



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0907; Product Identifier 2017-SW-072-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 adopt a new airworthiness directive (AD) for Airbus Helicopters Model AS350B3 helicopters. This proposed AD would require modifying the electrical system of the throttle twist grip, inspecting the routing of a microswitch electrical harness, and correcting the electrical harness routing if it is incorrect. This proposed AD was prompted by reports of the engine remaining in idle when the twist grip was turned from the “forced idle” position to the “flight” position. 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-2020-0907; 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 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: George Schwab, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110.

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 George Schwab, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued a series of ADs, most recently EASA AD No. 2017-0035, dated February 20, 2017 (EASA AD 2017-0035), to correct an unsafe condition for Airbus Helicopters (formerly Eurocopter) Model AS 350 B3 helicopters with ARRIEL 2B engines installed. EASA advises of an initial report of the microswitch pin jammed in the pushed-in position resulting in the engine remaining in idle when the twist grip had been turned back to the “flight” position during an autorotation training exercise. This condition could also occur during governor failure training when the twist grip is turned in the low flow rate direction. EASA also advises of two later reports of this condition, with one of those reports related to an incorrectly routed electrical harness. EASA advises that this condition, if not detected and corrected, could lead to reduced control of the helicopter.

EASA initially issued AD No. 2006-0094, dated April 21, 2006, which required repetitive testing of the microswitch and established a life limit for the microswitch. Subsequent EASA AD action required reducing that life limit, inspecting the travel of the

collective lever, performing an additional check of the collective lever for free travel, and installing a terminating action modification that was available for certain helicopter configurations. That modification gave priority to the HydroMechanical Unit (HMU) flight position when the microswitch failed to operate correctly at forced idle. EASA most recently issued AD 2017-0035, which prompted this AD action, to include all of the previous AD requirements and expand the terminating action modification to other helicopter configurations.

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 because the FAA evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type designs.

Related Service Information Under 1 CFR part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-67.00.43, Revision 3, dated June 16, 2016, which specifies procedures, based on different configurations, to modify the electrical operation to give priority to the HMU flight position when the microswitch does not operate correctly at forced idle (corresponds to Airbus Helicopters Modification (MOD) 073357). This service information also specifies instructions to inspect the routing of microswitch electrical harness number "53K".

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 Eurocopter ASB No. 05.00.49, Revision 3, dated March 8, 2012. This service information specifies procedures, for helicopters without MOD 073357 installed, for repetitive testing of the microswitch, a life limit for the microswitch, inspecting the travel of the collective lever, and verifying correct wiring harness installation.

Proposed AD Requirements

This proposed AD would require, based on helicopter configuration, modifying the electrical system of the throttle twist grip. This proposed AD would also require inspecting the routing of a microswitch electrical harness, and depending on the routing of that electrical harness, correcting the routing.

Differences between this Proposed AD and the EASA AD

The EASA AD specifies a repetitive test of the microswitch, a life limit for the microswitch, and inspecting the travel of the collective lever, until the terminating action of modifying the electrical system of the throttle twist grip and inspecting the routing of a microswitch electrical harness are completed. This proposed AD would only require modifying the electrical system of the throttle twist grip and inspecting the routing of a microswitch electrical harness. The EASA AD specifies performing that terminating action in a compliance time of calendar months. This proposed AD would require

performing the required actions before the next practice autorotation, before the next simulated governor failure, or within 330 hours time-in-service, whichever occurs first.

Costs of Compliance

The FAA estimates that this proposed AD would affect 517 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.

Modifying the electrical system and inspecting the electrical harness routing would take about 30 work-hours and parts would cost about \$9,692 for an estimated cost of \$12,242 per helicopter and \$6,329,114 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 adding the following new airworthiness directive (AD):

Airbus Helicopters: Docket No. FAA-2020-0907; Product Identifier 2017-SW-072-AD.

(a) Applicability

This AD applies to Airbus Helicopters Model AS350B3 helicopters, certificated in any category, with a Turbomeca ARRIEL 2B engine installed.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of the electrical operation of the throttle twist grip, which can prevent switching from “IDLE” mode to “FLIGHT” mode. During autorotation training or during governor failure training (when the throttle grip is turned in the low flow direction), this condition prohibits recovery from a practice autorotation and compels the pilot to continue the autorotation to the ground. This condition could result in unintended touchdown to the ground at a flight-idle power setting, damage to the helicopter, and injury to occupants.

(c) Comments Due Date

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

(d) 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.

(e) Required Actions

Before the next practice autorotation, before the next simulated governor failure, or within 330 hours time-in-service, whichever occurs first, modify the electrical operation of the throttle twist grip to give priority to the HydroMechanical Unit flight position when the microswitch does not operate correctly at forced idle (corresponds to Airbus Helicopters Modification (MOD) 073357) as follows:

(1) For helicopters without MOD 073087 and without MOD 073135 installed:

(i) Install box "69K" on the Full Authority Digital Engine Control plate, relay "81K" on frame X1310, install fuses on the console end comprising circuit-breaker panels "31 ALPHA" and "32 ALPHA," and modify the electrical wiring by following the Accomplishment Instructions, paragraph 3.B.2.a. of Airbus Helicopters Alert Service Bulletin No. AS350-67.00.43, Revision 3, dated June 16, 2016 (ASB AS350-67.00.43), except you are not required to discard parts.

(ii) Inspect the routing of microswitch electrical harness "53K" for correct installation by following paragraph 3.B.2.e. of ASB AS350-67.00.43. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(2) For helicopters with MOD 073087 (series) and without MOD 073135 installed:

(i) Install relays "54K" and "81K" on frame X1310 and modify the electrical wiring by following paragraph 3.B.2.b. of ASB AS350-67.00.43.

(ii) Inspect the routing of microswitch electrical harness "53K" for correct installation by following paragraph 3.B.2.e. of ASB AS350-67.00.43. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(3) For helicopters with MOD 073087 (retrofit) and without MOD 073135 installed:

(i) Install relay "81K" on frame X1310 and modify the electrical wiring by following paragraph 3.B.2.c. of ASB AS350-67.00.43.

(ii) Inspect the routing of microswitch electrical harness “53K” for correct installation by following paragraph 3.B.2.e. of ASB AS350-67.00.43. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(4) For helicopters with MOD 073087 and with MOD 073135 installed:

(i) Install relay "81K" on frame X1310 and modify the electrical wiring by following paragraph 3.B.2.d. of ASB AS350-67.00.43.

(ii) Inspect the routing of microswitch electrical harness “53K” for correct installation by following paragraph 3.B.2.e. of ASB AS350-67.00.43. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(5) For helicopters with MOD 073084 and with MOD 073222 installed:

(i) Install relay "81K" on frame X1310 and modify the electrical wiring by following paragraph 3.B.2.g. of ASB AS350-67.00.43, except you are not required to scrap parts.

(ii) Inspect the routing of microswitch electrical harness “53K” for correct installation by following paragraph 3.B.2.e. of ASB AS350-67.00.43. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(6) For helicopters with optional Autopilot "81K" and without MOD 073222 installed:

(i) Position relay "81K" on frame X1310 by following paragraph 3.B.2.h. of ASB AS350-67.00.43.

(ii) Inspect the routing of microswitch electrical harness “53K” for correct installation by following ASB AS350-67.00.43, step 3.B.2.e. If the wiring routing is incorrect, before further flight, correct the wiring routing by following paragraph 3.B.2.f. of ASB AS350-67.00.43.

(f) Special Flight Permits

Special flight permits are prohibited.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: George Schwab, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, 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.

(h) Additional Information

(1) Eurocopter Alert Service Bulletin No. 05.00.49, Revision 3, dated March 8, 2012, which is not incorporated by reference, contains 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 the 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. 2017-0035, dated February 20, 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: 7697, Engine Control System Wiring.

Issued on October 6, 2020.

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

[FR Doc. 2020-22744 Filed: 10/14/2020 8:45 am; Publication Date: 10/15/2020]