ROUTINE

TB 1-1520-248-20-21

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

TAILBOOM VISUAL INSPECTION ON ALL OH-58D AND OH-58D(I) HELICOPTERS

Headquarters, Department of the Army, Washington, D. C.

22 December 1993

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NOTE

THIS PUBLICATION IS EFFECTIVE INDEFINITELY UNLESS SOONER RESCINDED OR SUPERSEDED.

- 1. Priority Classification. ROUTINE.
- a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB) the condition status symbol of the cited aircraft will be changed to a Red Dash //– //. The Red Dash // // may be cleared when the inspection of paragraph 8a. below is completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this Technical Bulletin in the time frame specified will cause the status symbol to be upgraded to a red // X //.
 - b. Aircraft in Depot Maintenance. Same as paragraph 1.a.
 - c. Aircraft Undergoing Maintenance. Same as paragraph 1.a
 - d. Aircraft in Transit.
 - (1) Surface/Air Shipment. Prior to First Flight.
- (2) Ferry Status. Comply with paragraph 8.a. prior to and during ferry flight. Comply with paragraph 8.b. at final destination, within the specified time period.
 - e. Maintenance trainers (Category A, B, and C) N/A.
 - f. Component/parts in stock including war reserves at all levels (depot and others) N/A.
- **2. Task/Inspection Suspense Date.** For recurring visual inspection prior to next flight. For one time (visually aided) inspection 10 hours/14 days.

^{*} This Technical Bulletin supersedes USAATCOM Message 162021Z Dec 93 (OH-58-94-ASAM-03)

3. Reporting Compliance Suspense Date. Report compliance to Commander, ATCOM, Attn: AM-SAT-C-XS by 10 JAN 94 per para 14a. of this TB.

4. Summary of the Problem.

- a. Safety of Flight Messages referenced in para 13a. required a one-time inspection of the tailboom tail rotor gearbox support assembly and inspection for loose or working rivets and skin damage to the tailboom area. No evidence of loose or working rivets and/or cracks in the tailboom skin were reported to have been found during that inspection. Since that time, there have been three reports from the field of skin cracks in OH-58D tailbooms that run circumferentially around the skin. These cracks have been found in the aft skin just forward of the double row of fasteners which secure the tail rotor gearbox support assembly casting to the tailboom. Investigation into the cause of tailboom cracking is ongoing; at the conclusion of this investigation future inspection requirements will be determined.
 - b. For manpower/downtime and funding impacts, see paragraph 12.
- c. The purpose of this TB is to require a visual inspection of the tailboom skin in the area of the gear-box support assembly casting attachment for loose or working rivets and skin cracks in the rivet area, during preflight and thru flight inspections, and to required visual (visually aided) check of the area initially within 10 hours/14 days and recurring at 20 hour intervals.
- 5. End Items Affected. All OH-58D and OH-58D(I) Aircraft.

6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Tailboom	206-032-004-171	1560-01-383-0102
Tailboom	206-032-004-157	1560-01-341-6074
Tailboom	206-032-004-111	1560-01-262-1356

7. Parts to be Inspected. N/A.

8. Inspection Procedures.

- a. During each preflight and thru flight inspection, visually (unaided) inspect the tailboom in the area of the gearbox support assembly attachment, including the area under the tail rotor driveshaft cover, for loose or working rivets and/or cracks in the tailboom skin in the rivet area.
- (1) Inspection area is tailboom skin just forward of the double row of fasteners securing the tail rotor gearbox support assembly casting to the tailboom. Open the tail rotor driveshaff access door P/N 406-030-123-109.
- (2) Visually inspect the tailboom skin for cracks starting from the most aft rivet attaching tail rotor driveshaft access door left hand support, P/N 406-030-123-127, to the tailboom. Inspect along left and right side skin and along top skin under the tail rotor driveshaft cover.
- b. One-time (within 10 hours/14 days) and recurring (20 hour recurring) inspection. Gain access to the tailboom in the area of the gearbox support assembly attachment, including the area under the tail rotor driveshaft cover. Using a ten power (10X) magnifying glass, visually inspect the tailboom in the vicinity of the support assembly attachment for loose or working rivets and/or cracks in the tailboom skin in the rivet area. Status symbol may be cleared following this inspection.

9. Correction Procedures.

- a. If a crack indication is observed, remove paint and primer sufficiently to verify crack with fluorescent penetrant.
 - (1) If skin is not cracked, reprime and touch-up paint.
 - (2) If a crack is verified, repair IAW TM 55-1520-248-23.
- b. To facilitate opening panels, it is recommended that the standard slotted DZUS fastener be replaced with UH-1 type butterfly DZUS fasteners.
- c. This TB will be briefed to all flight crew members prior to their next days mission, and a copy of this TB will be placed in the pilots information/reading file.
- **10. Supply/Parts and Disposition.** A QDR is required. Hold any unserviceable part/component pending disposition instructions from technical/logistical point of contact per para 16 below.

11. Special Tools, Jigs and Fixtures Required. N/A.

12. Application.

- a. Category of Maintenance. AVUM.
- b. Time Required. One hour for one end item for one time inspection.
- c. Estimated Cost Impact of Stock Fund Items to the Field. N/A.
- d. TB/MWOs to be Applied Prior to or Concurrently with this Inspection. N/A.
- e. Publications Which Require Change as a Result of This Inspection. Publications changes will be determined upon conclusion of ongoing investigation.

13. References.

- USAAVSCOM safety-of-flight messages 131600Z FEB 91 and 162330Z FEB 91.
- b. TM 55-1520-248-10, Operator's Manual Army Model OH-58D Helicopter, dated 31 Mar 92, as changed.
- c. TM 55-1520-248-23, Aviation Unit and Intermediate Maintenance Manual Army Model OH-58D Helicopter, dated 12 Jan 88, as changed.

14. Recording and Reporting Requirements.

- a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this TB on DA Form 2408-13-1, forward a priority message, datafax or E-Mail to Commander, ATCOM, ATTN: AMSAT-C-XS (SOF Compliance Officer), per AR 95-3. Datafax number is DSN 693-2064 or commercial (314) 263-2064. E-Mail address is "AMSATCXS@ST-LOUIS-EMH4. ARMY MIL". The report will cite this TB number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.
- b. Task/Inspection Reporting Suspense Date (Aircraft). Units that fail inspection shall notify the ATCOM technical point of contact, (reference para 16a.) or send a priority message to AMSAT-R-EIO within ten days after inspection.
- c. The fallowing forms are applicable and are to be completed in accordance with DA PAM 738-751,15 June 1992:
 - (1) DA Form 2408-13, Aircraft Status Information Record.
 - (2) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
 - (a) Record initial compliance on DA Form 2408-13-1.

- (b) An entry will be made on the DA Form 2408-13-1 requiring the recurring inspection. The Entry will be signed off by the person completing the inspection and a new entry will be made requiring the next inspection. The status symbol for the entry shall be a red horizontal dash.
 - (3) DA Form 2408-15, Historical Record for Aircraft.

15. Weight and Balance. N/A.

16. Points of Contact.

- a. Technical point of contact for this TB is Mr. Gene Mergel, AMSAT-R-EIO, DSN 693-1672 or commercial (314)263-1672.
- b. Logistical point of contact for this TB is Mr. Mike Sisco, SFAE-AV-ASH-L, DSN 693-7614 or commercial (314)263-7614.
- c. Forms and records point of contact for this TB is Mrs. Ann Waldeck, AMSAT-I-MDM, DSN 693-1821 or commercial (314)263-1821.

Safety point of contact for this TB is Mr. Lyell Myers, AMSAT-C-XS, DSN 693-2258 or commercial (314)263-2258.

- e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact MW4 Jay Nance or Mr. Ron Sammons, AMSAT-I-IA, DSN 693-3826/3659 or commercial (314)263-3826/3659.
- f. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/7 or commercial (31 4)263-2066/7.

By Order of the Secretary of the Army:

GORDON R. SULLIVAN General, United States Army Chief of Staff

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