[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0016; Project Identifier MCAI-2022-00416-R]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Airbus Helicopters Model EC120B, EC130B4, and EC130T2 helicopters. This proposed AD was prompted by a report of corrosion detected on certain part-numbered landing gear assemblies. This proposed AD would require, for helicopters with certain part-numbered landing gear assemblies installed, visually inspecting for cracks and corrosion; borescope inspecting; and if required, removing corrosion, measuring thickness, interpreting results of the measurements, applying chemical conversion coating and primer, and removing affected parts (landing gear assembly) and affected part sub-assemblies (front or rear crossbeam or left-hand or right-hand skid assembly) from service and replacing with airworthy parts. This proposed AD would allow an affected part or affected part sub-assembly to be installed on a helicopter if certain actions in this proposed AD are accomplished. 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 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 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-0016; 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 NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

• For service information identified in this NPRM, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at www.airbus.com/helicopters/services/technical-support.html.

• You may view this this material 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. It is also available at regulations.gov under Docket No. FAA-2023-0016.

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 ADDRESSES. Include "Docket No. FAA-2023-0016; Project Identifier MCAI-2022-00416-R" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

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 post all

comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

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 Stephanie Sunderbruch, Aerospace Engineer, Safety Risk Management Section, Systems Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-4659; email Stephanie.L.Sunderbruch@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.

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2022-0053, dated March 23, 2022 (EASA AD 2022-0053), to correct an unsafe condition for Airbus Helicopters Model EC 120 B, EC 130 B4, and EC 130 T2 helicopters, all serial numbers. EASA advises an occurrence was reported of corrosion found on a landing gear assembly of a Model EC 130 helicopter. EASA further advises that other helicopter models are affected by the same unsafe condition due to design similarity. This condition, if not addressed, could result in the landing gear collapsing, damage to the helicopter, and injury to occupants.

Accordingly, EASA AD 2022-0053 requires, for helicopters with certain part-numbered landing gear assemblies installed, a one-time visual inspection of the external

areas of the landing gear tubes for corrosion and cracks, and a borescope inspection of the internal sides of the landing gear tubes for corrosion (including, but not limited to, leafing and exfoliant corrosion) and cracks. EASA AD 2022-0053 also requires contacting Airbus Helicopters for approved corrective action if any crack, or leafing or exfoliant corrosion, is found or if the remaining thickness of affected part sub-assemblies do not meet specified acceptability criteria during any of the inspections. EASA AD 2022-0053 allows replacing the affected part sub-assembly in lieu of contacting Airbus Helicopters for approved corrective action. EASA AD 2022-0053 also requires reporting inspection results to Airbus Helicopters within 30 days after the inspection or within 30 days after the effective date of EASA AD 2022-0053, whichever occurs later.

Additionally, EASA AD 2022-0053 allows credit for certain inspections and corrective actions if those actions were done before the effective date of EASA AD 2022-0053, and allows an affected part or affected part sub-assembly to be installed on a helicopter if certain requirements of EASA AD 2022-0053 are met. EASA considers its AD an interim action and states that further AD action may follow.

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 the unsafe condition described previously is likely to exist or develop on other helicopters of these same type designs.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. EC120-32A014 (EC120-32A014 Rev 1), for Model EC120B helicopters and Airbus Helicopters ASB No. EC130-32A013 (EC130-32A013 Rev 1), for Model EC130B4 and EC130T2 helicopters, both Revision 1, and both dated October 17, 2022. This service information includes Detail A Figure 3 (EC120-32A014 Rev 1) and Detail A Figure 4 (EC130-32A013 Rev 1), which identify the areas and zones to be inspected for cracks and corrosion (including, but not limited to leafing and exfoliant corrosion). This service

information also includes Table 3, which identifies the minimum material thickness permitted after corrosion is removed. Additionally, this service information specifies procedures for visually inspecting the external areas and borescope inspecting the internal areas of the landing gear tubes, removing corrosion, measuring thickness, interpreting results of the measurements, and applying a chemical conversion coating and primer.

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.

Proposed AD Requirements in this NPRM

This proposed AD would require, for helicopters with certain part-numbered landing gear assemblies installed, removing and cleaning certain parts and visually inspecting the external areas of the landing gear tubes for cracks and corrosion (including, but not limited to, leafing and exfoliant corrosion). If any crack, leafing corrosion, or exfoliant corrosion is detected, this proposed AD would require removing certain parts from service and replacing with airworthy parts. If any corrosion other than leafing or exfoliant corrosion is detected, this proposed AD would require removing the corrosion.

This proposed AD would also require borescope inspecting the internal side of the landing gear tubes for cracks and corrosion (including, but not limited to, leafing and exfoliant corrosion). If any crack, leafing corrosion, or exfoliant corrosion is detected, this proposed AD would require removing any affected part from service and replacing it with an airworthy part. If any corrosion other than leafing or exfoliant corrosion is detected, this proposed AD would require removing the corrosion.

If any corrosion other than leafing or exfoliant corrosion is detected during any of the inspections required by this proposed AD, this proposed AD would require removing all corrosion and measuring the remaining thickness of the landing gear tubes. This proposed AD would require interpreting the results of the measurements and if the remaining thickness does not meet the permitted criteria as specified, this proposed AD would require removing each affected sub-assembly from service and replacing it with an airworthy part. If the remaining thickness meets the permitted criteria as specified, this

proposed AD would require applying a chemical conversion coating and a double layer of primer.

Additionally, this proposed AD would allow an affected part or affected part sub-assembly to be installed on a helicopter, if certain requirements of this proposed AD have been accomplished.

Differences between this Proposed AD and EASA AD 2022-0053

EASA AD 2022-0053 requires, for certain helicopters, the initial inspections to be completed within certain compliance times specified in Table 1 of EASA AD 2022-0053, whereas this proposed AD would require the initial inspections to be completed within 13 months after the effective date of this proposed AD. EASA AD 2022-0053 requires contacting Airbus Helicopters for repair instructions if any cracks, leafing corrosion, or exfoliant corrosion are found, or if the residual thickness of an affected part sub-assembly does not meet certain criteria, whereas this proposed AD would require removing the affected part or part sub-assembly from service instead. EASA AD 2022-0053 allows credit for certain inspections and corrective actions if these requirements were accomplished in accordance with previously issued service information, whereas this proposed AD would not allow credit for the inspections and corrective actions if previously issued service information was used. EASA AD 2022-0053 requires reporting the inspection results to Airbus Helicopters, whereas this proposed AD would not require reporting.

Interim Action

The FAA considers this proposed AD would be an interim action. Once final action has been identified, the FAA might consider further rulemaking.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 353 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this proposed AD.

Removing and cleaning parts, and visually inspecting the external surface of each landing gear tube for cracks and corrosion would take about 2 work-hours for an

estimated cost of $170 per inspection, up to $680 per helicopter (4 landing gear tubes per helicopter), and up to $240,040 for the U.S. fleet.

Borescope inspecting the internal side of each landing gear tube for cracks and corrosion (including, but not limited to, leafing and exfoliant corrosion) would take about 1 work-hour for an estimated cost of $85 per inspection, up to $340 per helicopter (4 landing gear tubes per helicopter), and up to $120,020 for the U.S. fleet.

If required, applying a chemical conversion coating and a double layer of primer would take about 2 work-hours and parts would cost a minimal amount for an estimated cost of $170 per helicopter and up to $60,010 for the U.S. fleet.

If required, disassembling certain zones and removing corrosion would take about 1 work hour for an estimated cost of $85 per helicopter.

If required, measuring the thickness of the internal side of each landing gear tube and interpreting the results would take up to 1 work-hour for an estimated cost of $85 per helicopter.

If required, replacing a landing gear assembly would take about 2 work-hours and parts would cost up to $106,612 for an estimated cost of up to $106,782 per replacement.

If required, replacing a front crossbeam would take about 1 work-hour and parts would cost up to $9,081 for an estimated cost of up to $9,166 per replacement.

If required, replacing a rear crossbeam would take about 1 work-hour and parts would cost up to $11,639 for an estimated cost of up to $11,724 per replacement.

If required, replacing a right-hand or left-hand skid assembly would take about 1 work-hour and parts would cost up to $21,447 for an estimated cost of up to $21,532 per skid assembly replacement.

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) Would not affect intrastate aviation in Alaska, and

(3) Would 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 adding the following new airworthiness directive:

Airbus Helicopters: Docket No. FAA-2023-0016; Project Identifier MCAI-2022-00416-R.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus Helicopters Model EC120B, EC130B4, and EC130T2 helicopters certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 3213, Main Landing Gear Strut, Axle, Truck.

(e) Unsafe Condition

This AD was prompted by a report of corrosion detected on certain part-numbered landing gear assemblies. The FAA is issuing this AD to detect corrosion and cracks on the landing gear tubes. The unsafe condition, if not addressed, could result in the landing gear collapsing, damage to the helicopter, and injury to occupants.

(f) Compliance

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

(g) Required Actions

(1) Within 13 months after the effective date of this AD, for Model EC120B helicopters with landing gear assembly part number (P/N) C321A2106102, P/N C321A2501101, P/N C321A2501102, P/N C321A2601051AA, P/N C321A2601051CA, or P/N C321A2601052 installed, and for Model EC130B4 and EC130T2 helicopters with landing gear assembly P/N 350A41-0077-0201, P/N 350A41-0080-1102, P/N 350A41-0080-1103, P/N 350A41-0081-0201, P/N 350A41-0082-0101, or P/N 350A41-0082-0102 installed, except those having a date of first installation on a helicopter of February 16, 2022 or later; and for helicopters with a landing gear assembly having a P/N specified in this paragraph, with an unknown installation date, do the following:

(i) Remove the landing gear fairing from the rear crossbeam and clean the external areas of each of the landing gear tubes item a, item c, item d, and item e,

including Zones B1, B2, C1, C2, D, E, F, and M as depicted in Detail A, Figure 3, and Details B and C, Figure 4 of Airbus Helicopters Alert Service Bulletin (ASB) No. EC120-32A014 (ASB EC120-32A014 Rev 1), or as depicted in Detail A, Figure 4, and Details B and C, Figure 5 of Airbus Helicopters ASB No. EC130-32A013 (ASB EC130-32A013 Rev 1), both Revision 1, and both dated October 17, 2022, as applicable to your model helicopter.

(ii) Visually inspect the external areas of each of the landing gear tubes item a, item c, item d, and item e, including Zones B1, B2, C1, C2, D, E, F, and M for corrosion (including, but not limited to leafing and exfoliant corrosion) and cracks.

(A) If any crack or leafing or exfoliant corrosion is detected, before further flight, remove the affected part from service and replace it with an airworthy part.

(B) If any corrosion is detected in Zone C1, C2, or E, other than leafing or exfoliant corrosion, before further flight, disassemble the landing gear and using a non-metal abrasive pad, remove all corrosion from all zones.

(C) If any corrosion is detected in only Zone B1, B2, D, F, or M, other than leafing or exfoliant corrosion, before further flight, using a non-metal abrasive pad, remove all corrosion from all zones.

(iii) Borescope inspect the internal side of each of the landing gear tubes item a, item c, item d, and item e, including Zones B1, B2, C1, C2, D, E, F, and M for corrosion (including, but not limited to leafing and exfoliant corrosion) and cracks.

(A) If any crack, leafing corrosion, or exfoliant corrosion is detected, before further flight, remove the affected part from service and replace it with an airworthy part.

(B) If any corrosion is detected in Zone C1, C2, or E, other than leafing or exfoliant corrosion before further flight, disassemble the landing gear and using a non-metal abrasive pad, remove all corrosion from all zones.

(C) If any corrosion is detected in only Zone B1, B2, D, F, or M, other than leafing or exfoliant corrosion, before further flight, using a non-metal abrasive pad, remove all corrosion from all zones.

(iv) Before further flight after performing the inspections required by paragraphs (g)(1)(ii) and (iii) of this AD, if any corrosion was detected during any inspection

required by paragraphs (g)(1)(ii) and (iii) of this AD other than leafing or exfoliant corrosion, using an ultrasonic thickness gauge, measure the remaining thickness of the landing gear tubes in the zones where any corrosion was removed. Interpret the results of the measurement using the criteria specified in Table 3 of ASB EC120-32A014 Rev 1 or Table 3 of EC130-32A013 Rev 1, as applicable to your model helicopter. If the remaining thickness does not meet the permitted criteria as specified, before further flight, remove each affected sub-assembly from service and replace it with an airworthy part. If the remaining thickness meets the permitted criteria as specified, before further flight, accomplish the actions required by paragraph (g)(1)(v) of this AD.

(v) Apply a chemical conversion coating (Alodine 1200) or equivalent, and a double layer of chromate Primer P05 and Primer P20, or equivalent, below the collar in Zones F and M and to any reworked zone.

(2) For Model EC120B helicopters, as of the effective date of this AD, do not install landing gear assembly P/N C321A2106102, P/N C321A2501101, P/N C321A2501102, P/N C321A2601051AA, P/N C321A2601051CA, or P/N C321A2601052, previously installed with an unknown installation date or a date of first installation on a helicopter before February 16, 2022; and do not install a front crossbeam, rear crossbeam, left-hand (LH) skid assembly, or right-hand (RH) skid assembly having a P/N identified in Table 2 of ASB EC120-32A014 Rev 1, previously installed with an unknown installation date, or a date of first installation on a helicopter before February 16, 2022, on any helicopter; unless the actions required by paragraphs (g)(1)(i) through (v) of this AD, as applicable, have been accomplished on the part.

(3) For Model EC130B4 and EC130T2 helicopters, as of the effective date of this AD, do not install landing gear assembly P/N 350A41-0077-0201, P/N 350A41-0080-1102, P/N 350A41-0080-1103, P/N 350A41-0081-0201, P/N 350A41-0082-0101, or P/N 350A41-0082-0102, previously installed with an unknown installation date or a date of first installation on a helicopter before February 16, 2022, and do not install a front crossbeam, rear crossbeam, LH skid assembly, or RH skid assembly, having a P/N identified in Table 2 of ASB EC130-32A013 Rev 1 previously installed with an unknown installation date, or a date of first installation on a helicopter before February 16, 2022,

on any helicopter, unless the actions required by paragraphs (g)(1)(i) through (v) of this AD, as applicable, have been accomplished on the part.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Additional Information

(1) Refer to European Union Aviation Safety Agency (EASA) AD 2022-0053, dated March 23, 2022, for related information. This EASA AD may be found in the AD docket at regulations.gov under Docket No. FAA-2023-0016.

(2) For more information about this AD, contact Stephanie Sunderbruch, Aerospace Engineer, Safety Risk Management Section, Systems Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-4659; email Stephanie.L.Sunderbruch@faa.gov.

(j) Material Incorporated by Reference

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

(i) Airbus Helicopters Alert Service Bulletin (ASB) No. EC120-32A014, Revision 1, dated October 17, 2022.

(ii) Airbus Helicopters ASB No. EC130-32A013, Revision 1, dated October 17, 2022.

(3) For service information identified in this AD, contact Airbus Helicopters, Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at 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 fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on January 12, 2023.

Gaetano A. Sciortino, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
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