



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0893; Product Identifier 2018-SW-032-AD; Amendment 39-21319; AD 2020-23-03]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2017-09-05 for Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters. AD 2017-09-05 required repetitively checking screws in the emergency flotation gear. This new AD retains the requirements of AD 2017-09-05 but also requires installing a modification (MOD), which is a terminating action for the repetitive checks. This AD was prompted by the development of the MOD by Airbus Helicopters that addresses the unsafe condition. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 800-232-0323 or 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. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0893.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> in 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 AD, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any service information that is incorporated by reference, 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.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & Rotorcraft Unit, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 2017-09-05, Amendment 39-18867 (82 FR 21913, May 11, 2017) (“AD 2017-09-05”), and add a new AD. AD 2017-09-05 applied to Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters with emergency flotation gear installed. The NPRM published in the *Federal Register* on August 7, 2020 (85 FR 47921). The NPRM proposed to require, within 15 hours time-in-service (TIS) and thereafter, before each flight over water, visually checking each

emergency flotation gear left-hand (LH) and right-hand (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 this AD in 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 check 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. This action can be performed equally well by a pilot or a mechanic. This check is an exception to the FAA's standard maintenance regulations. If any screws are loose or any screw heads are missing, the NPRM proposed to 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. The NPRM also proposed to require, within 300 hours TIS, installing MOD 0728456 as a terminating action for the repetitive checks.

AD 2017-09-05 was prompted by EASA AD 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, to correct an unsafe condition for Airbus Helicopters Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters. EASA advised that a screw ruptured on the rear upper fitting on the 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 injuries to the occupants. The EASA AD consequently required repetitive inspections of the lower attachment screws of rear upper fitting on the rear LH and RH emergency flotation gears. EASA stated that the root cause of the failure had not yet been identified.

After 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 repetitive inspection requirements in EASA AD 2015-0239-E and also requires the installation of Airbus Helicopters MOD 0728456 as a terminating action for the repetitive inspections. 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.

Actions Since the NPRM was Issued

Since the FAA issued the NPRM, it was identified that the NPRM specified installing MOD 0728456 by using Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-25.03.43 or ASB No. EC225-25A207, each Revision 0 and dated April 4, 2018, in paragraphs (f)(3)(i) through (iii) of this AD. However, the FAA intended to update this service information to Airbus Helicopters ASB No. AS332-25.03.43 or ASB No. EC225-25A207, each Revision 2 and dated March 21, 2019. Since the updated service information does not affect compliance, this final rule allows the use of either Revision 0 or Revision 2 of this service information to install MOD 0728456.

Comments

The FAA gave the public the opportunity to participate in developing this final rule, but the FAA did not receive any comments on the NPRM or on the determination of the cost to the public.

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 issuing this AD after evaluating all of the information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other

helicopters of these same type design and that air safety and the public interest require adopting the AD requirements as proposed except for minor editorial changes. The two instances of 17mm (+ 0.1/+ 0.1) as published in the Required Actions of the NPRM have been corrected to 17mm (+ 0.1/- 0.1). 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.

Differences Between this AD and the EASA AD

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

Related Service Information Under 1 CFR part 51

Airbus Helicopters has issued 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. This service information specifies, 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 these service information requirements. Airbus Helicopters revised each of these ASBs, now at Revision 2 and dated March 21, 2019, to specify an alternative to the protection of the spotfacing(s) and add an instruction to apply primer after the protection and before painting the parts.

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

Airbus Helicopters has issued 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. Airbus Helicopters revised each of these EASBs to Revision 1, dated April 4, 2018, to exclude helicopters with MOD 0728456 installed from the effectivity.

Costs of Compliance

The FAA estimates that this AD affects 29 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

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

Performing the MOD takes about 16 work-hours, and parts 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 has 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 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.

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:

a. Removing Airworthiness Directive (AD) 2017-09-05, Amendment 39-18867 (82 FR 21913, May 11, 2017); and

b. Adding the following new AD:

2020-23-03 Airbus Helicopters: Amendment 39-21319; Docket No. FAA-2018-0893; Product Identifier 2018-SW-032-AD.

(a) Applicability

This airworthiness directive (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 39-18867 (82 FR 21913, May 11, 2017).

(d) Effective Date

This AD becomes effective [INSERT DATE 35 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 14 CFR 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.

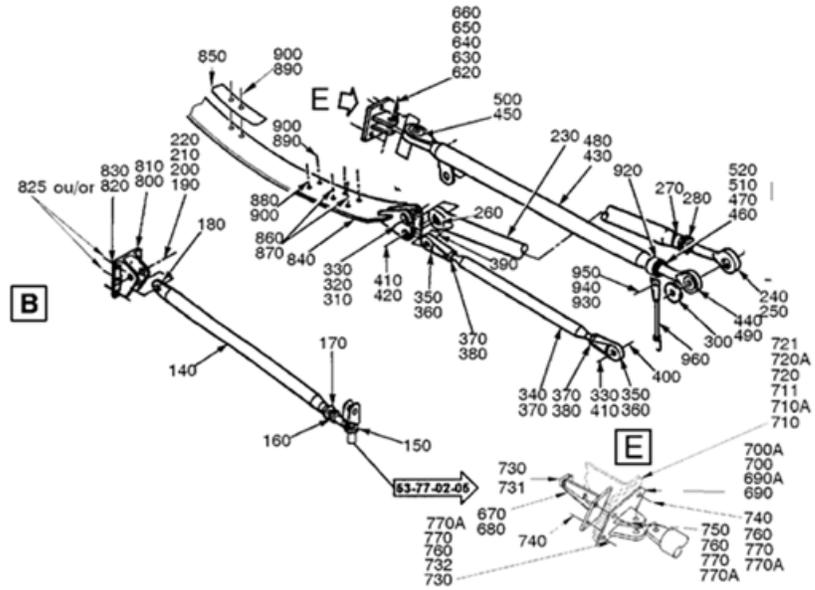
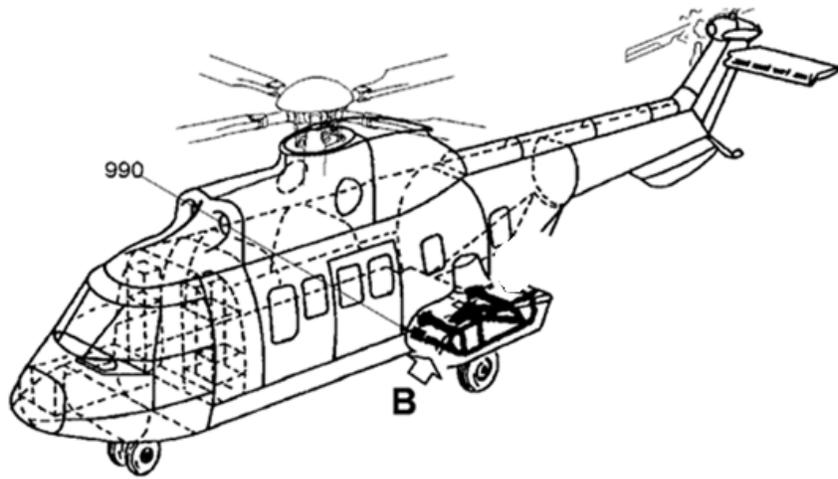


Figure 1 to Paragraph (f)(1)

(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): 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 Rev 0), or ASB No. EC225-25A207, Revision 0, dated April 4, 2018 (ASB EC225-25A207 Rev 0), as applicable to your model helicopter. As an option, you may use Airbus Helicopters ASB No. AS332-25.03.43 or ASB No. EC225-25A207, each Revision 2 and dated March 21, 2019 (ASB AS332-25.03-43 Rev 2 or ASB EC225-25A207 Rev 2), as applicable to your model helicopter, instead of ASB AS332-25.03-43 Rev 0 or ASB EC225-25A207 Rev 0.

(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 Rev 0 or ASB EC225-25A207 Rev 0, as applicable to your model helicopter. As an option, you may use ASB AS332-25.03-43 Rev 2 or ASB EC225-25A207 Rev 2, as applicable to your model helicopter, instead of ASB AS332-25.03-43 Rev 0 or ASB EC225-25A207 Rev 0.

(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 Rev 0 or ASB EC225-25A207 Rev 0, and inspect each washer on the internal fitting for contact with the fitting radius. As an option, you may use or ASB AS332-25.03-43 Rev 2 or ASB EC225-25A207 Rev 2, as

applicable to your model helicopter, instead of ASB AS332-25.03-43 Rev 0 or ASB EC225-25A207 Rev 0.

(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 constitutes 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: Matthew Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & 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, each Revision 0 and dated December 18, 2015, and each

Revision 1 and dated April 4, 2018, 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.airbus.com/helicopters/services/technical-support.html>. You may view a copy of the 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 Docket No. FAA-2018-0893.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 3212, Emergency Flotation Section.

(k) 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.

(i) Airbus Helicopters Alert Service Bulletin (ASB) No. AS332-25.03.43, Revision 0, dated April 4, 2018.

(ii) Airbus Helicopters ASB No. AS332-25.03.43, Revision 2, dated March 21, 2019.

(iii) Airbus Helicopters ASB No. EC225-25A207, Revision 0, dated April 4, 2018.

(iv) Airbus Helicopters ASB No. EC225-25A207, Revision 2, dated March 21, 2019.

(3) For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 800-232-0323 or Fax: 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(4) 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.

(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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on October 27, 2020.

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

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