applies to certain Leonardo S.p.A (type certificate previously held by Agusta S.p.A) Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters. AD 2018-07-08 requires reducing the life limit of the tail rotor blade retention bolt and an inspection of that bolt for cracking, and replacement of any cracked bolt. Since issuing AD 2018-07-08, the FAA has determined that repetitive inspections of the tail rotor blade retention bolt are needed to address the unsafe condition. This proposed AD would continue to require reducing the life limit of the tail rotor blade retention bolt, inspecting that bolt for cracking, and replacing any cracked bolt. In addition, this proposed AD would require repetitive inspections of the tail rotor blade retention bolt for cracking. 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 service information identified in this NPRM, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. 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 about the availability of this material at the FAA, call (817) 222-5110.

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-2020-0204; 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 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) 222-5161; email matthew.fuller@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 the ADDRESSES section. Include “Docket No. FAA-2020-0204; Product Identifier 2018-SW-082-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this NPRM.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD, 2016-0173-E, dated August 24, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Leonardo S.p.A. Model A109E, A109K2, A109LUH, A109S, A119, AW109SP and AW119 MKII helicopters.

EASA advises that a crack was found in a tail rotor blade retention bolt having part number (P/N) 709-0160-57-101, during a preflight inspection of a Model A109E helicopter. Tail rotor blade retention bolts having that part number are also installed on Model A109K2, A109LUH, A109S, A119, AW109SP, and AW119 MKII helicopters. A subsequent investigation did not identify the cause of the crack. EASA also advises cracked tail rotor blade retention bolts, if not detected and corrected, could lead to failure of the tail rotor, possibly resulting in loss of control of the helicopter. As a precautionary measure, pending the completion of the investigation and to address the unsafe condition, the MCAI requires reducing the life limit of these tail rotor blade retention bolts and repetitively inspecting the bolts. The MCAI is considered an interim action and further AD action may follow.

The FAA issued AD 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018) (“AD 2018-07-08”), for certain Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters. AD 2018-07-08 requires reducing the life limit of and inspecting the tail rotor blade retention bolts. AD 2018-07-08 resulted from the discovery of a cracked tail rotor blade retention bolt. The FAA issued AD 2018-07-08 to

address failure of the tail rotor, possibly resulting in loss of control of the helicopter.

AD 2018-07-08 did not require repetitive inspections of the tail rotor blade retention bolts at intervals not to exceed 200 flight hours as specified in the MCAI, as this time interval would allow for sufficient time for notice and comment.

Actions Since AD 2018-07-08 Was Issued

Since the FAA issued AD 2018-07-08, the FAA determined that repetitive inspections of the tail rotor blade retention bolts are needed to address the unsafe condition.

Also, since the FAA issued AD 2018-07-08, Agusta S.p.A changed its name to Leonardo S.p.A. This proposed AD reflects that change and updates the contact information to obtain service documentation.

You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0204.

Related Service Information under 1 CFR Part 51

This proposed AD would require the following service information, which the Director of the Federal Register approved for incorporation by reference as of April 26, 2018 (83 FR 15495, April 11, 2018).

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109K-72, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109S-072, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109SP-105, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 119-080, dated August 19, 2016.

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.

FAA’s Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD after evaluating all the relevant information and determining the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed Requirements of this NPRM

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the MCAI or Service Information.”

Differences Between this Proposed AD and the MCAI or Service Information

The MCAI does not specify life limits for a tail rotor blade retention bolt having P/N 709-0160-57-101 that has been interchanged between model helicopter installations, while this proposed AD does.

The MCAI applies to Model A109LUH helicopters. Model A109LUH helicopters are not certified 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.

Interim Action

The FAA considers this proposed AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this proposed AD. Once this modification is developed, approved, and available, the FAA might consider additional rulemaking.

Costs of Compliance

The FAA estimates that this proposed AD affects 219 helicopters of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2018-07-08	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$74,460
New proposed actions	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$74,460

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
2 work-hour X \$85 per hour = \$170	\$500	\$670

According to the manufacturer, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

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) 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018), and adding the following new AD:

Leonardo S.p.A. (type certificate previously held by Agusta S.p.A.): Docket No. FAA-2020-0204; Product Identifier 2018-SW-082-AD.

(a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018) (“AD 2018-07-08”).

(c) Applicability

This AD applies to Leonardo S.p.A. (type certificate previously held by Agusta S.p.A.) Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters, certificated in any category, with a tail rotor blade retention bolt (bolt) having part number (P/N) 709-0160-57-101 installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code 6500, Tail Rotor Drive System.

(e) Reason

This AD was prompted by the discovery of a cracked bolt, and a determination that repetitive inspections of the bolt are needed to address the unsafe condition. The FAA is issuing this AD to address cracked bolts, which could result in failure of the tail rotor and loss of control of the helicopter.

(f) Compliance

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

(g) Required Actions

(1) Before further flight:

(i) For Model A109E and A109K2 helicopters, remove from service any bolt having P/N 709-0160-57-101 that has 800 or more hours time-in-service (TIS). If the hours TIS is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 before accumulating 800 hours TIS.

(ii) For Model A109S, AW109SP, A119, and AW119 MKII helicopters, remove from service any bolt having P/N 709-0160-57-101 that has 3,200 or more landings. If the number of landings is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 before accumulating 3,200 landings. For purposes of this AD, a landing is counted anytime a helicopter lifts off into the air and then lands again regardless of the duration of the landing and regardless of whether the engine is shutdown.

(iii) Remove from service any bolt having P/N 709-0160-57-101 that has been interchanged between different model helicopters listed in paragraphs (g)(1)(i) and (ii) of this AD that has 800 or more hours TIS or 3,200 or more landings. If the hours TIS or number of landings is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 that has been interchanged between different model helicopters listed in paragraphs (g)(1)(i) and (ii) of this AD before accumulating 800 hours TIS or 3,200 landings, whichever occurs first.

(2) Within 25 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 200 hours TIS, remove each bolt having P/N 709-0160-57-101.

Prior to cleaning, using a 10X or higher power magnifying glass, inspect each bolt having P/N 709-0160-57-101 for any crack in the area depicted in Figure 1 of Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, 109K-72, 109S-072, 109SP-105, or 119-080, all dated August 19, 2016, as applicable to your model helicopter.

(i) If there is any crack, replace the bolt with an airworthy bolt before further flight.

(ii) If there are no cracks, before further flight, clean and degrease the inspection area of the bolt with solvent, and using a 10X or higher power magnifying glass, inspect each bolt having P/N 709-0160-57-101 for any crack in the area depicted in Figure 1 of Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, 109K-72, 109S-072, 109SP-105, or 119-080, all dated August 19, 2016, as applicable to your model helicopter. If there is any crack, replace the bolt with an airworthy bolt before further flight.

(3) As of the effective date of this AD, installation of a bolt having P/N 709-0160-57-101 is allowed, provided that the bolt has passed an inspection as required by paragraph (g)(2) of this AD.

(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: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Section, Rotorcraft Standards

Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5161; 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, 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) Related Information

(1) The subject of this AD is addressed in European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) Emergency AD 2016-0173-E, dated August 24, 2016. This EASA AD may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket FAA-2020-0204.

(2) For service information identified in this AD, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. 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.

Issued on March 16, 2020.

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

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