

**HUGHES  
SERVICE INFORMATION  
NOTICE**

NOTICE NO. HN-73

DATE 19 August 1974

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FAA APPROVED

**SUBJECT: INSPECTION - MAIN ROTOR BLADE TRAILING EDGE**

**MODELS AFFECTED: All 500 Model 369H Series Helicopters**

**TIME OF COMPLIANCE:** Shall be accomplished within next 25 hours of helicopter operation, and at each 100-Hour Periodic Inspection thereafter.

**PREFACE:** The information given in this Service Information Notice lists a procedure for a visual inspection of the main rotor blade trailing edge for nicks, scratches and cracks. Damage and repair criteria for the blade trailing edge area are also provided. The instructions and data provided in this Notice will be incorporated in the next revision to the applicable handbooks referenced below.

**Reference**

500 Series - Basic HMI, Issued 1 October 1972; Revision No. 3, 1 January 1974  
500 Series - HMI Appendix B, Issued 1 October 1972; Revision No. 3, 1 August 1974

Customer Service Department - Hughes Helicopters - Culver City, California

## TOOLS AND EQUIPMENT

Magnifying Glass - 5X minimum  
Dial Indicator

## PROCEDURE

- a. Using bright light and a 5-power magnifying glass, visually inspect main rotor blade trailing edge for evidence of nicks, scratches, and cracks generating from the trailing edge.
- b. Using light and magnifying glass, visually inspect from different angles the radius formed at the juncture of Area 6 (blade trailing edge) and Area 7 (tabs) for nicks, scratches and cracks. (See Figure 1.)

## NOTE

Nicks and scratches at the radii can cause fatigue cracks in the blade skin.

- c. As required, make repairs per damage and repair limits shown in Figure 1. Damage in excess of allowable limits requires blade replacement.
- d. Record compliance with this Service Information Notice in Compliance Record of helicopter Log Book.

## WEIGHT AND BALANCE DATA

Weight and balance not affected.



AREA	SCRATCHES (NOTE 1)				GOUGES AND NICKS (NOTE 1)		GOUGES AND NICKS (NOTE 1)	
	ORIENTATION FROM SPANLINE	MAXIMUM DEPTH WITHOUT REPAIR	MAXIMUM DEPTH WITH REPAIR	MAXIMUM DEPTH WITHOUT REPAIR	MAXIMUM DEPTH WITHOUT REPAIR	MAXIMUM DEPTH WITH REPAIR	MAXIMUM DEPTH WITHOUT REPAIR	MAXIMUM DEPTH WITH REPAIR
1	0°-90°	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION	MINOR WITHOUT SKIN PENETRATION
2	0°-30° 30°-90°	0.005 0.003	0.005 0.003	0.003 0.003	0.005 0.005	0.003 0.003	0.005 0.005	0.005 0.005
3	0°-30° 30°-90°	NONE NONE	0.005 0.003	NONE NONE	0.005 0.005	NONE NONE	0.005 0.005	0.005 0.005
4	0°-30° 30°-90°	NONE NONE	0.003 0.002	NONE NONE	0.003 0.003	NONE NONE	0.003 0.003	0.003 0.003
5 (NOTE 2)	0°-90°	NONE	0.001 (NOTE 3)	NONE	0.001 (NOTE 3)	NONE	0.001 (NOTE 3)	0.001 (NOTE 3)
6	0°-15° 15°-30° 30°-90°	0.005 0.003 NONE	0.005 0.005 0.003	NONE NONE NONE	0.005 0.005 0.005	NONE NONE NONE	0.005 0.005 0.005	0.005 0.005 0.005
7	0°-90°	NONE	0.005 (NOTE 3)	NONE	0.005 (NOTE 3)	NONE	0.005 (NOTE 3)	0.005 (NOTE 3, 4, 5)

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. DAMAGE LIMITS APPLY TO BOTH UPPER AND LOWER ROOT FITTINGS.
3. INSPECTION UNDER 5X MAGNIFICATION (MINIMUM) REQUIRED.
4. AREAS NOTED - 0.25 SMOOTHED AND RADIUS CLEANOUT ALLOWED.
5. SAME AS AREA 6.

30-036-2

Figure 1. Main rotor blade damage and repair limits for nicks, scratches and cracks (Sheet 2 of 2)