

# URGENT

\*TB 1-1520-248-20-58

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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### INITIAL AND RECURRING INSPECTION OF FORWARD TAILBOOM INTERCOSTAL ASSEMBLY AND AFT FUSELAGE FRAME ASSEMBLY

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Headquarters, Department of the Army, Washington, D. C.  
25 July 2001

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#### NOTE

THIS PUBLICATION IS EFFECTIVE  
UNTIL RESCINDED OR SUPERSEDED.

#### 1. Priority Classification. URGENT.

a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB), make the following entry on DA Form 2408-13-1. Enter a RED HORIZONTAL DASH status symbol with the following entry: "Inspect Intercostal Assembly and AFT Fuselage Frame in accordance with TB 1-1520-248-20-58 prior to next flight, but not later than 26 July 2001". Clear the RED HORIZONTAL DASH entry when procedures in paragraphs 8. and 9. are completed. Affected aircraft shall be inspected as soon as practical but no later than 26 July 2001. Commanders unable to comply with requirements of this TB within time frame specified will upgrade affected aircraft to a RED X.

#### b. Aircraft in Maintenance Facility.

(1) Aircraft in AVUM, AVIM or Depot - Commanders and Facility Managers will not issue aircraft until they are in compliance with this technical bulletin.

(2) Aircraft at Contractor Facility - Bell Helicopter will inspect DD250 Aircraft prior to those aircraft departing for ferry to final destination.

#### c. Aircraft in Transit --

(1) Surface/Air Shipment. Same as paragraph 1.a.

(2) Ferry status. Inspect at final destination.

#### d. Maintenance Trainers (Category A and B). Comply no later than task/inspection suspense date.

#### e. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves - Not applicable.

**2. Task/Inspection Suspense Date.** Complete the inspection in accordance with paragraph 8 prior to next flight but no later than 26 July 2001 and report in accordance with paragraph 14.a.(2) no later than 31 July 2001.

**3. Reporting Compliance Suspense Date.** Report compliance in accordance with paragraph 14.a.(1) no later than 16 July 2001.

\*This Technical Bulletin Supersedes OH-58-01-ASAM-04 112222Z Jul. 01.

**4. Summary of Problem.**

a. There are two issues in the fuselage/tailboom interface area addressed in this technical bulletin –

(1) A recent quality audit of the OH-58D tailboom assembly at Bell Helicopter has revealed that the requirement to identify a part as flight safety was inadvertently omitted on some dash numbers for the assembly of tailboom longeron and intercostal fittings. Consequently, “critical characteristics” were not annotated on the manufacturing planning documents. As a result of that omission, critical characteristics requiring deburring during the manufacturing process were not verified. Deburring of drilled holes is standard practice for assembly in this area. However, the possibility exists that sixteen (eight each side) specific rivet holes on the lower left interface between the longeron fitting and intercostal may not have been deburred. Failure to deburr can cause cracks to develop in the longeron fitting attached to the intercostal.

(2) Reports from the field and Bell Helicopter have indicated incidents of cracking in the aft fuselage frame assembly where the tailboom attaches. The cracks primarily appear near the outboard bend radius of the frame forward side in the upper right area (1 to 2 o'clock position looking forward).

b. Manpower/downtime and funding impacts – See paragraph 12.

c. The purpose of this technical bulletin is to –

(1) Perform initial and recurring inspection of the tailboom intercostal assembly for cracks.

(2) Perform initial and recurring inspection of the aft fuselage frame assembly for cracks.

(3) Change frequency interval of progressive phase maintenance (PPM) inspection number 4.1 and emphasize inspection of the lower left tailboom attachment fitting and aft fuselage frame for cracks.

**5. End Items to be Inspected – All OH-58D aircraft.**

**6. Assembly Components to be Inspected**

<b>NOMENCLATURE</b>	<b>PART NUMBER</b>	<b>NSN</b>
Tailboom, Assembly	206-032-004-177	1560-01-419-7889
Tailboom, Assembly	206-032-004-171	1560-01-383-0102
Tailboom, Assembly	206-032-004-157	1560-01-341-6074
Tailboom, Assembly	406-961-024-151	N/A
Tailboom, Assembly	406-961-024-149	N/A
Tailboom, Assembly	406-961-024-111	N/A

**7. Parts to be Inspected**

<b>NOMENCLATURE</b>	<b>PART NUMBER</b>	<b>NSN</b>
Fitting, Tailboom	206-031-403-5	N/A
Frame, Aft Fuselage	206-032-308-103	N/A

**8. Inspection Procedures**

a. Loosen screws on countermeasures set AN/ALQ-144 IR jammer mount, if installed (Reference Task 2-3-4, TM 1-1520-248-23-1).

b. Remove 27 screws from tailboom access panel (P/N 206-032-328-115, Item 4, Figure 28, TM 1-1520-248-23P).

c. Remove tailboom access panel.

d. Inspection of Tailboom Fitting –

(1) Using a mirror and flashlight, visually inspect the lower left tailboom attachment area. Emphasis is on the sixteen rivets (eight each side) that attach the intercostals (P/N 206-032-410-17/-19, Items 17 and 18, Figure 43, TM 1-1520-248-23P) to fitting (P/N 206-031-403-5, Item 22, Figure 43, TM 1-1520-248-23P).

(2) Check for cracks propagating from under the rivets.

(3) Inspect remaining tailboom attachment fittings for condition and security.

e. Inspection of Aft Fuselage Frame –

(1) Inspect aft fuselage frame (P/N 206-032--308-103) for cracking.

(2) Inspection shall emphasize the outside bend radius of the frame in the upper right area (1 to 2 o'clock position looking forward).

(3) If visual inspection reveals suspected cracks in aft fuselage frame, remove tailboom for access and verify cracks with non-destructive inspection in accordance with TM 1-1520-266-23.

f. If no cracks are found and attachment areas are secure, install tailboom access panel and secure IR jammer mount (reference Task 2-3-4, TM 1-1520-248-23-1). Inspection is complete and the red horizontal dash entry may be cleared. Proceed to paragraph 9.b.

g. If cracks are found in tailboom intercostal assembly or aft fuselage frame, proceed to paragraph 9.

**9. Correction Procedures**

a. If cracks are found in tailboom intercostal assembly or aft fuselage frame, proceed as follows --

(1) If cracks are found in tailboom intercostal assembly, enter a red X status symbol on DA Form 2408-13-1 with the following statement: "Tailboom intercostal assembly has crack at [Location]". Replace tailboom in accordance with Task 2-3-2, Task 2-3-8, TM 1-1520-248-23-1.

(2) If cracks are found in aft fuselage frame, enter a red X status symbol on the DA Form 2408-13-1 with the following statement: "Aft fuselage frame has crack at [Location]". Contact local liaison engineer or maintenance engineering point of contact in paragraph 16.b. for further instructions.

(3) Ensure report in accordance with paragraph 14.a.(2) is completed and forwarded.

b. Change/revise TM 1-1520-248-PPM as follows – Perform PPM inspection 4.1 at PPM 3, 6, 9, 12, and 15.

c. During application of PPM inspection 4.1, emphasize two locations -- Inspection of the lower left tailboom attachment fitting for cracks in rivet area between fitting and intercostal. Inspect for cracking in the aft fuselage frame in the upper right area (1 to 2 o'clock position looking forward).

**10. Supply/Parts and Disposition –**

a. Parts Required – Items cited in paragraphs 6 and 7 may be required to replace defective items.

b. Requisitioning Instructions – Requisition replacement parts using normal supply procedures. All requisitions shall use project code (CC 57-59) "X1H" .

**NOTE**

Project Code "X1H" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

c. Bulk and Consumable Materials –

NOMENCLATURE	PART NUMBER	NSN
Screw (27 ea.)	MS27039-1-06	5305-00-912-7307

d. Disposition – Dispose of removed parts/components using normal supply procedures. All turn-in documents must include project code (CC 57-59) "X1H".

e. Disposition of Hazardous Material – Not Applicable.

**11. Special Tools and Fixtures Required --** As required.

**12. Application –**

a. Category of Maintenance – AVUM. Aircraft downtime will be charged to AVUM maintenance. Report aircraft non-mission capable maintenance (NMCM) while undergoing inspection and correction in accordance with this message. Report aircraft non-mission capable supply (NMCS) while waiting for parts in accordance with this message.

b. Estimated Time Required --

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- (1) Time to Complete Inspection
  - (a) Total of 2 man-hours using 1 person.
  - (b) Total of 2 hours downtime for one end item.
- (2) Time for Repair/Replacement -
  - (a) Total of 32 hours man-hours using 2 persons.
  - (b) Total of 16 hours downtime for one end item.

c. Estimated Cost Impact to the Field -

NOMENCLATURE	PART NO./NSN	QTY.	COST EA.	TOTAL
Boom, Aircraft	206-032-004-177/ 1560-01-419-7889	1	\$31,913.85	\$31,913.85
Total Cost Per Aircraft				\$31,913.85

- 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 - TM 1-1520-248-PPM shall be changed to reflect this technical bulletin.

### 13. References -

- a. DA PAM 738-751, 15 MAR 99
- b. TM 1-1520-248-23-1
- c. TM 1-1520-248-23P
- d. TM 1-1520-248-PPM
- e. TM 1-1520-266-23

### 14. Recording and Reporting Requirements

a. Aircraft -

(1) Reporting Compliance Suspense - Upon entering requirements of this message on DA Form 2408-13-1 for all effected aircraft, commanders will forward a priority message, datafax, or e-mail to CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, in accordance with AR 95-1, no later than date specified in paragraph 3. Datafax number is DSN 897-2111 or (256) 313-2111. E-mail address is "safeadm@redstone.army.mil". The report will cite the SOF message and 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.

(2) Task/Inspection Reporting Suspense - Upon completion of the initial inspection, commanders will forward a priority message to the logistical point of contact listed in paragraph 16.b. The report will cite the SOF message and this TB number, date of inspection, aircraft serial number, aircraft and component hours, and results of the inspection. Inspection and reports will be completed no later than date specified in paragraph 2.

- b. Wholesale Spare Parts/Assemblies -- Not Applicable.
- c. Retail Spare Parts/Assemblies - Not Applicable.
- d. The following forms are applicable and are to be completed in accordance with DA PAM 738-751, 15 MAR 99

#### NOTE

ULLS-A users will use applicable "E" forms.

- (1) DA Form 2408-13, Aircraft Status Information Record.
- (2) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record
- (3) DA Form 2408-15, Historical Record for Aircraft

(4) DD Form 1577-2/DD Form 1577-3, Unserviceable (Reparable) Tag/Label -- Materiel (Color Green). Annotate remarks block with "unserviceable in accordance with OH-58-01-04 (TB 1-1520-248-20-58)".

**15. Weight and Balance** – Not applicable.

**16. Points of Contact** –

a. Technical Point of Contact for this message is Kevin Cahill, AMSAM-RD-AE-I-D-O, DSN 645-9544 or (256) 955-9544. Datafax is DSN 645-9536 or (256) 955-9536. E-mail is "Kevin.Cahill@redstone.army.mil".

b. Maintenance Engineering Point of Contact for this message is Dave Giratos, AMSAM-MMC-AV-SOT, DSN 897-1381 or (256) 313-1381. Datafax is DSN 788-6758 or (256) 842-6758. E-mail is "Dave.Giratos@redstone.army.mil".

c. Logistical Point of Contact for this message is SSG Tim Hardin, AMSAM-DSA-ASH-L, DSN 645-7934 or (256) 955-7934. Datafax is DSN 645-7125 or 955-7125. E-mail is "Timothy.Hardin@redstone.army.mil".

d. Wholesale Material Point of Contact (Spares) is Tom Fitzgerald, AMSAM-MMC-AV-SOA, DSN 897-1391 or (256) 313-1391. Datafax is DSN 788-6758 or (256) 842-6758. E-mail is "Thomas.Fitzgerald@redstone.army.mil".

e. Forms and Records Point of Contact for this message is Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564. Datafax is DSN 746-4904. E-mail is "Ann.Waldeck@redstone.army.mil".

f. Safety Points of Contact for this message are –

(1) Primary – Randall Rushing (SAIC), AMSAM-SF-A, DSN 897-2092 or (256) 313-2092, Datafax is DSN 897-2111 or (256) 313-2111. E-mail is "Randall.Rushing@redstone.army.mil".

(2) Alternate– Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636, Datafax is DSN 897-2111 or (256) 313-2111. E-mail is "Ron.Price@redstone.army.mil".

g. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact –

(1) Primary – Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or (256) 313-6856, Datafax is DSN 897-6630 or (256) 313-6630. E-mail is "Ronnie.Sammons@redstone.army.mil".

(2) Alternate– Paul W. Tarr, AMSAM-SA-CS-NF, DSN 897-6861 or (256) 313-6861, Datafax is DSN 897-6630 or (256) 313-6630. E-mail is "Paul.Tarr@redstone.army.mil".

h. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

**By Order of the Secretary of the Army:**

**ERIC K. SHINSEKI**  
*General, United States Army*  
*Chief of Staff*

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