



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0797; Product Identifier 2018-SW-081-AD]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters (Type Certificate Previously Held by Agusta S.p.A.)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2017-23-08 for Agusta S.p.A. (now Leonardo S.p.a.) Model AB139 and AW139 helicopters. AD 2017-23-08 requires repetitively inspecting the main rotor (M/R) rotating scissors, removing certain lower half scissor spherical bearings (bearings) from service, replacing the removed bearings with a new bearing, and installing a special nut. Since the FAA issued AD 2017-23-08, investigation results determined that a quality control issue may have affected the production of the affected bearings. This proposed AD would retain the requirements of AD 2017-23-08 and require replacing each affected bearing with a certain part-numbered bearing. 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 45 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-2020-0797; 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 Aviation Safety Agency (now European Union 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 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 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: Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General Aviation and Rotorcraft Unit, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email Matthew.Fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. 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.

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 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.

Confidential Business Information

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 Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General Aviation and Rotorcraft Unit, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email Matthew.Fuller@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

The FAA issued AD 2017-23-08, Amendment 39-19102 (82 FR 55752, November 24, 2017) (“AD 2017-23-08”) for Agusta S.p.A. (now Leonardo S.p.a.) Model AB139 and AW139 helicopters. AD 2017-23-08 requires repetitively inspecting the M/R rotating scissors, removing certain bearings from service, installing a special nut and requires replacing the removed bearings with certain part-numbered bearings.

AD 2017-23-08 was prompted by EASA Emergency AD (EAD) No. 2017-0028-E, dated February 15, 2017 (EASA EAD 2017-0028-E) issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA advised of a report of a dislodged bearing on an M/R rotating scissor equipped with a certain special nut. EASA EAD 2017-0028-E requires repetitive inspections of certain M/R rotating

scissor bearings, and depending on the findings, replacement of the bearing and affected M/R parts. The EASA AD also requires replacement of certain bearings as a terminating action for the repetitive inspections. According to EASA, this condition, could result in failure of the M/R rotating scissor bearing and subsequent loss of control of the helicopter.

Actions Since AD 2017-23-08 Was Issued

Since the FAA issued AD 2017-23-08, investigation results by the supplier of the bearings determined that a quality control issue may have affected the production of bearing part number (P/N) 3G6230V00654. Accordingly, this proposed AD retains the requirements of AD 2017-23-08 and proposes replacing bearing P/N 3G6230V00654 with P/N 3G6230V00655.

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 after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type design.

Differences Between this Proposed AD and the EASA AD

The EASA AD specifies some compliance times using calendar time, whereas this proposed AD does not. The EASA AD requires reporting information to Leonardo S.p.a. Product Support Engineering, whereas this proposed AD does not.

Related Service Information Under 1 CFR part 51

The FAA reviewed Leonardo Helicopters Alert Bollettino Tecnico No. 139-392, Revision A, dated February 14, 2017. This service information specifies repetitively inspecting the M/R rotating scissors to monitor the bearings and replacing the bearing with a new part-numbered bearing. This service info also specifies installing a special nut in case of lower scissor bearing dislodging.

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 reviewed Leonardo Helicopters AW139 IETP Document Code AMP-39-A-62-31-00-00A-31AC-A, Rotating control installation – Fixed swashplate and rotating scissors – Detailed inspection, Issue 29, dated July 31, 2017, which describes procedures for a detailed inspection of the fixed swashplate and rotating scissors.

Proposed AD Requirements

This proposed AD would retain the repetitive inspection requirements of AD 2017-23-08, and continue to require replacing the bearing with an improved bearing, replacing the rotating scissor attachment flange with a certain part-numbered rotating scissor attachment flange, and replacing the nut with a certain part-numbered special nut. This proposed AD would also require removing each bearing P/N 3G6230V00654 from service and replacing it with bearing P/N 3G6230V00655 within 100 hours TIS.

Costs of Compliance

The FAA estimates that this proposed AD would affect 102 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this proposed AD. Labor costs are estimated at \$85 per work-hour.

Inspecting for bearing liner wear, seat movement, and play would take about 1 work-hour for a cost of \$85 per helicopter and \$8,670 for the U.S. fleet per inspection cycle.

Replacing a bearing would take about 2 work-hours and parts would cost about \$950 for a cost of \$1,120 per bearing.

Replacing a rotating scissor attachment flange would take about 0.25 work-hours and parts would cost about \$25,629 for a cost of \$ 25,650 per flange.

Installing two special nuts would take about 1 work-hour and parts would cost about \$755 for a cost of \$840 per helicopter and \$85,680 for the U.S. fleet.

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:

a. Removing Airworthiness Directive (AD) 2017-23-08, Amendment 39-19102 (82 FR 55752, November 24, 2017); and

b. Adding the following new AD:

Leonardo S.p.a. (Type Certificate Previously Held by Agusta S.p.A.): Docket No. FAA-2020-0797; Product Identifier 2018-SW-081-AD.

(a) Applicability

This AD applies to Leonardo S.p.a. Model AB139 and AW139 helicopters, certified in any category, with main rotor (M/R) rotating scissors with a lower half scissor spherical bearing (bearing) P/N 3G6230V00654 installed.

(b) Unsafe Condition

This AD defines the unsafe condition as excessive play of the bearing in the M/R rotating scissors. This condition could result in failure of the M/R rotating scissor bearing and loss of helicopter control.

(c) Affected ADs

This AD replaces AD 2017-03-08, Amendment 39-19102; (82 FR 55752, November 24, 2017) (“AD 2017-23-08”).

(d) Comments Due Date

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

(e) 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.

(f) Required Actions

(1) Within 5 hours time-in-service (TIS) after December 11, 2017 (the effective date of AD 2017-23-08), and thereafter before the first flight of each day or at intervals not exceeding 24-clock hours, whichever occurs later:

(i) Using a magnifying glass and a flashlight, visually inspect each bearing for wear of the bearing liner. Some examples of wear are shown in Figures 4 through 8 of Leonardo Helicopters Alert Bollettino Tecnico No. 139-392, Revision A, dated February 14, 2017 (BT 139-392). If there is any wear of the liner, before further flight, replace the bearing with bearing P/N 3G6230V00655 and install special nut P/N 3G6230A06851. Replacing the bearing with bearing P/N 3G6230V00655 constitutes terminating action for the remaining actions of this AD for the bearing.

(ii) Inspect each bearing for movement. Refer to Figure 9 of BT 139-392. If the bearing moves freely out of its seat, before further flight, replace the rotating scissor attachment flange with flange P/N 3G6220A00633, replace the bearing with bearing P/N 3G6230V00655 and install special nut P/N 3G6230A06851. Replacing the bearing with bearing P/N 3G6230V00655 constitutes terminating action for the remaining actions of this AD for the bearing.

(iii) Inspect the M/R rotating scissors for play and wear of each bearing, paying particular attention to the bearing staking condition, by manually moving the lower half scissor along the axis of the spherical bearing. Refer to Figure 1 of BT 139-392. If there is any play or wear beyond allowable limits, before further flight, replace the bearing with bearing P/N 3G6230V00655 and install special nut P/N 3G6230A06851. Replacing

the bearing with bearing P/N 3G6230V00655 constitutes terminating action for the remaining actions of this AD for the bearing.

(2) Within 100 hours TIS after the effective date of this AD, replace and torque each lower half scissor nut with special nut P/N 3G6230A06851 to the M/R rotating scissor in accordance with the Compliance Instructions, Part II, steps 5.1 through 5.9 of BT 139-392, except you are not required to discard parts.

(3) Within 100 hours TIS after the effective date of this AD, remove each bearing P/N 3G6230V00654 from service and replace with bearing P/N 3G230V00655.

(4) After December 11, 2017 (the effective date of AD 2017-23-08), do not install on any helicopter any M/R rotating scissors with a bearing P/N 3G6230V00654 installed.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General Aviation and Rotorcraft Unit, 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.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD No. 2017-0028-E, dated February 15, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in the AD Docket.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6200, Main Rotor System.

Issued on September 9, 2020.

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

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