

URGENT

TB 1-1520-238-20-117

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION OF TAIL ROTOR BLADES FOR ALL AH-64 AIRCRAFT

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

2 July 2001

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. Urgent.

NOTE

IAW AR 95-1, PARAGRAPH 6-6A, MACOM COMMANDERS MAY AUTHORIZE TEMPORARY EXCEPTION FROM MESSAGE REQUIREMENTS. EXCEPTION MAY ONLY OCCUR WHEN COMBAT OPERATIONS OR MATTER OF LIFE OR DEATH IN CIVIL DISASTERS OR OTHER EMERGENCIES ARE SO URGENT THAT THEY OVERRIDE THE CONSEQUENCES OF CONTINUED AIRCRAFT OPERATION.

a. Aircraft in Use. Upon receipt of this technical bulletin (TB), make the following entry on the DA Form 2408-13-1. Enter a red horizontal dash "-" status symbol with the following statement: "Inspect tail rotor blades IAW SOF AH-64-01-04 (TB 1-1520-238-20-117) prior to next flight but not later than 18 June 2001". Clear the red horizontal dash "-" entry when the procedures IAW para 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than 18 June 2001. Commanders who are unable to comply with the requirements of this TB within the time frame specified will upgrade the affected aircraft status symbol to a red "X".

This TB supersedes USAAMCOM Safety of Flight Message 152250Z Jun 01 (AH-64-01-04).

NOTE

AIRCRAFT AWAY FROM HOME BASE MAY BE DOWNGRADED TO A CIRCLED RED "X" FOR A ONE-TIME DIRECT FLIGHT, NOT TO EXCEED 5 HOURS, TO THE NEAREST MILITARY BASE WITH ADEQUATE SECURITY AND MAINTENANCE CAPABILITIES. AIRCRAFT GROUND RUN-UPS WITH ROTORS TURNING ARE NOT AUTHORIZED.

b. Aircraft in Maintenance. Same as para 1a.

c. Aircraft in Transit. Same as para 1a.

d. Maintenance Trainers (Category A and B). Same as para 1a.

e. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves. Upon receipt of this TB, depot and materiel activity commanders will ensure the materiel condition tags of all items in all condition codes listed in paragraphs 6 and 7 are annotated to read: "SOF AH-64-01-04 (TB 1-1520-238-20-117), Inspection of Tail Rotor Blades, not complied with."

(1) Wholesale Stock. Upon receipt of this TB, depot and materiel activity commanders will ensure all items in condition codes "A", "B", "C", "D", and "E", listed in paragraphs 6 and 7, are placed in condition code "J" and tagged with a suspended tag/label - Materiel, DD Form 1575/DD Form 1575-1. Do not remove original condition tags. Report compliance with this TB IAW paragraph 14b(2) not later than 19 June 2001.

(2) Retail Stock. Upon receipt of this TB, commanders and facility managers maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the procedures required IAW paragraphs 8 and 9 on suspect materiel. Dispose of discrepant materiel IAW paragraph 10. Report compliance with this TB IAW paragraph 14c(2) not later than 19 June 2001.

f. Components/Parts in Work (Depot Level and Others). Depot and other maintenance activity commanders will ensure items listed in paragraphs 6 and 7 are not issued until they are in compliance with this TB.

2. Task/Inspection Suspense Date. Complete the inspection IAW paragraphs 8 and 9 prior to next flight but not later than 18 June 2001 and report IAW para 14a(2) not later than 19 June 2001.

3. Reporting Compliance Suspense Date. Report compliance IAW para 14a(1) not later than 19 June 2001.

4. Summary of the Problem.

a. An AH-64A was involved in an incident where the tail rotor head assembly separated from the aircraft in flight. An investigation is underway to determine the cause of this incident. Preliminary investigation has revealed separation may have been caused by a tail rotor blade failure in flight. As a temporary measure, an interim tail rotor blade life limit has been established.

b. For manpower/downtime and funding impacts, see paragraph 12.

c. The purpose of this TB is to:

(1) Require inspection of all AH-64 series aircraft to determine time since new (TSN) of all tail rotor blades.

(2) Establish a temporary life limit for the tail rotor blades of 1000 hours TSN.

5. End Items To Be Inspected. All AH-64 series aircraft.

6. Assembly Components To Be Inspected. N/A.

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Blade, rotary rudder	7-311422050-5, -7	1615-01-312-2387
Blade, rotary rudder	7-311422050-3	1615-01-154-7139
Blade, rotary rudder	7-311422050-3A	1615-01-441-6249
Blade, rotary rudder	7-311422050-5A, -7A, -9A	1615-01-441-6248

8. Inspection Procedures.**NOTE**

FOLLOW-ON INSPECTION PROCEDURES WILL BE DEVELOPED AND A SUBSEQUENT SAFETY OF FLIGHT MESSAGE WILL FOLLOW.

- a. Conduct records check of DA Form 2408-16 to determine the number of hours time since new (TSN) of the tail rotor blades. Conduct visual inspection of tail rotor blades to confirm the serial numbers annotated on the DA Form 2408-16. Any blades that do not match the DA Form 2408-16 will upgrade the affected aircraft to status symbol red "X" pending future inspection procedures.
- b. If the TSN is 1000 hours or greater, enter a red "X" and the following write up on the DA Form 2408-13-1, "Aircraft grounded pending future inspection procedures TBD". Proceed to paragraph 9.
- c. If the TSN is less than 1000 hours, the red horizontal "-" entry may be cleared.

9. Correction Procedures.

- a. If the TSN on the tail rotor blade is 1000 hours or greater, the aircraft is grounded until the blade is replaced or inspection procedures are implemented.

NOTE

IF ENTIRE CROSSHEAD ASSEMBLY IS REMOVED, UNITS WILL ENSURE THAT WHEN INSTALLING THE TAIL ROTOR FORK ASSEMBLY, THAT THEY ARE USING THE MOST CURRENT TAIL ROTOR INDEXING PROCEDURES AS LISTED IN TB 1-1520-238-30-15, DATED 30 JUNE 1999 AND/OR TM 1-1520-238-23-3, CHANGE 5, OR CURRENT VERSION OF LONGBOW IETM.

- b. Change the DA Form 2408-16, block 6J, to reflect the interim life limit of 1000 hours TSN.

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

HQDA WILL PRIORITIZE UNITS AND REPAIR PARTS DISTRIBUTION.

- a. Parts Required. Items cited in paragraph 7 may be required to replace defective items.
- b. Requisitioning Instructions. Do not requisition replacement parts IAW this TB. A follow-on message will be issued once the inspection procedures are established.
- c. Bulk and Consumable Materials. IAW the appropriate technical manual.
- d. Disposition. Hold any discrepant part/component pending disposition instructions IAW subsequent message.

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e. Disposition of Hazardous Material. IAW Environmental Protection Agency directives as implemented by your servicing environmental coordinator (AR 200-1).

11. Special Tools and Fixtures Required. As required.

12. Application.

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

b. Estimated Time Required.

(1) Time to complete inspection – total of 0.5 manhours using 1 person.

(2) Time for repair/replacement –

(a) Total of 4 manhours using 1 person.

(b) Total of 4 hours downtime for one end item.

c. Estimated Cost Impact to the Field.

NOMENCLATURE	PART NUMBER/NSN	QUANTITY	COST EACH
Blade, rotary rudder	7-311422050-ALL/ 1615-01-312-2387 or 1615-01-154-7139	4	\$10321.49

Total cost per aircraft = \$41285.96

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. N/A.

13. References. –

a. DA Pam 738-751, 15 Mar 1999.

b. Interactive Electronic Technical Manual (IETM) – TM 1-1520- Longbow/Apache IETM, CD No. 1, version 3.1.2, data 19 Nov 1998, CD date 1 Dec 1998 or subsequent.

c. TM 1-1520-238-23 – Aviation Unit and Intermediate Maintenance Manual for AH-64A Apache Attack Helicopter, 16 May 1994.

d. TB 1-1520-238-30-15 – Tail Rotor Head Installation and Inspection, 30 Jun 1999.

14. Recording and Reporting Requirements.

a. Aircraft.

(1) Reporting Compliance Suspense Date – Upon entering requirements of this TB on DA Form 2408-13-1 on all affected aircraft, commanders will forward a priority message, datafax or email to: CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1, not 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 this TB number and the message, 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 Date – Upon completion of inspection, commanders will forward a priority message to the logistical point of contract listed in paragraph 16b. The report will cite this TB number and the message, date of inspection, aircraft serial number and hours, component serial number and hours, and results of the inspection. Inspection and reports will be completed not later than date specified in paragraph 2.

b. Wholesale Spare Parts/Assemblies.

(1) Reporting Message Receipt – Depot and materiel activity commanders will report receipt of the message by e-mail or datafax to the wholesale materiel (spares) point of contact listed in paragraph 16c not later than date specified in paragraph 1e(1). Provide local point of contact.

(2) Task/Inspection Reporting Suspense Date – Depot and materiel activity commanders will provide a DD Form 1225 to the wholesale materiel (spares) point of contact listed in paragraph 16c not later than date specified in paragraph 1e(1). Provide an estimate of the cost reimbursable funding required to move serviceable items on hand, listed in paragraphs 6 and 7 to a work area, unpack the materiel, repack the materiel after inspection by AMCOM inspectors, and to return the materiel to storage, as appropriate. Report, by original serviceable condition code "J". Report by e-mail or datafax and provide local point of contact.

c. Retail Spare Parts/Assemblies.

(1) Reporting Message Receipt – Commanders and facility managers will report receipt of this TB by e-mail or datafax to the logistical point of contact listed in paragraph 16b not later than date specified in paragraph 1e(2). Provide local point of contact.

(2) Task/Inspection Reporting Suspense – Commanders and facility managers will report inspection results to the logistical point of contact in paragraph 16b not later than date specified in paragraph 1e(2). Report the quantity inspected by condition code and the resulting condition code. Report by e-mail or datafax and provide local point of contact.

d. The following forms are applicable and are to be completed IAW DA PAM 738-751, 15 Mar 1999

NOTE

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

(1) DA Form 2408-5-1, Equipment Modification Record (Tail Rotor Blade Assembly).

(2) DA Form 2408-13, Aircraft Status Information Record.

(3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

(4) DA Form 2408-16, Aircraft Component Historical Record.

(5) DA Form 2410, Component Removal and Repair/Overhaul Record. (Only if the tail rotor assembly is removed and/or replaced.)

(6) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label – Materiel (Color Yellow). Annotate remarks block with "Inspected Serviceable IAW SOF AH-64-01-04 (TB 1-1520-238-20-117)."

(7) DD Form 1575/DD Form 1575-1, Suspended Tag/Label – Materiel (Color Brown). Annotate remarks block with "Suspended IAW SOF AH-64-01-04 (TB 1-1520-238-20-117)."

(8) DD Form 1577-2/DD Form 1577-3, Unserviceable (Reparable) Tag/Label – Materiel (Color Green). Annotate remarks block with "Unserviceable, hold for disposition instructions IAW SOF AH-64-01-04 (TB1-1520-238-20-117)."

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. Ken Muzzo, AMSAM-RD-AE-I-P-A, DSN 897-4812 or commercial (256) 313-4812. Datafax is DSN 897-4923 or commercial (256) 313-4923. E-mail is "Kenneth.Muzzo@redstone.army.mil".

b. Logistical points of contact are:

(1) Primary – Mr. Jim Mason, SFAE-AV-AAH-LF, DSN 897-4242 or commercial (256) 313-4242. Datafax is DSN 897-4343 or commercial (256) 313-4343. E-mail is "MasonJ@peoavn.redstone.army.mil".

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(2) Alternate – Mr. Mike Sharp, SFAE-AV-AAH-LF, DSN 897-4236 or commercial (256) 313-4236. Datafax is DSN 897-4343 or commercial (256) 313-4343. E-mail is "Mike.Sharp@peoavn.redstone.army.mil".

c. Wholesale materiel point of contact (spares) is Ms. Kathy Elfrink, AMSAM-MMC-AV-AA, DSN 897-1350 or commercial (256) 313-1350, Datafax is DSN 897-1556. E-mail is "Kathy.Elfrink@redstone.army.mil".

d. Forms and records point of contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or commercial (256) 876-5564. Datafax is DSN 746-4904 or commercial (256) 876-4904. E-mail is "Ann.Waldeck@redstone.army.mil".

e. Safety points of contact are –

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

(2) Alternate – Mr. Howard Chilton, AMSAM-SF-A, DSN 897-2068 or commercial (256) 313-2068. Datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is "Howard.Chilton@redstone.army.mil".

f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact one of the following (Huntsville, AL, time is GMT minus 5 hours):

(1) Primary – Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0408 or commercial (256) 313-0408. Datafax is DSN 897-0411 or commercial (256) 313-0411. E-mail is "Ronnie.Sammons@redstone.army.mil".

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

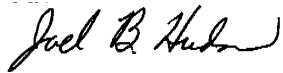
g. After hours, contact the AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

17. Reporting of Errors and Recommending Improvements. You can improve this TB. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the following address: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. You may also submit your recommended changes by e-mail directly to "2028@redstone.army.mil". A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual.

By Order of the Secretary of the Army:

Official:

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



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0117303

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 313982 requirements for TB 1-1520-238-20-117.

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>

To: <2028@redstone.army.mil>

Subject: DA Form 2028

1. **From:** Joe Smith
2. *Unit:* home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **St:** MO
6. **Zip:** 77777
7. **Date Sent:** 19--OCT--93
8. **Pub no:** 55--2840--229--23
9. **Pub Title:** TM
10. **Publication Date:** 04--JUL--85
11. *Change Number:* 7
12. *Submitter Rank:* MSG
13. **Submitter FName:** Joe
14. *Submitter MName:* T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123--123--1234
17. **Problem: 1**
18. *Page:* 2
19. *Paragraph:* 3
20. *Line:* 4
21. *NSN:* 5
22. *Reference:* 6
23. *Figure:* 7
24. *Table:* 8
25. *Item:* 9
26. *Total:* 123
27. **Text:**

This is the text for the problem (below line 27).

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE
DOPE ABOUT IT ON THIS FORM.
CAREFULLY TEAR IT OUT, FOLD IT
AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE
NO.

PARA-
GRAPH

FIGURE
NO.

TABLE
NO.

IN THIS SPACE, TELL WHAT IS WRONG
AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

THE METRIC SYSTEM AND EQUIVALENTS

WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

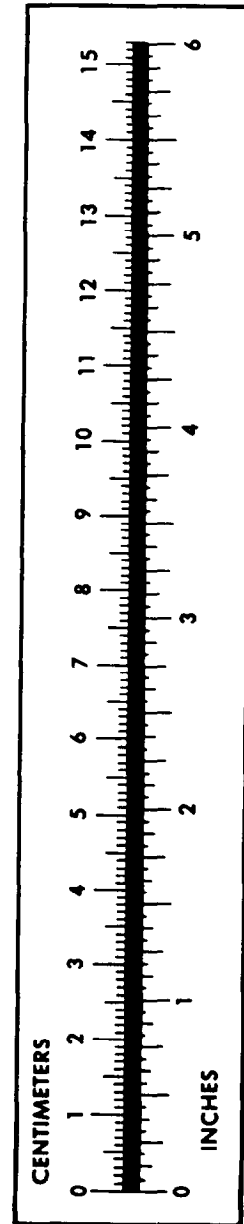
TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
its	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
ometers per Liter	Miles per Gallon	2.354
ometers per Hour	Miles per Hour	0.621



PIN: 079092-000