

# URGENT

\*TB 1-1520-210-20-46

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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### ALL UH-1 H/V SERIES AIRCRAFT, MANDATORY TIME REPORTING AND TEMPORARY RETIREMENT LIFE EXTENSION OF UH-1 TAIL ROTOR BLADES, PART NUMBER 204-011-702-15

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

21 October 1999

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

1. **Priority Classification.** URGENT

**NOTE**

See AR 95-1, paragraph 6-6.a., for noncompliance authority of major commanders.

**a. Aircraft in Use.** Upon receipt of this message/Technical Bulletin (TB), the condition status symbol of the cited aircraft will be changed to a **red horizontal dash //--//**. The **red horizontal dash //--//** may be cleared when the inspection of paragraph 8 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 message/TB within the time frame will cause the status symbol to be upgraded to a **red X**.

**b. Aircraft in Depot Maintenance.** Aircraft will not be issued until compliance with this message/TB has been completed.

**c. Aircraft Undergoing Maintenance.** Aircraft will not be released until compliance with this message/TB has been completed.

**d. Aircraft in Transit.**

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

(2) **Ferry Status.**

(a) Inspect at final destination

(b) Those aircraft that have a DD 250 and are at US Helicopters will be inspected prior to ferry to final destination.

**e. Maintenance Trainers (Category A, B, and Others).** N/A.

\* This TB supersedes USAAMCOM Aviation Safety Action Message 131611Z, Oct 99, UH-1-00-ASAM-01.

**f. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves.** Upon receipt of this message/TB the material condition tags of all items in all condition codes listed in paragraphs 6 and 7 shall be annotated to read "UH-1-00-ASAM-01, (TB 1-1520-210-20-46), Mandatory Time Reporting and Temporary Retirement Life Extension of UH-1 Tail Rotor Blades Not Complied With".

(1) **Wholesale Stock.** N/A.

(2) **Retail Stock.** Upon receipt of this message/TB commanders and others maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the inspection required by paragraph 8 and the correction procedures of paragraph 9 on discrepant material. Disposition of discrepant material will be IAW paragraph 10. Report compliance with this message/TB IAW paragraph 14d.(2).

**g. Components/Parts in Work. (Depot Level and Others)** N/A.

**2. Task/Inspection Suspense Date.** Within next 15 flight hours/30 days.

**3. Reporting Compliance Suspense Date.** No later than 4 Nov 1999 IAW paragraph 14.a. of this message/TB.

**4. Summary of the Problem.**

**a. Background.**

(1) A severe supply shortage of UH-1 tail rotor blades, part number 204-011-702-15, has been realized. Although resupply contracts are in place, deliveries are not expected to begin until sometime mid-late first quarter 2000. These deliveries will be too late to prevent aircraft groundings; thus negatively impacting some critical UH-1 missions.

(2) In order to accurately assess the near and long term requirements for tail rotor blades, mandatory time reporting is required for all tail rotor blades installed or in local supply.

(3) AMCOM engineering has identified a procedure to temporarily extend the retirement life on tail rotor blades that have reached their 1200 hour retirement life. By performing the initial and recurring inspections in paragraph 8 of this message/TB, the retirement life of otherwise serviceable blades can be extended to 1500 flight hours.

(4) This authorization will expire no later than 11 August 2000; however, early rescinding of this life extension is highly likely. When this authorization is rescinded, aircraft with tail rotor blades over the published 1200 hour retirement life will be immediately grounded; therefore, it is imperative that requisitions are in place to allow AMCOM to intensively manage this situation.

**b. For Manpower/Downtime and Funding Impacts.** See paragraph 12.

**c. The purpose of this TB is to:**

(1) To require mandatory reporting (via DA Form 2410) of the current hours on each tail rotor blade both in supply and in service.

(2) To identify the inspection (initial and recurring) procedure to be followed to temporarily extend the retirement life of tail rotor blades from 1200 flight hours to 1500 flight hours.

**5. End Items to be inspected.** All UH-1 H/V series aircraft.

**6. Assembly Components to be Inspected.** N/A.

**7. Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Blade, rotary rudder	204-011-701-15	1615-00-472-7308

## 8. Inspection Procedures.

a. Inspect aircraft DA Form 2408-16 to determine the current time since new of the tail rotor blades, part number 204-011-702-15. Complete and submit DA Form 2410 copy 3 (use failure code 999) reporting the current time since new and next higher assembly (NHA) information for each tail rotor blade installed. If in local supply leave the current DA Form 2410 with the tail rotor blade, copy data from current DA Form 2410 to a new DA Form 2410 copy 3 (use failure code 999) by entering uninstalled in block 50 and completing the remainder of the form per DA PAM 738-751 dated Mar 99.

### NOTE

Temporary life extension is not authorized on part number 204-011-702-17 (NSN 1615-00-907-0842) tail rotor blades. The retirement life on these blades remains at 1200 hours.

b. For those tail rotor blades that subsequently reach the normal 1200 hour retirement life, perform the inspections in paragraphs 8.c and 8.d to determine if the retirement life can be temporarily extended to 1500 hours.

### NOTE

Tail rotor hub removal is not required to perform the initial and recurring 75 hour blade inspections. IAW TM 55-1520-210-23-1 paragraph 5-96, tail rotor balancing is not required if blades are removed and re-installed in the same hub assembly. If reinstalling blades in the same hub, follow the procedures in paragraph 5-93 to ensure that the blades and hardware are installed in the same location. A maintenance test flight is required prior to releasing aircraft for flight.

### NOTE

In accordance with TM 55-1520-210-23 (para 5-117d), any crack detected in any location on the blade is cause for replacement.

c. Initial inspection: When a blade reaches 1200 hours TSN, remove the part from the aircraft. Clean blade IAW TM 55-1520-210-23, paragraph 5-116, and inspect IAW paragraph 5-117. In addition to the inspections in para 5-117, inspect the grip plate area around the bushing bolt holes for cracks using Eddy Current (TM 1-1520-256-23, paragraph 2.41). Perform recurring inspections IAW the following:

(1) At each 50 hour interval, clean blades IAW TM 55-1520-210-23 (paragraph 1-19) and inspect IAW paragraph 5-117 (excluding paragraph 5-117f).

(2) At each 75 hour interval, remove the blade from the aircraft and inspect the retention bolt holes IAW paragraph 5-117f. Inspect the grip plate area around the bushing bolt holes for cracks using Eddy Current (TM 1-1520-256-23, paragraph 2.41).

### NOTE

A plus 10% time variance is not authorized for the 50 or 75 hour recurring inspections.

d. After the last flight of each mission day – inspect blades as follows:

(1) Using a 10X magnifying glass, inspect the exposed area of the tail rotor blade grip plate for cracks. Pay particular attention for cracks emanating from the area under the tail rotor grip flanges.

(2) Visually inspect the entire surface of the tail rotor blade for cracks, skin separation or other damage. Pay particular attention to the area from the blade doublers (includes doublers) outward to station 25.

**9. Correction Procedures.**

a. Those blades which pass the inspections in paragraph 8.c and 8.d may remain in service up to the temporary retirement life of 1500 hours. A DA Form 2410 (all three copies, copy 1 for the removal, copy 2 for the inspection, and copy 3 for the installation) shall be submitted to AMCOM for each recurring 75 hour special inspection.

(1) ULLS-A users will make an entry in the revised component TBO (RCT) file for each serial numbered blade passing the inspection in para 8.c above, to increase the retirement life to 1500 hrs.

(2) The RCT file may be modified by following the menu structure under production processes - master files maintenance - add/modify/delete - revised component TBO and then adding a record. If users have questions or require assistance call Mr. Al Burlison, DSN 746-4468 or commercial (256) 876-4468.

b. Remove from service and dispose of IAW normal procedures any tail rotor blade that reaches the temporary retirement life of 1500 hours, or any blade over 1200 hours that fails either the recurring 50 hour inspection, recurring 75 hour inspection (paragraph 8.c) or the recurring daily inspection (paragraph 8.d).

c. Annotate the DA Form 2408-18 (ULLS-A units will use two of their 800 inspection numbers) with the following special inspection requirement -

(1) 50 hour special T/R blade inspection.

(2) 75 hour special T/R blade inspection.

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

a. **Parts Required.** Items cited in paragraph 7 may be required to replace defective items.

b. **Requisitioning Instructions.** Requisition replacement parts using normal supply procedures. Requisitions for unserviceable blades with less than 1200 hours shall use a project code of "AOG". Requisitions for blades which have reached the 1200 hour life shall use the project code (cc 57-59) "XF4" (X-RAY-FOXTROT-FOUR).

**NOTE**

Project code "XF4", "X-RAY-FOXTROT-FOUR" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of ASAM/TB actions.

c. **Bulk and Consumable Materials.** N/A.

d. **Disposition.** Demilitarize/mutilate IAW TM 1-1500-328-23 any part/component which does not meet inspection criteria.

e. **Distribution of Hazardous Material.** N/A.

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

**12. Application.**

a. **Category of Maintenance.** AVUM. Aircraft downtime will be charged to AVUM.

b. **Estimated Time Required.**

(1) Total of .5 man-hours using 1 person for records inspection.

(2) Total of .5 hours downtime for one end item.

- 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.** N/A. A copy of this message shall be inserted in the appropriate TM as authority to implement the change.

### 13. References.

- a. TM 1-1500-328-23.
- b. TM 55-1520-210-23.

### 14. Recording and Reporting Requirements.

a. **Reporting Compliance Suspense Date (Aircraft).** Upon entering requirements of this message/TB on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, datafax or E-mail to CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer) Redstone Arsenal, AL. 35898-5000, IAW AR 95-1. Datafax number is DSN 897-2111 or commercial (256) 313-2111. E-Mail address is <safeadm@redstone.army.mil>. The report will cite this message/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).** Upon completion of inspection, units will forward a priority message to the logistical POC in paragraph 16.b. The report will cite this message/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 5 days after task/inspection suspense date.

c. **Reporting Message Receipt Date (Spares).** N/A.

d. **Task/Inspection Reporting Suspense Date (Spares).**

(1) **Material in Wholesale Depot Storage.** N/A.

(2) **Material in Retail Storage.** Report compliance with this message/TB to the logistical point of contact in paragraph 16.b within 14 days of the date of this message/TB. Report the quantity inspected by condition code and the resulting condition code. Report by e-mail or datafax and provide local point of contact.

e. **The following forms are applicable and are to be completed in accordance with DA PAM 738-751, 15 March 1999:**

#### NOTE

ULLS-A users will use applicable "E" forms. ULLS-A users shall submit a paper copy DA Form 2410 as required by this message/TB.

- (1) DA Form 2408-5-1, Equipment Modification Record (T/R blade).
- (2) DA Form 2408-13, Aircraft Status Information Record.
- (3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
- (4) DA Form 2408-15, Historical Record for Aircraft.
- (5) DA Form 2408-16, Aircraft Component Historical Record.
- (6) DA Form 2408-18, Equipment Inspection List.
- (7) DA Form 2410, Component Removal and Repair/Overhaul Record.
- (8) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label - Material (color yellow). Annotate remarks block with "Inspected Serviceable IAW UH-1-00-ASAM-01, (TB 1-1520-210-20-46)."

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(9) DD Form 1575/DD Form 1575-1, Suspended Tag/Label – Material (color brown). Annotate remarks block with "Suspended IAW UH-1-00-ASAM-01, (TB 1-1520-210-20-46)."

(10) DD Form 1577/DD Form 1577-1, Unserviceable (condemned) Tag/Label – Material (color red). Annotate remarks block with "Condemned IAW UH-1-00-ASAM-01, (TB 1-1520-210-20-46) and mutilated IAW TM 1-1500-328-23."

(11) DD Form 1577-2/DD Form 1577-3, Unserviceable (reparable) Tag/Label – Material (color green). Annotate remarks block with "Unserviceable IAW UH-1-00-ASAM-01, (TB 1-1520-210-20-46)."

### 15. Weight and Balance. N/A.

### 16. Points of Contact.

a. Technical point of contact for this message/TB is Mr. Steve Monaco, AMSAM-AR-E-I-B-U, DSN 645-0078 or commercial (256) 955-0078. Datafax is DSN 645-6590 or (256) 955-6590, E-mail is <steve.monaco@uh.redstone.army.mil>.

b. Logistical point of contact for this message/TB is Mr. Mike Haragan, AMSAM-DSA-UH-U, DSN 645-0211 or commercial (256) 955-0211. Datafax is DSN 897-3770 or (256) 313-3770. E-mail is <mike.haragan@uh.redstone.army.mil>.

c. Wholesale Materiel point of contact (Spares) is Ms. Theresa Dougherty, AMSAM-MMC-VS-UN, DSN 897-1137 or commercial (256) 313-1137, Datafax is DSN 897-1558 or (256) 313-1558. E-mail is <dougherty-ta@exchange1.redstone.army.mil>.

d. Forms and records point of contact for this message/TB is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or commercial (256) 876-5564. Datafax is DSN 746-4904 or (256) 876-4904. E-mail is <waldeck-ab@redstone.army.mil>.

e. Safety point of contact for this message/TB is Mr. Robert Brock, AMSAM-SF-A, DSN 788-8632 or commercial (256) 842-8632, Datafax is DSN 897-2111 or (256) 313-2111. E-mail is <bob.brock@redstone.army.mil>.

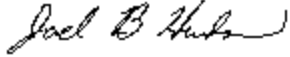
f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this message/TB should contact either CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681; E-mail is <wittstrom-jl@redstone.army.mil> or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (256) 313-0869; datafax is DSN 897-0411 or (256) 313-0411, E-mail is <sammons-rw@redstone.army.mil> (Huntsville, AL. is GMT minus 6 hrs).

g. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/2067 or commercial (256) 313-2066/2067.

**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: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, Alabama 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our E-mail address: <is-lp@redstone.army.mil> or by datafax: DSN 788-6546 or commercial (256) 842-6546. Instructions for sending a 2028 by E-mail may be found at the back of some TM's.

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

Official:



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*Administrative Assistant to the  
Secretary of the Army*

9929302

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*General, United States Army  
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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

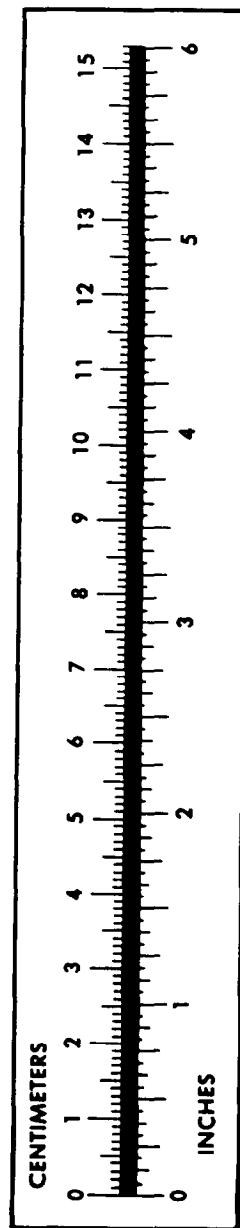
## TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 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: 077606-000**