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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0483; Product Identifier 2016-SW-066-AD; Amendment 39-21241; AD 2020-18-20]**

**RIN 2120-AA64**

# Airworthiness Directives; MD Helicopters Inc. (MDHI), Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting 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 AD was prompted by reports of abrasion strips departing the main rotor (MR) blade in-flight. This AD requires tap inspecting each MR blade leading edge abrasion strip. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective October 28, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of October 28, 2020.

**ADDRESSES:** For service information identified in this final 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 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. It is also available on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0483.

## 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 final rule, any comments received, and other information. The address for Docket Operations is Docket Operations,

U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**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:

### Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to MDHI Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters with a 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, LLC (HTC), or where the manufacturer of the abrasion strip is unknown, except if the abrasion strip has accumulated 700 or more hours time-in-service (TIS). The NPRM published in the Federal Register on May 14, 2020 (85 FR 28895).

The NPRM was prompted by reports of leading edge abrasion strips manufactured by HTC 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 were not proposed as the subject of this AD.

To address this unsafe condition, the NPRM proposed to require tap inspecting the abrasion strip within 10 hours TIS and thereafter before the first flight of each day until the abrasion strip has accumulated 700 or more hours TIS since installation.

### Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

### Supportive Comment

The FAA received one comment in support of the NPRM.

### Requests

Request: HTC stated that the NPRM proposed to mandate its service bulletin that was issued June 1, 2017, and that there has not been a documented case of an abrasion strip departure related to this issue in 4 years. HTC further stated that the majority of affected operators have either modified the abrasion strip or accumulated more than 700 hours TIS, such that the proposed AD would no longer apply. Although HTC did not request any changes to the NPRM, the FAA infers that this commenter would like the FAA to withdraw the proposed AD.

FAA's Response: The FAA partially agrees. The FAA has not received any reports of an abrasion strip departure related to this issue since issuance of the HTC service bulletin. In addition, about a third of the abrasion strips have been modified and others have accumulated more than 700

hours TIS, and therefore would not be affected by this AD. However, because some affected abrasion strips are still in service or may be stored as spare parts, the unsafe condition exists and corrective action is necessary. The FAA has made no changes based on these comments.

Request: Wilson Construction requested that the FAA change the NPRM to allow pilots to perform the tap test following proper training, to avoid difficulties complying with the AD while away from base of operations or during cross country flights. The commenter stated that this would be consistent with AD 88-17-09 R1 (Amendment 39-6400; 54 FR 48583, November 24, 1989) ("AD 88-17-09 R1"), which allows a pilot to perform a pre-flight check, and that the test itself is simple to perform.

FAA's Response: The FAA disagrees. AD 88-17-09 R1 allows the pilot to perform a check of the tail boom extension for security. This check is an exception to the FAA's standard maintenance regulations and is allowed in AD 88-17-09 R1 because it is a visual check that can be performed equally well by a pilot or a mechanic and does not require training or the use of tools. Since the tap inspection proposed in the NPRM would require both training and the use of a tool, allowing a pilot to perform it is not acceptable. The FAA made no changes in this final rule based on this comment.

Request: Wilson Construction stated the inspection criteria in the proposed AD are already specified by the manufacturer of the MR blades (HTC) and by MDHI. The commenter stated if owners/operators would follow the manufacturer's instructions, then an AD would not be necessary.

FAA's Response: The FAA agrees. Not all operators are required to incorporate a manufacturer's maintenance instructions into the operator's maintenance program. Where the FAA has determined that a manufacturer's maintenance instructions are necessary to correct an unsafe condition, the FAA must issue an AD to mandate those instructions. The FAA made no changes in this final rule based on this comment.

**FAA's Determination**

The FAA has reviewed the relevant information, considered the comments received, and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed with minor editorial changes. These minor changes are consistent with the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of the AD.

**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, this service information 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.

**Costs of Compliance**

The FAA estimates that this AD affects 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 requires about 0.25 work-hour, for a cost per helicopter of $22 per inspection cycle. If required, replacing an MR blade requires about 1 work-hour and required parts 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 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 this 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

This AD will not have federalism implications under Executive Order 13132. This AD will 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 above, I certify that this AD:

(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.

## Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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):

**2020-18-20 MD Helicopters Inc. (MDHI):** Amendment 39-21241; 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, LLC (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) Effective Date**

This AD becomes effective October 28, 2020.

**(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.

**(h) 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 the AD specifies otherwise.

(i) Helicopter Technology Company, LLC, Mandatory Service Bulletin Notice No. 2100-8R4, dated June 1, 2017.

(ii) [Reserved]

(3) For service information identified in this AD, 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.

(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 fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on August 31, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-20930 Filed 9-22-20; 8:45 am]