

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2006-24518; Directorate Identifier 2006-SW-10-AD; Amendment 39-14569; AD 2006-08-12]

RIN 2120-AA64

#### Airworthiness Directives; MD Helicopters, Inc. Model 600N Helicopters

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD) for the MD Helicopters, Inc. (MDHI) Model 600N helicopters, that currently requires inspecting both upper tailboom attachment fittings, nut plates and both angles for a crack or thread damage, and repairing or replacing any cracked or damaged part. That AD also requires replacing the upper right tailboom attachment bolt with a new attachment bolt, and if the upper right attachment bolt is broken, replacing the three remaining attachment bolts with airworthy bolts. Adding a washer to each bolt and modifying both access covers is also required. Thereafter, inspecting the upper tailboom attachments and repairing or replacing any cracked part is required by that AD. That AD was prompted by the discovery of a cracked attachment bolt on a helicopter. This AD requires those same actions, plus installing additional inspection holes in the aft fuselage skin panels and inspecting the upper and lower tailboom attachment fittings, the upper longerons, and the angles and nut plates for cracks. It also requires, within a specified time, replacing the upper right tailboom attachment fitting, painting the inspection area, and replacing existing nut plates. Additionally, it requires inspecting the attachment bolts for any damage or wear. This amendment is prompted by an accident involving a Model 600N helicopter. The actions specified by this AD are intended to prevent failure of the tailboom attachment fittings, separation of the tailboom from the helicopter, and subsequent loss of control of the helicopter.

**DATES:** Effective April 27, 2006.

The incorporation by reference of MD Helicopters Service Bulletin SB600N-039, dated December 9, 2003; MD Helicopters Service Bulletin SB600N-043, dated April 13, 2006; and MD Helicopters Technical Bulletin TB600N-007, Revision 1, dated April 13, 2006, as listed in the regulations, is approved by the Director of the Federal Register as of April 27, 2006.

The incorporation by reference of MD Helicopters Service Bulletin SB600N-036, dated November 2, 2001, as listed in the regulations, was approved previously by the Director of the Federal Register as of April 29, 2002 (67 FR 17934, April 12, 2002).

Comments for inclusion in the Rules Docket must be received on or before June 26, 2006.

**ADDRESSES:** Use one of the following addresses to submit comments on this AD:

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically;
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically;
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590;
- Fax: (202) 493-2251; or
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may get the service information identified in this AD from MD Helicopters Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, Arizona 85215-9734, telephone 1-800-388-3378, fax 480-346-6813, or on the Web at <http://www.mdhelicopters.com>.

### Examining the Docket

You may examine the docket that contains the AD, any comments, and other information on the Internet at <http://dms.dot.gov>, or in person at the Docket Management System (DMS) Docket Offices between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the DMS receives them.

**FOR FURTHER INFORMATION CONTACT:** Jon Mowery, Aviation Safety Engineer, FAA, Los Angeles Aircraft Certification Office, Airframe Branch, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5322, fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** On April 12, 2002, the FAA published AD 2001-24-51, Amendment 39-12706 (67 FR 17934), applicable to MDHI Model 600N helicopters, that had been issued on November 28, 2001, to all known operators. That AD requires, within 5 hours time-in-service (TIS), inspecting both upper tailboom attachment fittings, nut plates, and both angles for a crack or thread damage, and repairing or replacing any cracked or damaged part before further flight. That AD also requires replacing the upper right tailboom attachment bolt with a new bolt, and if the upper right tailboom attachment bolt is broken, replacing the three remaining attachment bolts with airworthy attachment bolts before further flight. Adding a washer to each bolt and modifying both access covers was also required. Thereafter, inspecting the upper tailboom attachments at intervals not to exceed 25 hours TIS and repairing or replacing any cracked part is required by that AD. That AD was prompted by the discovery of a cracked attachment bolt on a helicopter. That condition, if not corrected, could result in failure of a tailboom attachment, loss of the tailboom, and subsequent loss of control of the helicopter.

Since issuing that AD, on March 21, 2006, an accident occurred in Alberta, Canada, involving an MDHI Model 600N helicopter, resulting in one fatality. That accident may have been caused by failure of the thread engagement between the nut plate and bolt, and/or by cracking in the attachment bathtub fitting. This condition, if not corrected, could result in failure of the tailboom attachment fittings, separation of the tailboom from the helicopter, and subsequent loss of control of the helicopter.

On February 2, 2005, we issued a notice of proposed rulemaking (NPRM), applicable to MDHI Model 600N helicopters, to supersede AD 2001-24-51. That NPRM, Docket No. 2004-SW-16-AD (70 FR 7065, February 10, 2005), proposed to require the same actions required by AD 2001-24-51,

and also proposed to require, before further flight, installing six additional inspection holes in the aft fuselage skin panels. The NPRM also proposed to require, within 100 hours TIS, inspecting the lower tailboom attachment fittings, inspecting the upper longerons at intervals not to exceed 1,200 flight hours, and additionally proposed a terminating action of modifying the fuselage aft section to strengthen the tailboom attachments and longerons. We anticipate withdrawing that NPRM. We also anticipate issuing a subsequent AD to require, within 24 months TIS, modifying the aft fuselage to strengthen the tailboom attachments and the longerons.

We have reviewed the following MDHI service information:

- MD Helicopters Service Bulletin SB600N-036, dated November 2, 2001, which describes procedures for inspecting the tailboom attachment fittings, repairing damaged fittings, and installing inspection holes in the upper right and upper left access covers;
- MD Helicopters Service Bulletin SB600N-039, dated December 9, 2003, which describes procedures for installing additional inspection holes in the fuselage, and also describes procedures for recurring inspections of the tailboom attachment fittings and of the upper longerons for cracks; and
- MD Helicopters Service Bulletin SB600N-043, dated April 13, 2006, which describes procedures for inspecting the tailboom attachment fittings and attachment bolts, and replacing the nut plates, attachment fittings, and attachment bolts, if necessary.
- MD Helicopters Technical Bulletin TB600N-007, Revision 1, dated April 13, 2006, which describes procedures for modifying the fuselage aft section to strengthen tailboom attachment fittings and upper longerons.

Since an unsafe condition has been identified that is likely to exist or develop on other MDHI Model 600N helicopters of the same type design, this AD supersedes AD 2001-24-51 to require, within 5 hours TIS, installing six inspection holes in the aft fuselage skin panels. Then, using a borescope, inspect all four tailboom attachment fittings and the surrounding areas, the upper longerons, the upper nut plates and the upper angles for cracks. Add a washer to each bolt between the tailboom and the NAS1587 countersunk washer. If a crack is found on a right-hand angle, before further flight, install a new clip. If a crack is found on the left-hand angle, before further flight, replace the angle with an airworthy angle, or repair the angle in accordance with FAA-approved procedures. Finally, replacing the upper RH tailboom attachment bolt with a new bolt, and if the upper right attachment bolt is broken, replacing the three remaining attachment bolts with airworthy attachment bolts before further flight is required. Within 25 hours TIS, the following actions are also required:

- Inspecting all attachment fittings and surrounding areas;
- Replacing the upper right tailboom attachment fitting with an airworthy fitting;
- Painting the inspection area;
- Inspecting the attachment bolts for wear or damage;
- Replacing worn or damaged attachment bolts; and
- Replacing all existing nut plates with airworthy nut plates. Thereafter, inspect the upper tailboom attachment fittings, angles, and nut plates at intervals not to exceed 25 hours TIS, and inspect the lower tailboom attachment fittings, angles and nut plates at intervals not to exceed 100 hours TIS. Modifying the aft fuselage to strengthen the tailboom attachments and the longerons constitutes a terminating action for the requirements of this AD. Accomplish the actions by following the specified portions of the service and technical bulletins described previously.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability and structural integrity of the helicopter. A portion of the helicopters operated in this fleet have high utilization rates. Drilling inspection holes and inspecting the tailboom attachment fittings and surrounding areas for cracks are required within 5 hours TIS, therefore this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that this AD will affect 18 helicopters, and:

- Initial inspections will take approximately 2 work hours;
- Repetitive inspections will take approximately 24 work hours; and
- The initial modification will take approximately 25 work hours for a total of 51 work hours per helicopter to accomplish at an average labor rate of \$80 per work hour. Required parts will cost approximately \$2,050 for each tailboom attachment fitting (1 per helicopter) and \$26 for 4 nut plates and 4 rivet collars per helicopter. Based on these figures, which assume a rate of utilization of 600 hours TIS per year, resulting in 24 repetitive inspections per year, we estimate the total cost impact of the AD on U.S. operators to be approximately \$6,156 per helicopter, or \$110,808, for the fleet, to perform the inspections and replacements.

### **Comments Invited**

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2006-24518; Directorate Identifier 2006-SW-10-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of our docket Web site, you can find and read the comments to any of our dockets, including the name of the individual who sent the comment. You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

### **Regulatory Findings**

We have determined that 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 the 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); 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.

We prepared an economic evaluation of the estimated costs to comply with this AD. See the DMS to examine the economic evaluation.

### **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.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing Amendment 39-12706 (71 FR 17934, April 12, 2002), and by adding a new airworthiness directive (AD), Amendment 39-14569, to read as follows:

SUPERSEDED

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2006-08-12 MD Helicopters, Inc:** Amendment 39-14569. Docket No. FAA-2006-24518; Directorate Identifier 2006-SW-10-AD. Supersedes AD 2001-24-51, Amendment 39-12706, Docket No. 2001-SW-57-AD.

## Applicability

Model 600N helicopters, serial numbers with a prefix "RN" and 003 through 058, that have not been modified in the fuselage aft section to strengthen the tailboom attachments and longerons in accordance with MD Helicopters Technical Bulletin TB600N-007, dated January 12, 2004, or TB600N-007, Revision 1, dated April 13, 2006, certificated in any category.

## Compliance

Required as indicated.

To prevent failure of the tailboom attachment fittings, separation of the tailboom from the helicopter, and subsequent loss of control of the helicopter, accomplish the following:

**Note 1:** There is a slight discrepancy between MD Helicopters, Inc. Service Bulletin SB600N-036, dated November 2, 2001 (SB600N-036) and MD Helicopters Service Bulletin SB600N-039, dated December 9, 2003 (SB600N-039) on the vertical location of the upper left inspection hole. Either location is acceptable for this AD.

(a) Within 5 hours time-in-service (TIS), unless accomplished previously:

(1) Remove the tailboom fairing and tailboom. Remove both upper tailboom attachment access covers in accordance with the Accomplishment Instructions, paragraph 2.B.(2) of SB600N-036.

**Note 2:** MDHI CSP-HMI-2, Section 53-40-30, pertains to the subject of this AD.

(2) Using a light and a 10x or higher magnifying glass:

(i) Inspect the right and left upper tailboom attachment fittings, part number (P/N) 500N3422 and 500N3422-3, respectively, for a crack as shown in Figure 1 of the SB600N-036. If a crack is found, replace any cracked attachment fitting with an airworthy attachment fitting before further flight.

(ii) Inspect both upper tailboom attachment nut plates for thread damage or a crack. Replace any damaged or cracked nut plate with an airworthy nut plate before further flight.

(iii) Inspect both angles for a crack. If a crack is found on a right-hand angle, P/N 500N3429-6, before further flight, install a new clip in accordance with the Accomplishment Instructions, paragraph 2.B.(5)(c) of the SB600N-036. If a crack is found on the left-hand angle, P/N 500N3429-7, before further flight, replace the angle with an airworthy angle, or repair the angle in accordance with FAA-approved procedures.

- (3) Replace the upper right (pilot side) tailboom attachment bolt (bolt) with a new bolt.
- (4) If the removed upper right pilot-side bolt is broken, replace the remaining three bolts with airworthy bolts before further flight.
- (5) Add one washer, P/N AN960C516 (NAS1149C0563R) or AN960C616 (NAS1149C0663R), as appropriate, to each tailboom bolt between the tailboom and the NAS1587 countersunk washer. A minimum of two threads must extend past the nut plate.
- (6) Modify both access covers in accordance with the Accomplishment Instructions, paragraph 2.B.(6), of the SB600N-036.

(b) Within 5 hours TIS, unless accomplished previously:

(1) Drill four additional inspection holes in the fuselage as shown for the left side of the fuselage in Figure 1 of SB600N-039, by following the Accomplishment Instruction paragraphs of SB600N-039 as follows:

(i) Paragraphs 2.A.(1)(a), (b), and (d) for inspection holes at L166 and R166.

(ii) Paragraphs 2.A.(2)(a), (b), and (d) for inspection holes at L153 and R153.

(2) Thoroughly clean the attachment fittings and surrounding area. If the attachment fittings and surrounding area cannot be satisfactorily cleaned to accomplish a borescope inspection, then accomplish the actions in paragraph (c) of this AD.

(3) Using a lighted borescope, inspect all four attachment fittings and the surrounding area for cracking.

(i) If a crack is found in the upper right attachment fitting, accomplish the actions in paragraph (c) of this AD.

(ii) If a crack is found in any of the other three attachment fittings, before further flight, accomplish the actions described in paragraph (f) of this AD.

(4) Visually inspect the upper longerons for cracking in accordance with the Accomplishment Instructions, paragraph 2.C., of SB600N-039. If a crack is found in the upper longeron, accomplish the actions in paragraph (e) of this AD.

**Note 3:** The reference in Figure 1 of SB600N-039 to the inspection hole at L167 mistakenly states that it was "Added by SB900-036." Inspection holes at L167 and R167 were originally specified by SB600N-036.

(c) Within 25 hours TIS, unless accomplished previously:

(1) Thoroughly clean all attachment fittings and the surrounding areas, inspect the area for cracking, replace the upper right attachment fitting and all four nut plates, and paint the area inside of the attachment fittings in accordance with the Accomplishment Instructions, paragraph 2.B., of MD Helicopters Service Bulletin SB600N-043, dated April 13, 2006 (SB600N-043). If a crack is found in any of the other three attachment fittings, before further flight, accomplish the actions described in paragraph (f) of this AD.

(2) Using a 10x magnifying glass, inspect the attachment bolts' threads and shanks for wear or damage in accordance with paragraph 2.B., of SB600N-043. If wear or damage is present, replace the attachment bolts with airworthy bolts.

(d) Thereafter, at the specified intervals, remove the plug buttons from the inspection holes, and using a bright light, inspect the upper and lower left and upper and lower right attachment fittings, angles, and nut plates for a crack by following the Accomplishment Instruction paragraphs of SB600N-039, as follows, except you are not required to contact MDHI to meet the requirements of this AD.

(1) At intervals not to exceed 25 hours TIS, through inspection holes at L167 and R167, inspect the upper left and upper right attachment fittings, angles, and nut plates by following the Accomplishment Instructions, paragraphs 2.B.(2) through 2.B.(4), of SB600N-039.

(2) At intervals not to exceed 100 hours TIS, through inspection holes at L166 and R166, inspect the lower left and lower right attachment fittings, angles, and nut plates by following the Accomplishment Instructions, paragraphs 2.B.(2) through 2.B.(4), of SB600N-039.

(e) If a crack is found in the upper right attachment fitting, or in any angle, nut plate, longeron, or if thread wear or damage is found on any nut plate or bolt, before further flight, replace the cracked or worn or damaged part with an appropriate airworthy part, or accomplish the actions in paragraph (f) of this AD. If cracking is found in any of the other three attachment fittings, before further flight, accomplish the actions described in paragraph (f) of this AD.

(f) If required by paragraph (c)(1) of this AD, or if you choose to make this modification to comply with paragraph (e) of this AD, modify the aft fuselage to strengthen the tailboom attachments and the longerons by following the Accomplishment Instructions of MD Helicopters Technical Bulletin TB600N-007, Revision 1, dated April 13, 2006. Modifying the aft fuselage in accordance with this paragraph constitutes a terminating action for the requirements of this AD.

(g) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Los Angeles Aircraft Certification Office, Airframe Branch, FAA, ATTN: Jon Mowery, Aviation Safety Engineer, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5322, fax (562) 627-5210, for information about previously approved alternative methods of compliance.

(h) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to the nearest maintenance facility capable of performing the inspections and modification.

(i) The inspections shall be done in accordance with MD Helicopters Service Bulletin SB600N-036, dated November 2, 2001. The incorporation by reference of that document was approved previously by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51, as of April 29, 2002 (67 FR 17934, April 12, 2002). The inspections, replacements and modifications shall be done in accordance with MD Helicopters Service Bulletin SB600N-039, dated December 9, 2003; MD Helicopters Service Bulletin SB600N-043, dated April 13, 2006; and MD Helicopters Technical Bulletin TB600N-007, Revision 1, dated April 13, 2006. The incorporation by reference of these documents was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from MD Helicopters Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, Arizona 85215-9734, telephone 1-800-388-3378, fax 480-346-6813, or on the web at <http://www.mdhelicopters.com>. Copies may be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(j) This amendment becomes effective on April 27, 2006.

Issued in Fort Worth, Texas, on April 20, 2006.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.  
[FR Doc. 06-3986 Filed 4-26-06; 8:45 am]  
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