AIRWORTHINESS DIRECTIVES; MD HELICOPTERS INC. (MDHI), 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 certain MD Helicopters Inc. (MDHI), Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters. This proposed AD would require tap inspecting each main rotor (MR) blade leading edge abrasion strip and is prompted by reports of abrasion strips departing the MR blade in-flight. The proposed actions are intended to prevent an unsafe condition on these products.

DATES: The FAA 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 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-2020-0483; 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, 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 Helicopter Technology Company, LLC, address 12902 South Broadway, Los Angeles, CA 90061; telephone (310) 523-2750; email gburdorf@helicoptertech.com; or at http://www.helicoptertech.com. 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**: Payman Soltani, Aviation Safety Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5313; email payman.soltani@faa.gov.
SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites 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.

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.

Discussion

The FAA proposes to adopt a new AD for MDHI Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters with an MR blade part number (P/N) 500P2100-105, P/N 500P2100-305, P/N 500P2300-505, P/N 369D21120-505, P/N 369D21121-505, or P/N 369D21123-505, with a 1.25-inch chord length nickel abrasion strip (abrasion strip) manufactured or installed by Helicopter
Technology Company (HTC) or where the manufacturer of the abrasion strip is unknown. This proposed AD would require tap inspecting the abrasion strip within 10 hours time-in-service (TIS) and thereafter before the first flight of each day until the abrasion strip has accumulated 700 hours TIS since installation.

This proposed AD is prompted by reports that leading edge abrasion strips manufactured by HTC are departing the MR blades during flight. An investigation determined that the abrasion strips were manufactured from electroformed nickel, have a chord length of 1.25 inch, and are delaminating from the MR blade before departing from the helicopter. HTC has determined that a repetitive tap inspection of the abrasion strips should be performed on all blades with abrasion strips that have less than 700 hours TIS to detect any voids, including blistering, bubbling, or lifting of the abrasion strip.

Identical looking electroformed nickel abrasion strips with a chord length of 1.25 inch manufactured by other repair stations have not departed in flight and therefore are not the subject of this proposed AD. If the manufacturer of the installed abrasion strip is unknown, this proposed AD would apply to the strip.

**FAA’s Determination**

The FAA is proposing this AD because the agency evaluated all known relevant information and determined that an unsafe condition exists and 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 HTC Mandatory Service Bulletin Notice No. 2100-8R4, dated June 1, 2017, which specifies a daily tap inspection of the MR blade abrasion strip to detect voids. If there are any voids, the SB specifies repairing or replacing the MR blade,
depending on the size, quantity, and location of any damage.

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**

This proposed AD would require, within 10 hours TIS and thereafter before the first flight of each day until the abrasion strip reaches 700 hours TIS, tap inspecting the leading edge abrasion strip for a void. If there is a void within 0.5 inch (12.7 mm) of the edge of the abrasion strip, the proposed AD would require replacing the blade with an airworthy blade before further flight. If there is a void that is not within 0.5 inch (12.7 mm) from the edge of the abrasion strip and is larger than 0.5 square inch (322.6 square mm) or if there is more than one void of any size, the proposed AD would require replacing the blade with an airworthy blade before further flight.

**Costs of Compliance**

The FAA estimates that this proposed AD would affect 50 helicopters of U.S. Registry.

The FAA estimates that operators may incur the following costs in order to comply with this AD. At an average labor rate of $85 per hour, tap-testing the MR blades will require about 0.25 work-hour, for a cost per helicopter of $22 per inspection cycle.

If required, replacing an MR blade would require 1 work-hour, and required parts would cost up to $24,130, for a cost per helicopter of $24,215.

According to HTC’s service information some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals.
The FAA does not control warranty coverage by HTC. Accordingly, the FAA has included all costs in our cost estimate.

**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 to the extent that it justifies making a regulatory distinction; 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):

**MD Helicopters Inc. (MDHI):** Docket No. FAA-2020-0483; Product Identifier 2016-SW-066-AD.

   *(a) Applicability*

   This AD applies to MD Helicopters Inc. (MDHI), Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters, certificated in any category, with a main rotor (MR) blade part number (P/N) 500P2100-105, P/N 500P2100-305, P/N 500P2300-505, P/N 369D21120-505, P/N 369D21121-505, or P/N 369D21123-505 with a 1.25 inch chord length nickel abrasion strip (abrasion strip)*
manufactured or installed by Helicopter Technology Company (HTC) or where the manufacturer of the abrasion strip is unknown. This AD does not apply if the abrasion strip has accumulated 700 or more hours time-in-service (TIS).

(b) Unsafe Condition

This AD defines the unsafe condition as failure of the bond between the leading edge abrasion strip and an MR blade. This condition could result in the abrasion strip departing the MR blade in-flight, subsequent imbalance of the rotor system, and loss of control of the helicopter.

(c) Comments Due Date

The FAA 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

Within 10 hours TIS and thereafter before the first flight of each day, tap inspect each MR blade leading edge abrasion strip for a void in accordance with Part 1 – Inspection, paragraphs 2 through 4, of HTC Mandatory Service Bulletin Notice No. 2100-8R4, dated June 1, 2017.

(1) If there is a void within 0.5 inch (12.7 mm) of the edge of the abrasion strip, before further flight, replace the MR blade.

(2) If there is a void larger than 0.5 square inch (322.6 square mm) or if there is more than one void of any size, before further flight, replace the MR blade.
(f) Alternative Methods of Compliance (AMOC)

(1) The Manager, Los Angeles ACO Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Payman Soltani, Aviation Safety Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5313; email 9-ANM-LAACO-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.

(g) Subject

Joint Aircraft Service Component (JASC) Code: 6210, Main Rotor Blade.


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

[FR Doc. 2020-10246 Filed: 5/13/2020 8:45 am; Publication Date: 5/14/2020]