DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0893; Product Identifier 2018-SW-032-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 supersede Airworthiness Directive (AD) 2017-09-05 for Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters. AD 2017-09-05 requires repetitively checking screws in the emergency flotation gear. Since the FAA issued AD 2017-09-05, Airbus Helicopters developed a modification that addresses the unsafe condition. This proposed AD would retain the requirements of AD 2017-09-05 but would require installing the modification, which would be a terminating action for the repetitive checks required by AD 2017-09-05. 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.
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-2018-0893; 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 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 this 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, Safety Management Program Manager, Airworthiness Products Section, Operational Safety Branch, General
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 the FAA receives 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, Safety Management Program Manager, Airworthiness Products Section, Operational Safety Branch, General Aviation and Rotorcraft Unit, FAA, 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 2017-09-05, Amendment 39-18867 (82 FR 21913, May 11, 2017) (“AD 2017-09-05”), for Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters with emergency flotation gear installed. AD 2017-09-05 requires repetitive visual checks of the emergency flotation gear screws. Those actions are intended to prevent the failure of a rear upper screw fitting on the emergency flotation gear. This condition, if not detected and corrected, could result in failure of the emergency flotation system and subsequent capsizing of the helicopter.

AD 2017-09-05 was prompted by EASA Emergency AD No. 2015–0239–E, dated December 18, 2015 (EASA AD 2015–0239–E), issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA advised that a screw ruptured on the rear upper fitting on the left-hand (LH) emergency flotation gear of an AS332 helicopter. EASA stated that this condition, if not detected and corrected, could
result in the failure of an emergency flotation system when ditching and unstable floating of the helicopter, possibly resulting in injury to the occupants. The EASA AD consequently required repetitive inspections of the lower attachment screws of rear upper fitting on the rear LH and right-hand (RH) emergency flotation gears. EASA stated that the root cause of the failure had not yet been identified.

**Actions Since AD 2017-09-05 Was Issued**

Since the FAA issued AD 2017-09-05, Airbus Helicopters identified the root cause of the screw rupture as a tapering gap under the fitting attachment screw heads creating excessive stress loads. Consequently, EASA issued AD No. 2018-0090, dated April 20, 2018 (EASA AD 2018-0090), to supersede EASA AD 2015–0239–E. EASA AD 2018-0090 retains the requirements in EASA AD 2015-0239-E and also requires the installation of Airbus Helicopters modification (MOD) 0728456 as a terminating action for the repetitive inspections required in EASA AD 2015-0239-E. MOD 0728456 involves the installation of spherical washers and longer screws on the rear upper fittings of the flotation gear to remove the stress applied to the screw heads.

**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 about 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 allows using tools for the inspection, while this proposed AD requires checking by hand. The EASA AD requires contacting Airbus Helicopters if a screw is missing or loose, while this proposed AD would not. The EASA AD requires that repetitive inspections occur at intervals not to exceed 15 hours time-in-service (TIS), while this proposed AD requires the repetitive checks before each flight over water.

Related Service Information Under 1 CFR part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-25.03.43, Revision 0, dated April 4, 2018, for Model AS332C, AS332C1, AS332L, AS332L1, and AS332L2 helicopters and for military Model AS332B, AS332B1, AS332F1, AS332M, and AS332M1 helicopters. The FAA also reviewed ASB No. EC225-25A207, Revision 0, dated April 4, 2018, for Model EC 225 LP helicopters. Both ASBs specify, within 12 months, installing MOD 0728456 by installing spherical leveling washers and longer screws to attach the rear upper fittings of the LH and RH emergency flotation gear. Airbus Helicopters specifies that helicopters that have undergone MOD 0728456 are exempt from the ASB’s requirements.

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 Helicopters Emergency Alert Service Bulletin (EASB) No. 05.01.06, Revision 0, dated December 18, 2015, for Model AS332C, AS332C1, AS332L, AS332L1, and AS332L2 helicopters and for military Model
AS332B, AS332B1, AS332F1, AS332M, and AS332M1 helicopters, and EASB No. 05A047, Revision 0, dated December 18, 2015, for Model EC225LP helicopters. This service information specifies repetitively inspecting the lower screws of the rear upper fitting on the rear LH and RH emergency floating gears for the presence of the heads and stressing the screw heads using a tool to make sure that the screw head does not move. If all screw heads are present, the service information requires no further action. If at least one screw head is missing or is loose, the service information specifies replacing the two lower screws and the upper screw and informing Airbus Helicopters.

**Proposed AD Requirements**

This proposed AD would require, within 15 hours TIS and thereafter before each flight over water, visually checking each emergency flotation gear LH and RH rear upper fitting for the presence of screw heads and looseness. An owner/operator (pilot) may perform the required visual check but must enter compliance with the applicable paragraph of the AD into the helicopter maintenance records in accordance with 14 CFR 43.9(a)(1) through (4) and 91.417(a)(2)(v). A pilot may perform this inspection because it involves visually checking the rear upper fittings of the LH and RH emergency flotation gears for the presence of screw heads and twisting the screws by hand, which can be performed equally well by a pilot or a mechanic. This check is an exception to our standard maintenance regulations. If any screws are loose or any screw heads are missing, this proposed AD would require removing from service the screws on each LH and RH side on the flotation gear rear fitting and installing MOD 0728456, base washers and spherical washers. This proposed AD would also require, within 300 hours TIS installing MOD 0728456, as a terminating action for the repetitive checks.
**Costs of Compliance**

The FAA estimates that this proposed AD would affect 29 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.

Checking the screws for looseness and a missing head would take about 5 minutes, for an estimated cost of about $7 per helicopter and $203 for the U.S. fleet.

Performing the modification would take about 16 work-hours, and parts would cost about $3,030 for total estimated cost of $4,390 per helicopter and $127,310 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) 2017-09-05, Amendment 39-18867 (82 FR 21913, May 11, 2017); and
b. Adding the following new AD:

**Airbus Helicopters:** Docket No. FAA-2018-0893; Product Identifier 2018-SW-032-AD.

(a) **Applicability**

This AD applies to Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters with emergency flotation gear installed, certificated in any category, except those helicopters that have Airbus Helicopters Modification (MOD) 0728456 already installed.

(b) **Unsafe Condition**

This AD defines the unsafe condition as failure of a rear upper screw fitting on the emergency flotation gear. This condition, if not detected and corrected, could result in failure of the emergency flotation system and subsequent capsizing of the helicopter.

(c) **Affected ADs**

This AD replaces AD 2017-09-05, Amendment 39-188767 (82 FR 21913, May 11, 2017).

(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 15 hours time-in-service (TIS), and before each flight over water thereafter, visually check each emergency flotation gear left hand (LH) and right hand
(RH) rear upper fitting to determine whether the heads of the lower screws are present.

Figure 1 to paragraph (f)(1) of this AD depicts where the lower three screws (noted as B and E) are located. Check each screw for looseness by determining whether it can be rotated by hand. These actions may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with Title 14 Code of Federal Regulations (14CFR) §§ 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR §§ 91.417, 121.380, or 135.439.
(2) If a screw head is missing, or if a screw is loose, before further flight over water, install MOD 0728456 by completing paragraph (f)(3) of this AD.

(3) Within 300 hours TIS, unless required before further flight over water by paragraph (f)(2) of this AD, install MOD 0728456 by doing the following:

Note 1 to paragraph (f)(3) of this AD: The installation of MOD 0728456 on the LH and RH sides is identical.

(i) Remove external fitting (a) and remove from service screws (c), (d) and (e), washers (f), and nuts (g) as shown in Figure 1, Detail A of Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-25.03.43, Revision 0, dated April 4, 2018 (ASB AS332-25.03-43), or ASB No. EC225-25A207, Revision 0, dated April 4, 2018 (ASB EC225-25A207), as applicable to your model helicopter.

(ii) Install base washers (1) (structural side), spherical washers (2) (screw side), and screws (3) and coat with sealing compound (or similar) on the smooth surface of the nuts (5) as shown in Figure 2 of ASB AS332-25.03-43 or ASB EC225-25A207, as applicable to your model helicopter.

(iii) Inspect each washer on the external fitting (a) for contact with a weld as shown in Figure 2, Detail A of ASB AS332-25.03-43 or ASB EC225-25A207, and inspect each washer on the internal fitting for contact with the fitting radius.

(A) If a washer on the external fitting makes contact with a weld, perform a spotfacing to the diameter of 17mm (+ 0.1 / + 0.1) with a cutter root radius of 0.5mm.

(B) If a washer on the internal fitting falls in the radius of the bracket, perform a spotfacing to the diameter of 17mm (+ 0.1 / +0.1) with a cutter root radius of 0.5mm.
(iv) Torque each nut to 169-203 lbf.in (1.9-2.3 daN.m), and apply sealing compound to outer edge of the LH rear upper fitting.

(4) Completion of the requirements in paragraph in (f)(3) of this AD constitute terminating action for the repetitive checks required in paragraph (f)(1) of this AD.

(g) Special Flight Permits

Special flight permits are prohibited for flights over water.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Safety Management Program Manager, Airworthiness Products Section, Operational Safety Branch, General Aviation and Rotorcraft Unit, 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 Helicopters Emergency Alert Service Bulletin (EASB) No. 05.01.06, and EASB No. 05A047, both Revision 0, and both dated December 18, 2015, which are not incorporated by reference, contain 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.airbushelicopters.com/techpub. You may review this 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 Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD No. 2018-0090, dated April 20, 2018. You may view the EASA AD on the Internet at https://www.regulations.gov in the AD Docket.

(j) Subject


Ross Landes, Deputy Director for Regulatory Operations, Compliance & Airworthiness Division, Aircraft Certification Service.

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