

**URGENT**

**DEPARTMENT OF THE ARMY TECHNICAL BULLETIN**

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**ASSIGNMENT OF LIFE TO MAIN ROTOR YOKE FOR ALL UH-1H/V AIRCRAFT**

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**Headquarters, Department of the Army, Washington, D. C. 13 September 1996**

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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**THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.**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), the condition status symbol of the cited aircraft will be changed to a circled red X. The circled red X 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 requirements of this TB within the time frame will cause the status symbol to be upgraded to a red X. While the aircraft is on a circled red X it may be reported as fully mission capable (FMC).
- b. Aircraft in Depot Maintenance. Aircraft will not be issued until compliance with this TB has been completed.
- c. Aircraft Undergoing Maintenance. Aircraft will not be released until compliance with this TB has been completed.
- d. Aircraft in Transit.
  - (1) Surface/Air Shipment. Same as paragraph 1 .a.
  - (2) Ferry Status. Inspect at final destination.
- e. Maintenance Trainers (Category A and B). Same as paragraph 1.a.
- f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others).

**NOTE**

**Forms and records should be maintained on locally salvaged airframe components to ensure operating hours are maintained when and/or if components are returned to supply system.**

\*This TB supersedes USAATCOM Safety of Flight Message 211515Z, AUG 96, UH-1 -96-SOF-04.

(1) Retail Stock. Upon receipt of this TB, all items listed in paragraph 6. below shall be placed in condition code D and retagged with a DD Form 1576/1576-1, Test/Modification Tag/Label-Materiel (Blue). The authority block must reference the inspection required per this TB. Items identified as serviceable IAW paragraph 8. shall be retagged with a DD Form 1574/1574-1, Serviceable Tag/Label-Materiel (Yellow). Indicate compliance with this TB in the remarks block. Items identified as discrepant IAW paragraph 8. will be identified as scrap and disposed of in accordance with normal supply procedures.

(2) Wholesale Stock. Upon receipt of this TB, depot commanders shall ensure inspection of all items listed in paragraph 6. Special inspection criteria will be provided to depot commanders, via separate correspondence, to be used in lieu of the criteria specified in this message for the inspection of wholesale stock. All items listed in paragraphs 6. and 7. below shall be placed in condition code D and retagged with a DD Form 1576/1576-1, Test/Modification Tag/Label-Materiel (Blue). The authority block must reference the inspection required per this TB. A classification team will be dispatched by ATCOM to the depots to classify the materiel and provide the appropriate DA Form 2410 information.

**2. Task/Inspection Suspense Date.** Within the next 10 flight hours/20 days from receipt of superseded message or receipt of this TB, whichever is received first.

**3. Reporting Compliance Suspense Date.** No later than 12 September 1996 per paragraph 14.a. of this TB.

**4. Summary of the Problem.**

a. It has been determined that the UH-1H/V Main Rotor Yoke has a service life of 7200 hours. Currently, the Yoke is tracked on condition and is not tracked by time. All used Yokes, installed or in supply, must be assigned a time since new (TSN), and a DA Form 2410 must be initiated to continue tracking the Yoke. Likewise, all new Yokes must now have a DA Form 2410 generated to initialize tracking.

b. The assignment of a TSN is dependent upon the Yoke manufacturer and date on which it was introduced into Army inventory. These can be determined by the Yoke serial number prefix.

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

d. The purpose of this TB is to assign a retirement life of 7200 hours to the Main Rotor Yoke and to initiate tracking of these Yokes.

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

**6. Assembly Components to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Main Rotor Hub	204-012-101-137	1615-01-261-0570
Main Rotor Hub	204-012-101-141	1615-01-270-2982

**NOTE**

The only approved Main Rotor Hub part numbers and NSNs for UH-1 aircraft are referenced in paragraph 6. Problems have occurred cross referencing part numbers to serial numbers of Main Rotor Hubs in the DA Form 2410 system. Some units that have converted previously assigned Main Rotor Hub part numbers to P/N 204-012-101-141 have not documented loss (J Code) of the old Hubs correctly. When the conversion is completed, two DA Form 2410 actions must occur. The first action is to show a loss (J Code) of the old Hub, while the second action is to show a gain of the new Hub (P/N 204-012-101-141).

**NOTE**

When the Hub Spring bumpers are removed because of climatic conditions, the part number of the Main Rotor Hub does not change. Some units have changed Hub records to incorrectly reflect original Main Rotor Hub part numbers that were assigned prior to Hub Spring kit installation

**7. Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Main Yoke Assembly	204-011-102-17	1615-00-757-2905

**8. Inspection Procedures.**

a. Gain access to the Main Rotor Yoke

b. Locate the data plate for the Main Rotor Yoke. Some Yokes have two data plates - one for the Yoke itself and one for the Rotor Hub Assembly. Do not confuse the Yoke data plate with the data plate for the Rotor Hub Assembly.

c. If there is no data plate for the Yoke, the serial number may be found vibro-etched in one of two locations - either on the side of the Yoke where the data plate would normally be found, or on the top flat surface at the inboard end of the spindle, between the Pillow Block mounts.

d. The Yoke serial number may be covered by the Rotor Hub Assembly data plate. If necessary, carefully remove the Rotor Hub Assembly data plate. The vibro-etched Yoke serial number may be very light and difficult to see. Remove any excess adhesive and paint using sandpaper.

e. Identify and record the Yoke serial number. Replace any Rotor Hub Assembly data plate removed during this inspection with a new data plate. Continue with the corrective action of paragraph 9.

**9. Correction Procedures.**

a. If the Yoke serial number cannot be found, call ATCOM (AMSAT-I-MDO) at DSN 693-2900 or Commercial (314) 233-2900, to have a new serial number assigned.

b. If the Yoke data plate was missing and/or a new serial number had to be assigned, bond a new data plate to the Yoke which includes the appropriate serial number and part number.

c. Assign a time since new (TSN) for each Yoke according to the following:

(1) If a Yoke serial number could not be located, or if the serial number is found and the prefix is not "IT", "TM", "A-FS", or "AFS", assign a TSN of 6000 hours.

(2) If the Yoke serial number begins with "IT", assign a TSN of 5350 hours.

(3) If the Yoke serial number begins with "TM", assign a TSN of 2230 hours.

(4) If the Yoke serial number begins with "A-FS" or "AFS", assign a TSN of 1450 hours.

d. Initiate a DA Form 2410 for each Yoke. The work unit code (WUC) for the Yoke will be 05A01A. Destroy Copy 1 of the DA Form 2410 set. Use gain code "U" in block 37. If the Yoke is installed in a Main Rotor Hub, complete Copy 3 of the DA Form 2410 showing the Yoke installed in the Main Rotor Hub at the current Main Rotor Hub time since new (TSN), and enter the Yoke on the Main Rotor Hub DA Form 2408-16. If the Yoke is uninstalled, Copy 3 of the DA Form 2410 will remain with the Yoke. Unit Level Logistics System Aviation (ULLS-A) users will add the Main Rotor Yoke to the legitimate code file (LCF).

e. Annotate the TM 55-1520-210-23-1 Overhaul and Retirement Schedule to show the Yoke with a 7200 hour life.

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

- (1) Total of 1 man-hours using 1 person.
- (2) Total of 1 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. TM 55-1520-210-23-1 shall be changed to reflect this TB. A copy of this TB shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

**13. References. N/A.**

**14. Recording and Reporting Requirements.**

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this TB on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, datafax or E-Mail to Commander, ATCOM, ATTN: AMSAT-R-X (SOF Compliance Officer), per AR 95-3. Datafax number is DSN 693-2064 or commercial (314) 263-2064. E-Mail address is <amsatrxs@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). Upon completion of inspection, units will forward a priority message to: Commander, ATCOM, ATTN: AMSAT-D-WAU. The Report will cite this message number, date of inspection, aircraft serial number, aircraft and component hours, and the results of the inspection. Inspection and reports will be completed no later than 15 days after task/inspection suspense date.

c. Reporting Compliance Suspense Date (Spares). N/A.

d. Task/Inspection Reporting Suspense Date (Spares). Upon completion of inspection, depot commanders and others holding stock shall forward a priority message report of results of this inspection to logistical POC below NLT 10 days after receipt of this TB. The report shall include quantity on-hand, quantity which passed inspection, and quantity which failed inspection.

e. The following forms are applicable and are to be completed in accordance with DA PAM 738-751, dated 15 June 92:

- (1) DA Form 2408-5-1, Equipment Modification Record (Component), for the Main Rotor Yoke.
- (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, for the Main Rotor Hub if the Yoke is installed.
- (5) DA Form 2410, Component Removal and Repair/Overhaul Record.
- (6) DA Form 1574, Serviceable Tag-Materiel (Yellow), for in stock items in suspended status awaiting inspection. Mark inspected in accordance with this TM.
- (7) DA Form 1576, Test/Modification Tag-Materiel (Blue), for in stock items that are determined to be serviceable. Mark inspected suspended in accordance with this TM.

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

**16. Points of Contact.**

a. Technical point of contact for this TB is Mr. Fred Kershaw, AMSAT-R-ECH, DSN 693-1683 or commercial (314) 263-1683.

b. Logistical point of contact for this TB is Mr. Mike Haragan, AMSAT-D-WAU, DSN 693-2134 or commercial (314) 263-2134.

c. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or commercial (314) 260-2318.

d. Safety point of contact for this TB is Mr. Jim Wilkins, AMSAT-R-X, DSN 693-2258 or commercial (314) 263-2258.

e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact Mr. Ron Van Rees, AMSAT-I-IAF, DSN 693-3826/3659 or commercial (314) 263-3826/3659. Datafax is (314) 263-2917.

f. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/2067 or commercial (314)263-2066/2067.

**17. Reporting of Errors and Recommending Improvements.** You can help 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 Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmt%oavma28@st-louisemh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of some TMs.

By Order of the Secretary of the Army:

Official: 


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RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

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# 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

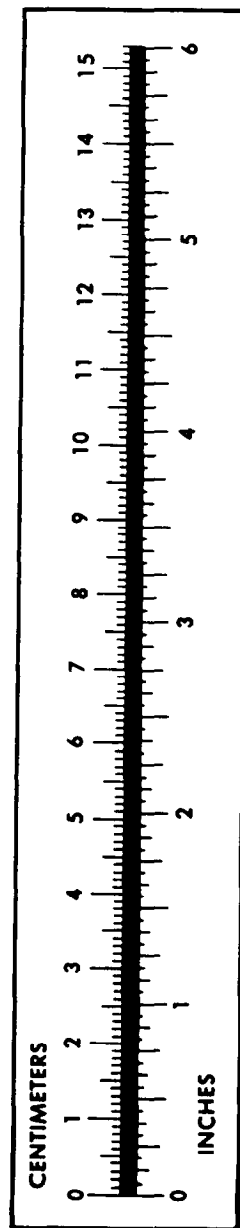
## TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 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: 075072-000**