FAA
Aviation Safety

EMERGENCY AIRWORTHINESS DIRECTIVE
www.faa.gov/aircraft/safety/alerts/

DATE: May 3, 2022
AD #: 2022-10-51

Emergency Airworthiness Directive (AD) 2022-10-51 is sent to owners and operators of the following:

Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350D, AS355E, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters.

Airbus Helicopters Deutschland GmbH (AHD) Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, EC135T3, MBB-BK 117 C-2, MBB-BK 117 D-2, and MBB-BK 117 D-3 helicopters.

Background

This emergency AD was prompted by a supplier report of a non-conformity occurring during production. This emergency AD requires removing certain part-numbered and serial-numbered flight control Flexball cables from service and prohibits installing those flight control Flexball cables on any helicopter. This emergency AD also requires reporting certain information to Airbus Helicopters or AHD, as applicable. This condition, if not addressed, could result in increased friction inside the flight control Flexball cables, jamming of the flight controls, and subsequent loss of control of the helicopter.

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD 2022-0077-E, dated April 29, 2022 (EASA AD 2022-0077-E), to correct an unsafe condition for Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale, Model AS 350 B, AS 350 B1, AS 350 B2, AS 350 B3, AS 350 BA, AS 350 BB, AS 350 D, AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N, AS 355 NP, EC 130 B4, and EC 130 T2 helicopters, all serial numbers (S/Ns); and Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH, Eurocopter España S.A., Model EC 135 T1, EC 135 T2, EC 135 T2+, EC 135 T3, EC 135 P1, EC 135 P2, EC 135 P2+, EC 135 P3, EC 635 T1, EC 635 T2+, EC 635 T3, EC 635 P2+, EC 635 P3, MBB-BK 117 D-2, MBB-BK 117 D-3, MBB-BK 117 D-3m, and MBB-BK 117 C-2 helicopters, all S/Ns. EASA advises of reported occurrences of flight control Flexball cables which were not in compliance with the approved design. Airbus Helicopters, AHD, and the part supplier identified a batch of affected parts.

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 emergency AD. The FAA is issuing this emergency 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 the same type designs.

Related Service Information

EASA AD 2022-0077-E requires replacing affected flight control Flexball cables with a serviceable part and prohibits installing an affected flight control Flexball cable on any helicopter.

The FAA reviewed Airbus Helicopters Emergency Alert Service Bulletin (EASB) AS350 67.00.81, AS355 67.00.49, and EC130 67A023, which are co-published as one document along with AS550 67.00.45 (military) and AS555 67.00.34 (military), EASB EC135-67A-043, EASB EC135H-67A-016, EASB MBB-BK117 C-2-67A-032, and EASB MBB-BK117 D-2-67A-021, each Revision 0 and dated April 29, 2022. This service information specifies procedures for determining if an affected Flexball is installed. If an affected Flexball is installed, or if it cannot be determined if an affected Flexball is installed, this service information specifies procedures for replacing the Flexball, returning the removed Flexball to the supplier, and completing and emailing a reply form sheet to Airbus Helicopters Customer Support or Airbus Helicopters Service Bulletin Germany, depending on your model helicopter.

Emergency AD Requirements

This emergency AD requires accomplishing the actions specified in EASA AD 2022-0077-E, described previously, which is incorporated by reference (IBRed), except for any differences identified as exceptions in the regulatory text of this emergency AD and except as discussed under "Differences Between this Emergency AD and the EASA AD."

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, EASA AD 2022-0077-E is IBRed in this FAA emergency AD. This emergency AD, therefore, requires compliance with EASA AD 2022-0077-E in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this emergency AD. Using common terms that are the same as the heading of a particular section in EASA AD 2022-0077-E does not mean that operators need comply only with that section. For example, where the emergency AD requirement refers to "all required actions and compliance times," compliance with this emergency AD requirement is not limited to the section titled "Required Action(s) and Compliance Time(s)" in EASA AD 2022-0077-E.

Differences Between This Emergency AD and the EASA AD

EASA AD 2022-0077-E applies to Airbus Helicopters Model AS 350 BB helicopters and Airbus Helicopters Deutschland GmbH (AHD) Model EC 635 T1, EC 635 T2+, EC 635 T3, EC 635 P2+, EC 635 P3, and MBB-BK 117 D-3m helicopters. This emergency AD does not apply to those model helicopters because those models are not FAA type-certificated and are not included on the U.S. type certificate data sheet (TCDS), except where the TCDS explains that the Model EC635T2+ helicopter having serial number 0858 was converted from Model EC635T2+ to Model EC135T2+. The service information referenced in EASA AD 2022-0077-E specifies sending removed Flexball cables to the supplier; whereas, this emergency AD requires removing an affected part from service. EASA AD 2022-0077-E specifies that a single ferry flight without passengers is allowed to a maintenance location where the action required by the AD can be accomplished; whereas this emergency AD may allow a special flight permit or continuous authorization flight for a single flight, provided that there are no passengers onboard and that there is no noticeable increase in friction in

the flight control system. EASA AD 2022-0077-E does not require reporting information; whereas, this emergency AD does.

Costs of Compliance

The FAA estimates that this emergency AD affects up to 1,785 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 emergency AD.

Replacing a flight control Flexball cable takes about 8 work-hours and parts cost about $804 to $13,555, depending on part number, for an estimated cost of $1,484 to $14,235 per helicopter and up to $437,780 to $4,199,325 for the U.S. fleet (there are up to 295 affected flight control Flexball cables installed in the U.S. fleet). Reporting information takes about 0.5 work-hour for an estimated cost of $43 per helicopter and up to $76,755 for the U.S. fleet.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 0.5 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

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.

Presentation of the Actual AD

The FAA is issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2022-10-51 Airbus Helicopters and Airbus Helicopters Deutschland GmbH (AHD): Project Identifier MCAI-2022-00589-R.

(a) Effective Date

This emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the helicopters identified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

(1) Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350D, AS355E, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters.

Note 1 to paragraph (c)(1): Helicopters with an AS350B3e designation are Model AS350B3 helicopters.

(2) Airbus Helicopters Deutschland GmbH (AHD) Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, EC135T3, MBB-BK 117 C-2, MBB-BK 117 D-2, and MBB-BK 117 D-3 helicopters.

Note 2 to paragraph (c)(2): Helicopters with an EC135P3H designation are Model EC135P3 helicopters. Helicopters with an EC135T3H designation are Model EC135T3 helicopters. Helicopters with an MBB-BK117 C-2e designation are Model MBB-BK117 C-2 helicopters.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 2700, Flight Control System.

(e) Unsafe Condition

This AD was prompted by a supplier report of a non-conformity occurring during production. The FAA is issuing this AD to address non-conforming flight control Flexball cables. The unsafe condition, if not addressed, could result in increased friction inside the flight control Flexball cables, jamming of the flight controls, and subsequent loss of control of the helicopter.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) Emergency AD 2022-0077-E, dated April 29, 2022 (EASA AD 2022-0077-E).

(h) Exceptions to EASA AD 2022-0077-E

(1) Where EASA AD 2022-0077-E refers to its effective date, this AD requires using the effective date of this AD.

(2) Where the service information referenced in EASA AD 2022-0077-E specifies returning a part to the supplier, this AD requires removing an affected part from service.

(3) The note to paragraph (1) of EASA AD 2022-0077-E does not apply to this AD; instead, see the provisions in paragraph (j) of this AD.

(4) This AD does not mandate compliance with the "Remarks" section of EASA AD 2022-0077-E.

(i) Reporting Requirement

Within 10 days after accomplishing the actions required by paragraph (g) of this AD, report the information requested in Appendix 1 to this emergency AD to the email address identified in paragraph (i)(1) or (2) of this AD, depending on your helicopter model.

(1) For Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350D, AS355E, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters: customersupport.helicopters@airbus.com.

(2) For Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, EC135T3, MBB-BK 117 C-2, MBB-BK 117 D-2, and MBB-BK 117 D-3 helicopters: support.technical-bulletins.ahd@airbus.com.

(j) Special Flight Permit

A special flight permit or continuous authorization flight for a single flight may be issued, provided that there are no passengers onboard and that there is no noticeable increase in friction in the flight control system.

(k) 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 (l)(1) 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.

(l) Related Information

(1) For more information about this AD, contact Kristi Bradley, Program Manager, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email kristin.bradley@faa.gov.

(2) For EASA AD 2022-0077-E, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find the EASA material on the EASA website at https://ad.easa.europa.eu.

(3) For Airbus Helicopters service information identified in this emergency AD, 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 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 information on the availability of this material at the FAA, call (817) 222-5110.

Appendix 1 to Emergency Airworthiness Directive 2022-10-51

Conformity of the Flexballs (sample format)

Provide the following information by email as follows:

For Model AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350D, AS355E, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters: customersupport.helicopters@airbus.com.

For Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, EC135T3, MBB-BK 117 C-2, MBB-BK 117 D-2, and MBB-BK 117 D-3 helicopters: support.technical-bulletins.ahd@airbus.com.

Helicopter Model and Serial Number:	
Flexball Part Number:	
Flexball Serial Number:	

Issued on May 3, 2022.

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