



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0438; Product Identifier 2017-SW-062-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters. This proposed AD would require measuring a vibration level in the tail rotor (T/R) drive. This proposed AD is prompted by reports of bearing degradation. The actions of this proposed AD are intended to prevent an unsafe condition on these helicopters.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 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 <http://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 <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0438; 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 (EASA) AD, the economic evaluation, any comments received, and other information.

The street address for Docket Operations (telephone 800-647-5527) is in the ADDRESSES section. 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

http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. You may review 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: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. 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.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2017-0159, dated August 25, 2017, to correct an unsafe condition for Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters. EASA advises of two occurrences on AS355 military helicopters in which the main gearbox (MGB) oil cooler fan bearing (bearing) installed on the TR drive shaft experienced significant degradation. EASA states that while investigation has not

determined the cause of the failures, this condition may also occur on other AS355 helicopters due to design commonality. According to EASA, this condition, if not detected and corrected, could result in loss of MGB and engine oil cooling function, loss of the rear transmission, and subsequent loss of control of the helicopter. To address this unsafe condition and as an interim measure, the EASA AD requires two vibration level measurements of the forward portion of the tail rotor drive line, one before and one after cleaning the MGB oil cooler fan, and replacing the bearings if excessive level or level trends are detected. The EASA AD also specifies that after the effective date of the AD, only those MGB oil cooler fan assembly bearings that are new or that have passed the vibration level measurements may be installed.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information

We reviewed Airbus Helicopters Alert Service Bulletin No. AS355-05.00.77, Revision 0, dated July 3, 2017, which contains procedures for checking the condition of the fan assembly bearings by measuring the vibration levels of the first section of the T/R drive.

Proposed AD Requirements

This proposed AD would require, within 165 hours time-in-service, measuring the T/R drive vibration level without balancing, cleaning the fan, and repeating the vibration level measurement. If the difference between the two amplitude values is greater than 0.75 inch per second (ips), the proposed AD would require, before further flight, replacing each T/R fan bearing.

Interim Action

We consider this proposed AD to be an interim action. The manufacturer is currently developing a terminating action for the unsafe condition described in this proposed AD. If a terminating action is identified, we may consider further rulemaking then.

Costs of Compliance

We estimate that this proposed AD would affect 104 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD. At an average labor rate of \$85 per work-hour, measuring the vibration levels would require about 5 work-hours, for a cost of \$425 per helicopter and \$44,200 for the U.S. operator fleet. If required, replacing both fan assembly bearings would require about 8 work-hours, and required parts would cost \$1,064, for a cost per helicopter of \$1,744.

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.

We are 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

We 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. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. 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.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

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-2018-0438; Product Identifier 2017-SW-062-AD.

(a) Applicability

This AD applies to Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as degradation of a main gearbox (MGB) oil cooler fan assembly bearing. This condition could result in loss of MGB and engine oil cooling function, loss of the rear transmission, and subsequent loss of control of the helicopter.

(c) Comments Due Date

We must receive comments by [INSERT DATE 60 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

(1) Within 165 hours time-in-service (TIS):

(i) Measure the tail rotor (T/R) drive vibration level without balancing the T/R drive, and record the amplitude value.

(ii) Clean the oil cooler fan.

(iii) Measure the T/R drive vibration level without balancing the T/R drive, and record the amplitude value.

(iv) Calculate the difference between the two amplitude values. If the difference is greater than 0.75 inch per second (ips), before further flight, replace each oil cooler fan assembly bearing.

(2) After the effective date of this AD, do not install an oil cooler fan assembly bearing with more than 0 hours TIS unless the requirements of this AD have been accomplished.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy 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, we suggest 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.

(g) Additional Information

(1) Airbus Helicopters Alert Service Bulletin No. AS355-05.00.77, Revision 0, dated July 3, 2017, 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 http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. You may review 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 (EASA) AD No. 2017-0159, dated August 25, 2017. You may view the EASA AD on the Internet at <http://www.regulations.gov> in the AD Docket.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6510 Tail Rotor Driveshaft.

Issued in Fort Worth, Texas, on May 7, 2018.

Lance T. Gant,

Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2018-10494 Filed: 5/16/2018 8:45 am; Publication Date: 5/17/2018]