SUMMARY:

Two operators of MD Helicopters, Inc. Model 369/500/600 Helicopters experienced cracking in the Skin adjacent to the Trim Tab on one of their Main Rotor Blades. In both cases, the cracking was discovered during inspection after completing a flight during which an increase in vibration levels was noticed.

Evidence of damage in the affected area due to impact damage, filing, or sanding was present under the paint.

An enhanced inspection of the Skin adjacent to the Trim Tab is required during the 100 Hour Periodic Inspection in order to ensure that this cracking is not present.

PURPOSE:

The purpose of this bulletin is to require an enhancement to the 100 Hour Periodic Inspection of the Skin adjacent to the Trim Tab.

Failure to comply with this bulletin may result in undetected cracking and subsequent loss of a Main Rotor Blade during operation. Loss of a Main Rotor Blade will cause significant vibration and loss of control of the aircraft.

REVISION:

N/A.

PART NUMBERS AND SERIAL NUMBERS AFFECTED:

All Variants of Main Rotor Blade installed on an MD Helicopters, Inc. Model 369A, H, HE, HM, HS, D, E, FF, 500N, and 600N. This includes the following Part Numbers:

- 500P2100 ALL VARIANTS (STC Numbers SR09074RC, SR09184RC, and SR09172RC)
- 500P2300 ALL VARIANTS (STC Number SR01050LA)
- 369D21120 ALL VARIANTS
- 369D21121 ALL VARIANTS
- 369D21123 ALL VARIANTS
- 369A1100 ALL VARIANTS
- 369D21100 ALL VARIANTS
- 369D21102 ALL VARIANTS

HELICOPTER MODEL AFFECTED:

MD Helicopters, Inc. Models 369A, H, HE, HM, HS, D, E, FF, 500N, and 600N.
MAIN ROTOR BLADE
ENHANCED 100-HOUR INSPECTION REQUIREMENTS

REFERENCES:
1) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-HMI-2), Revision 29, dated May 11, 2001 or later
2) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-H-2), Revision 17, dated May 15, 2001 or later
3) MD Helicopters, Inc. Appendix B (CSP-H-4), Revision 1, dated May 14, 2001 or later
4) Maintenance Manual HTCM-001, Main Rotor Blades (Installation and Maintenance), Revision H, dated February 12, 2009 or later.

FAA APPROVAL:
The design engineering aspects of this Bulletin have been shown to comply with the applicable Federal Aviation Regulations (FARs) and are FAA Approved.

Figure 1
Examples of Cracking adjacent to the Inboardmost Area of the Trim Tab (Approximately Blade Station 91) Initiating at the Trailing Edge and Proceeding in the Leading Edge Direction
MAIN ROTOR BLADE
ENHANCED 100-HOUR INSPECTION REQUIREMENTS

TIME OF COMPLIANCE:
This bulletin shall be accomplished within 25 flight hours after receipt of this bulletin and on Every 100 Hour Inspection or Annual Inspection thereafter.

MANPOWER:
Approximately 0.1 man-hours will be required to accomplish this bulletin.

WARRANTY POLICY:
As applicable per Helicopter Technology Company (HTC) written Limited Warranty for New Product located on the company Website at www.helicoptertech.com.

DISPOSITION OF PARTS REMOVED:
SCRAP. Notify at the below Contact for further instructions.

INSPECTION FOR CRACKING:
1) Perform Inspection required for Area 8 as defined in CSP-HMI-2, Chapter 62-10-00 and in CSP-H-2, Section 7, Chapter 10, as applicable.
2) Additionally, Inspect each subject Main Rotor Blade for Cracking adjacent to the Inboardmost Area of the Trim Tab (Approximately Blade Station 91, Area 8 as defined in Figure 601 in CSP-HMI-2, Chapter 62-10-00 and Figure 7-8 in CSP-H-2, Section 7, Chapter 10) initiating at the Trailing Edge and proceeding in the Leading Edge direction. Inspect the Top Surface and Bottom Surface independently. Use a Bright Flashlight and 10x Magnifying Glass. Any evidence of cracking scraps the blade. See Figure 1 for examples of Cracking.
3) If a crack is found, replace Blade with an airworthy Main Rotor Blade.

RECORDING AND COMPLIANCE:
Record compliance as applicable in the Rotorcraft Log Book (Reference 4–CSP-RLB) and/or Serviceable Component Record.

POINTS OF CONTACT:
For further information and rotor blade disposition, contact Helicopter Technology Company (HTC), LLC at (310) 523-2750, or FAX (310) 523-2745. www.helicoptertech.com

THIS SERVICE BULLETIN IS FAA APPROVED