

# EMERGENCY AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

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

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**DATE: November 28, 2001  
2001-24-51**

Send to all U.S. owners and operators of MD Helicopters, Inc. Model 600N helicopters.

This Emergency Airworthiness Directive (AD) is prompted by the discovery of a cracked tailboom attachment bolt (bolt) on a helicopter. Further inspection revealed cracking on bolts and attachments on several other helicopters. This condition, if not corrected, could result in failure of a tailboom attachment, loss of the tailboom, and subsequent loss of control of the helicopter.

The FAA has reviewed MD Helicopters, Inc. Service Bulletin SB600N-036, dated November 2, 2001 (SB). The SB describes procedures for inspecting the tailboom attach fittings and repairing damaged fittings. In addition to those procedures, the FAA has determined that if one bolt is broken, all four bolts must be replaced. Also, we have determined that a 25-hour time-in-service (TIS) repetitive inspection of the tailboom attachments is required.

Since we have identified an unsafe condition that is likely to exist or develop on other helicopters of the same type design, accomplish the following:

- Within 5 hours time-in-service (TIS):
  - Remove the tailboom fairing, tailboom, and both upper tailboom attachment access covers.
  - Using a light and a 10x or higher magnifying glass, inspect for a crack or damage:
    - Both upper tailboom attachments and nutplates. If a crack or damage is found, replace any cracked or damaged attachments or nutplates with an airworthy part before further flight.
    - Both angles. If a crack is found on the right-hand (RH) angle, before further flight, install a new clip. If a crack is found on the left-hand angle, before further flight, replace or repair the angle.
  - Replace the upper RH tailboom attachment bolt with a new bolt. If the upper RH bolt is found broken, before further flight, also replace the three remaining bolts.
  - Add a washer to each bolt.
  - Modify both upper access covers.
- At intervals not to exceed 25 hours TIS, using a borescope through the hole in each upper access cover, inspect the upper tailboom attachments for a crack. Repair or replace any cracked part with an airworthy part before further flight.

The actions are required to be accomplished in accordance with the SB described previously.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

**2001-24-51 MD HELICOPTERS, INC.:** Docket No. 2001-SW-57-AD.

*Applicability:* Model 600N helicopters, serial numbers with a prefix “RN” and 003 through 063, certificated in any category.

**Note 1:** This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

*Compliance:* Required as indicated, unless accomplished previously.

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

(a) Within 5 hours time-in-service (TIS):

(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 the MD Helicopters, Inc. (MDHI) Service Bulletin SB600N-036, dated November 2, 2001 (SB).

**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 attachments, part number (P/N) 500N3422 and 500N3422-3, respectively, for a crack as shown in Figure 1 of the SB. If a crack is found, replace any cracked attachment fitting with an airworthy attachment fitting before further flight.

(ii) Inspect both upper tailboom attachment nutplates for thread damage or a crack. Replace any damaged or cracked nutplate with an airworthy nutplate 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 SB. 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-hand (pilot side) tailboom attachment bolt (bolt) with a new bolt.

(4) If the removed upper pilot-side bolt is found 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 nutplate.

(6) Modify both access covers in accordance with the Accomplishment Instructions, paragraph 2.B.(6), of the SB.

(b) At intervals not to exceed 25 hours TIS, using a borescope, through the hole in each upper access cover, inspect the right and left upper tailboom attachments, nutplates, and angles for a crack. If a crack is found, replace or repair any cracked part with an airworthy part in accordance with the requirements of this AD before further flight.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (LAACO), FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, LAACO.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the LAACO.

(d) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the requirements of this AD can be accomplished.

(e) **Emergency AD 2001-24-51, issued November 28, 2001, becomes effective upon receipt.**

**FOR FURTHER INFORMATION CONTACT:** Fred Guerin, Aviation Safety Engineer, FAA, Los Angeles Aircraft Certification Office, Airframe Branch, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5232, fax (562) 627-5210.

Issued in Fort Worth, Texas, on November 28, 2001.

**Eric Bries,**

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