[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2026-4666; Project Identifier AD-2025-01677-R]

RIN 2120-AA64

Airworthiness Directives; MD Helicopters, LLC 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, LLC (MDHI) Model 369D, 369E, 369F, 369FF, 369H, and 500N helicopters. This proposed AD was prompted by a report of mechanical damage to the main transmission drive shaft coupling (coupling). This proposed AD would require a one-time visual inspection of the couplings for cracks of the splines and, depending on the results, replacement of the couplings. The FAA is proposing this AD to address the 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, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

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

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2026-4666; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

• For MD Helicopters material identified in this proposed AD, contact MDHI, 4555 East McDowell Road, Mesa, AZ, 85215-9734; phone: (480) 346-6300; email: info@mdhelicopters.com; website: mdhelicopters.com/contact/.

• You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 10101 Hillwood Parkway, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

FOR FURTHER INFORMATION CONTACT: Binod Singh, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5228; email: binod.singh@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments using a method listed under ADDRESSES. Include "Docket No. FAA-2026-4666; Project Identifier AD-2025-01677-R" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may revise this proposal because of those comments.

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 post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

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 Binod Singh, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA received a report that couplings part number (P/N) 369H5660 were found with mechanical damage to the root fillets, spline faces, and the major diameter on Model 369D, 369E, 369F, 369FF, 369H, and 500N helicopters. It was also reported that a new vendor improperly manufactured coupling P/N 369H5660, with a total of 148 shipped to customers between June 3, 2020, and May 1, 2022. The manufacturer reported that 86 affected couplings have been recovered, with the remaining 62 affected couplings at unknown locations.

This condition, if not addressed, could result in fatigue cracks that grow from the damaged root fillets and spline faces, which could lead to failure of the coupling with consequent loss of power to the main rotor blades and possible emergency autorotational landing.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed MD Helicopters Service Bulletin SB369H-264R1 for Model 369H helicopters, SB369D-230R1 for Model 369D helicopters, SB369E-130R1 for Model 369E helicopters, SB369F-121R1 for Model 369F and 369FF helicopters, and SB500N-067R1 for Model 500N helicopters, dated May 26, 2023 (co-published as one document). This material specifies procedures for a one-time visual inspection of the couplings for mechanical damage or cracks of the splines and, if necessary, replacement of the couplings.

This material 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 in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 568 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Visual inspection of the couplings	1 work-hour x $85 per hour = $85	$0	$85	$48,280

The FAA estimates the following costs to do any replacement that would be required based on the results of the proposed inspection. The agency has no way of determining the number of helicopters that might need this replacement:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Replace coupling	2 work-hours x $85 per hour = $170	$1,681 (per coupling)	Up to $3,532

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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 above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would 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:

MD Helicopters, LLC: Docket No. FAA-2026-4666; Project Identifier AD-2025-01677-R.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to MD Helicopters, LLC (MDHI) Model 369D, 369E, 369F, 369FF, 369H, and 500N helicopters, certificated in any category, with an installed main transmission drive shaft coupling (coupling) part number 369H5660, having serial numbers 8564-0001 through 8564-0308.

(d) Subject

Joint Aircraft System Component (JASC) Code 6310, Engine/transmission coupling.

(e) Unsafe Condition

This AD was prompted by a report of mechanical damage to the coupling. The FAA is issuing this AD to detect and address couplings with damage to the root fillets, spline faces, and major diameter. The unsafe condition, if not addressed, could result in fatigue cracks that grow from the damaged root fillets and spline faces, which could lead to failure of the coupling with consequent loss of power to the main rotor blades and possible emergency autorotational landing.

(f) Compliance

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

(g) Required Actions

Within 50 hours time-in-service (TIS) or 6 months after the effective date of this AD, whichever occurs first, using a bright light and 10X magnification, visually inspect each coupling for cracks to the spline.

Note 1 to paragraph (g): Examples of acceptable couplings with standard broaching tool marks and mechanical damage may be found in Figure 1 and Figure 2, as applicable, of MD Helicopters Service Bulletin SB369H-264R1, SB369D-230R1, SB369E-130R1, SB369F-121R1, and SB500N-067R1, dated May 26, 2023 (co-published as one document)

(1) If any cracks are found on any coupling, before further flight, remove the affected coupling from service and replace with a serviceable coupling.

(2) If there are no cracks on any coupling, within 300 hours TIS after the effective date of this AD, replace the affected coupling with a serviceable coupling.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, West Certification 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 West Certification Branch, send it to the attention of the person identified in paragraph (i) of this AD and email to: 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.

(i) Additional Information

For more information about this AD, contact Binod Singh, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5228; email: binod.singh@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

Note 1 to paragraph (j)(2): The material listed in paragraphs (j)(2)(i) through (v) of this AD is co-published as one document.

(i) MD Helicopters Service Bulletin (SB) SB369H-264R1, dated May 26, 2023.

(ii) MD Helicopters SB SB369D-230R1, dated May 26, 2023.

(iii) MD Helicopters SB SB369E-130R1, dated May 26, 2023.

(iv) MD Helicopters SB SB369F-121R1, dated May 26, 2023.

(v) MD Helicopters SB SB500N-067R1, dated May 26, 2023.

(3) For MD Helicopters material identified in this AD, contact MD Helicopters LLC, 4555 East McDowell Road, Mesa, AZ, 85215-9734; phone: (480) 346-6300; email: info@mdhelicopters.com; website: mdhelicopters.com/contact/.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 10101 Hillwood Parkway, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on June 26, 2026.

Christopher R. Parker,
Acting Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.
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