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MANDATORY

### TAIL ROTOR BLADE ASSEMBLY INSPECTION

### 1. PLANNING INFORMATION

### A. <u>Aircraft Affected:</u>

All MD Helicopters, Inc. (MDHI) Model 369A (Army OH-6A), 369H, 369HE, 369HS, 369HM, 369D, 369E, 369F, and 369FF, and tail rotor blade assemblies in spares inventory.

### B. Assembly/Components Affected By This Notice:

Tail Rotor Blade Assembly<br/>Helicopter Technology Co. (HTC)MDHI P/N 369D21640-501 and -503<br/>HTC P/N 500P3100-101 to include "M", "MT", "I" and "IT"Tail Rotor Blade Assembly<br/>Helicopter Technology Co. (HTC)MDHI P/N 369D21641-501 and -503<br/>HTC P/N 500P3100-301 to include "M", "MT", "I" and "IT"Tail Rotor Blade Assembly<br/>Helicopter Technology Co. (HTC)MDHI P/N 369D21643-501 and -503<br/>HTC P/N 500P3300-501 to include "M", "MT", "I" and "IT"Tail Rotor Blade Assembly<br/>Helicopter Technology Co. (HTC)MDHI P/N 369D21643-501 and -503<br/>HTC P/N 500P3300-501 to include "M", "MT", "I" and "IT"Tail Rotor Blade Assembly<br/>Helicopter Technology Co. (HTC)MDHI P/N 369D21642-501 and -503<br/>HTC P/N 500P3500-701 to include "M", "MT", "I" and "IT"

### C. Reason:

Failure to comply with this bulletin can result in the pitch control arm separating from the tail rotor blade. This will lead to an unbalanced condition, vibration, partial loss of tail rotor pitch control and possible loss of directional control of the helicopter.

### D. <u>Description:</u>

Procedures in this Bulletin give owners and operators information that pertains to an inspection of the tail rotor blade assembly pitch control arm for any evidence of corrosion, corrosion pitting or cracks.

### E. Time of Compliance:

Perform this Bulletin within five (5) flight hours of receiving this Bulletin. Remove Tail Rotor Blade Assembly, strip paint and inspect each pitch control arm (all four sides and the pocket) for corrosion, corrosion pitting or cracks in the hatched areas shown in Figure 1 of this Bulletin.

### F. FAA Approval:

The technical design aspects of this Bulletin are FAA Approved.

### G. <u>Manpower:</u>

Corrosion Inspection: Five and one-half (5.5) man-hours.

### H. Interchangeability:

None.

### I. Points of Contact:

For further assistance, contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1-800-388-3378 or 480-346-6387. DATAFAX: 480-346-6813.

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### J. <u>Material/Part Availability:</u>

Contact MDHI Field Service Department.

REPLACEMENT PARTS/SUPPLIES				
Nomenclature	Part No.	Qty.	Source	
Tail Rotor Blade Assembly	369D21640-507	AR	MDHI	
Tail Rotor Blade Assembly	369D21641-507	AR	MDHI	
Tail Rotor Blade Assembly	369D21642-507	AR	MDHI	
Tail Rotor Blade Assembly	369D21643-507	AR	MDHI	
Tail Rotor Blade Assembly	500P3100-305	AR	нтс	
Tail Rotor Blade Assembly	500P3300-505	AR	нтс	
Tail Rotor Blade Assembly	500P3500-705	AR	НТС	
Paint Stripper	Turco #5351	1	Henkel	
Aluminum Tape (0.005 thick 2.0 width)	MIL-T-23399	1	ЗМ	
Alodine	Alodine 1201	1	Henkel	

### K. <u>Warranty Policy:</u>

N/A

### L. Tooling:

Magnifying Glass, 10X minimum - commercial

Bright Light Source - commercial

TOOLS AND EQUIPMENT			
Nomenclature	Source		
Magnifying Glass 10X	Commercial		
Bright Light Source	Commercial		



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### M. <u>Weight and Balance:</u>

N/A

### N. Electrical Load Data:

N/A

### O. Other Publications Affected:

CSP-HMI-2 Basic Handbook of Maintenance Instructions - Servicing and Maintenance

CSP-H-2 Basic Handbook of Maintenance Instructions

CSP-H-4, Appendix B – Airworthiness Limitations Overhaul and Replacement Schedules Periodic Inspections Weight and Balance Procedures

### P. <u>Reference Publications:</u>

Refer to the latest revision of these publications for procedures and additional information:

CSP-HMI-2 Basic Handbook of Maintenance Instructions - Servicing and Maintenance

CSP-H-2 Basic Handbook of Maintenance Instructions

AD 2003-08-51 issued April 15, 2003

AMOC June 13, 2003 for AD 2003-08-51

HTC Service Bulletin 3100-5 - Tail Rotor Blade Pitch Control Arm Corrosion Inspection

### 2. ACCOMPLISHMENT INSTRUCTIONS

(Ref. Figure 1)

### A. Corrosion Inspection

(1). Remove tail rotor blade assembly (Ref. CSP-HMI-2, Section 64-10-00, or CSP-H-2, Section 8).

## CAUTION

Use care when handling pitch bearings. Teflon reinforced linings are easily damaged if mishandled or exposed to contaminants. If lining is damaged or contaminated, bearing service life will be shortened or bearing replacement may be required.

(2). (Ref. Figure 1, Note 2). Carefully tape around bearing, bushing and blade areas to prevent contamination from debris and paint stripper. Use aluminum tape that is resistant to paint stripper.

**CAUTION** Extreme care shall be taken to prevent debris or paint stripper contamination in bearing and bushing areas and tail rotor blade bond surfaces and cavities.

(3). Remove paint from tail rotor blade pitch control arm (all four sides and the pocket) as shown in Figure 1 with paint stripper. (Ref. CSP-HMI-2, Section 20–30–00 or CSP-H-2, Section 2).

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**CAUTION** The pitch control arm area is shot peened and has a protective chemical coating. No abrasive cleaning, sanding or blending is allowed.

- (4). (Ref. Figure 1 hatched area). Use a bright light and 10X magnifying glass to inspect the tail rotor blade pitch control arm (all four sides and the pocket) for corrosion, corrosion pitting or cracks. No corrosion, corrosion pitting or cracks are allowed. If corrosion, corrosion pitting or cracks are present, replace blade assembly before next flight. (Ref. CSP-HMI-2, Section 64-10-00 or CSP-H-2, Section 8). Mark the defective tail rotor blade assembly as scrap and destroy.
- (5). Make sure the inspection area has a "dimpled" shot peen surface texture. If the inspection area surface is not shot peened or there is evidence of blending or material removal that affected the shot peened surface, replace blade assembly before next flight. (Ref. CSP-HMI-2, Section 64-10-00 or CSP-H-2, Section 8). In addition, check rotorcraft maintenance records to make sure no rework was done in this area. Mark the defective tail rotor blade assembly as scrap and destroy.
- (6). If no corrosion, corrosion pitting or cracks exist and the inspection area has an acceptable shot peen surface texture, refinish stripped pitch control arm as follows:
  - (a). Apply alodine per instructions contained in the CSP-HMI-2, Section 20-40-00 or CSP-H-2, Section 2).
  - (b). Apply primer and paint to match original as required (Ref. CSP-HMI-2, Section 20-30-00 or CSP-H-2, Section 2).
- (7). Install tail rotor blade assembly (Ref CSP-HMI-2, Section 64-10-00 or CSP-H-2, Section 8).

### B. Compliance Record

- (1). Record compliance to this Service Bulletin in the Compliance Record section of the Rotorcraft Log Book and the tail rotor blade assembly component card.
- (2). Complete Bulletin Completed Record form (attached) and FAX or e-mail to MDHI Field Service Department.

### C. Periodic Inspection

Upon completion of this Bulletin, perform yearly inspections of pitch control arm per CSP-HMI-2, Section 05-20-15 or CSP-H-4, Section 05-20-15.



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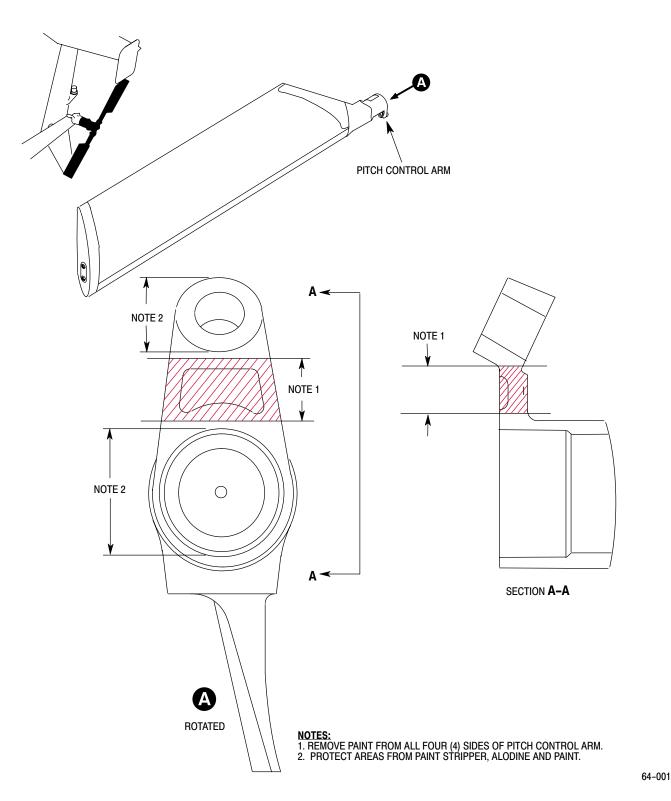


Figure 1. Tail Rotor Pitch Control Arm

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## **Bulletin Completed Record** TAIL ROTOR BLADE ASSEMBLY INSPECTION

MD Helicopters, Inc. **Field Service Department** 4555 E. McDowell Road Mesa. AZ 85215-9734

800-388-3378 Phone (U.S. and Canada) 480-346-6387 Phone (International) 480-346-6813 Fax

**SERVICE BULLETIN** 

FAX this form to MDHI (480) 346-6813 or E-mail to ServiceEngineering@mdhelicopters.com

Owner	Helicopter		
/Operator:			
Address:	Helicopter Total Time:		
	Tail Rotor Blade		
	S/N:		
	Date Complete:		
Phone:	Location:		
E-mail:			
	(Signature)		
	(Print Name)		
	(Tit	e)	
Comments:			

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