

URGENT

TB 1-1520-240-20-139

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MANDATORY INSPECTION FOR UNTESTED FLIGHT SAFETY PART (FSP) BOLTS, P/N 114R3650-9 AND BACB30ST10-40 ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
11 September 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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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

In accordance with AR 95-1, paragraph 6-6A, MACOM Commanders may authorize temporary exception from ASAM 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, make the following entry on the DA Form 2408-13-1. Enter a red horizontal dash//--// status symbol with the following statement: "Inspect for untested flight safety part (FSP) P/N 114R3650-9 and BACB30ST10-40 bolts in accordance with CH-47-01-ASAM-09 (TB 1-1520-240-20-139) at the next phase inspection, but no later than 30 September 2002." Clear the red horizontal dash//--// entry when the procedures in accordance with paragraphs 8 and 9 are completed. Commanders who are unable to comply with the requirements of this Technical Bulletin within the time frame specified will upgrade the affected aircraft status symbol to a red //X//.

b. Aircraft in Maintenance Facility -

(1) Aircraft in AVUM, AVIM, or Depot - same as paragraph 1 a.

(2) Aircraft at Contractor Facility - Boeing Helicopters will inspect DD 250 aircraft and ensure that they are in compliance with this Technical Bulletin prior to the aircraft departing for ferry to final destination.

c. Aircraft in Transit --

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

This TB supersedes USAAMCOM Message 061239z SEP 01 CH-47-01-ASAM-09

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(2) Ferry Status -- Same as paragraph 1 a.

d. Maintenance Trainers (Category A and B). Comply no later than 30 September 2002.

e. Component/Parts in Stock at All Levels (Depot and Others) including War Reserves - Upon receipt of this Technical Bulletin, Depot and Materiel Activity Commanders will ensure the materiel condition tags of all items in all condition codes listed in paragraph 7 are annotated to read "CH-47-01-ASAM-09 (TB 1-1520-240-20-139), inspection for untested flight safety part (FSP) bolts, P/N 114R3650-9 and BACB30ST10-40, not complied with."

(1) Wholesale Stock --N/A.

(2) Retail Stock -- Upon receipt of this Technical Bulletin, Commanders and Facility Managers maintaining retail stock at Installation level and below shall contact the supported aviation unit to perform the procedures required in accordance with paragraphs 8 and 9 on suspect materiel. Dispose of discrepant materiel in accordance with paragraph 10d.

f. Components/Parts in Work (Depot Level and Others) -- Depot and other Maintenance Activity Commanders will ensure items listed in paragraph 7 are not issued until they are in compliance with this Technical Bulletin.

2. Task/Inspection Suspense Date. Complete the inspection in accordance with paragraph 8 at the next phase inspection but no later than 30 September 2002.

3. TAMMS Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14a (1) no later than 27 September 2001.

4. Summary of the Problem.

a. The original qualification (fatigue testing) of flight safety parts was done by Boeing Helicopters under Army direction. The fatigue testing of these parts substantiated their service life and the parts design was considered qualified. In October 1995 a change in the Army flight safety part (FSP) policy required that parts manufactured by authorized vendor/suppliers and originally qualified by the prime contractor must be fatigue tested. The 114R3650-9 and BACB30ST10-40 bolts are flight safety parts. The 114R3650-9 bolt is used for attachment of the drive scissors upper arm to the drive collar assembly on both the forward and aft rotor heads. The BACB30ST10-40 self-retaining bolt is used for attachment of the fixed link to the yoke assembly in the aft pylon controls installation.

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

c. The purpose of this Technical Bulletin is to -

(1) Inspect all 114R3650-9 and BACB30ST10-40 bolts installed on H-47 series aircraft and in stock.

(2) Replace all 114R3650-9 and BACB30ST10-40 bolts that do not exhibit a qualified and fatigue tested CAGE Code or manufacturer's name on the bolts at the next phase inspection of 30 September 2002, whichever occurs first.

5. End Items to be inspected. All H-47 series aircraft.

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

7. Parts to be Inspected. -

| NOMENCLATURE | PART NUMBER | NATIONAL STOCK NUMBER |
|----------------------|---------------|-----------------------|
| BOLT ASSEMBLY | 114R3650-9 | 1615-00-003-1154 |
| BOLT, SELF-RETAINING | BACB30ST10-40 | 5306-00-008-5032 |

8. Inspection Procedures.**NOTE**

There may be two different five digit codes marked on the subject bolts. The five digit code 81996 is not the manufacturer's CAGE Code. If so marked, the number 81996 identifies the part as having been manufactured in accordance with a Government Technical Data Package (TDP). Use the five-digit codes in accordance with paragraphs 8a (2) and 8b (2) to determine the manufacturer's CAGE Code.

NOTE

Read all paragraph 8 inspection procedures for each part prior to proceeding to paragraph 9, correction procedures.

a. P/N 114R3650-9 bolt assembly -

(1) Locate the bolt assemblies. Refer to TM 55-1520-240-23P-1, Figure 177, Item 42 (H-47D) or TM 1-1520-252-23P-1, Figure 05-6, Item 42 (MH-47E).

(2) Identify the five digit manufacturer's code or manufacturer's name on the bolt head. If the bolt head is marked with one of the CAGE Codes or manufacturer's name listed below, the 114R3650-9 bolt is serviceable. Proceed to paragraph 9d.

(a) CAGE Code 56878 (SPS Technologies Inc.)

(b) CAGE Code 84256 (Avibank Manufacturing Co.)

(c) CAGE Code 77272 (Boeing)

(3) If the 114R3650-9 bolt is unserviceable, or if the CAGE Code or manufacturer's name cannot be identified, proceed to paragraph 9a.

b. P/N BACB30ST10-40 bolt, self-retaining -

(1) Locate the self-retaining bolts. Refer to TM 55-1520-240-23P-1, Figure 376, Item 46 (H-47D) or TM 1-1520-252-2223P-1, Figure 11-16, Item 42 (MH-47E).

(2) Identify the five digit manufacturer's code or manufacturer's name on the bolt head. If the bolt head is marked with one of the CAGE Codes or manufacturer's name listed below, the BACB30ST10-40 bolt is serviceable. Proceed to paragraph 9d.

(a) CAGE Code 84256 (Avibank Manufacturing Co.)

(b) CAGE Code 77272 (Boeing)

(3) If the BACB30ST10-40 bolt is unserviceable, or if the CAGE Code or manufacturer's name cannot be identified, proceed to paragraph 9a.

c. If the 114R3650-9 and BACB30ST10-40 bolts are determined to be serviceable, inspection is complete. Proceed to paragraph 9d.

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9. Correction Procedures.

a. Remove and replace any unserviceable bolts with serviceable 114R3650-9 and BACB30ST10-40 bolts from the supply system.

b. P/N 114R3650-9 Bolt Assembly -

(1) H-47D aircraft - refer to TM 55-1520-240-23, Task 5-101 (Remove Drive Arms) and 5-112 (Install Drive Arms).

(2) MH-47E aircraft - refer to TM 1-1520-252-23, Task 5-152 (Remove Drive Arms) and 5-163 (Install Drive Arms).

c. P/N BACB30ST10-40 Self-Retaining Bolt -

(1) H-47D Aircraft - refer to TM 55-1520-240-23, Task 11-227 (Remove Aft LCT Yoke) and 11-233 (Install Aft LCT Yoke).

(2) MH-47E Aircraft - Refer to TM 1-1520-252-23, Task 11-245 (Remove Aft LCT Yoke) and 11-251 (Install Aft LCT Yoke).

d. After completion of the paragraph 8 inspection procedures and (if required) paragraph 9 correction procedures, the red horizontal dash //--// status symbol entry will be cleared and compliance with CH-47-01-ASAM-09 (TB 1-1520-240-20-139) entered on the DA Form 2408-15.

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. All requisitions shall use project code (CC 57-59) "X11", (X-RAY-ONE-ONE).

NOTE

Project code "X11", is required to track and establish a data base of stock fund expenditures incurred by the field as a result of ASAM/SOF actions.

c. Bulk and Consumable Materials -

| NOMENCLATURE | PART NUMBER | NATIONAL STOCK NUMBER |
|---------------------|--------------------|------------------------------|
| NUT | AN320-10 | 5310-00-176-8114 |
| NUT | AN320-9 | 5310-00-176-8113 |
| WASHER | AN960-916 | 5310-00-167-0824 |
| WASHER | AN960-1216 | 5310-00-167-0823 |
| WASHER, FLAT | AN960-1016 | 5310-00-167-0826 |
| WASHER, REC. | MS20002C10 | 5310-00-275-9211 |
| PIN, COTTER | RS40-7 | 5315-00-241-7332 |
| BUSHING, SLEEVE | 145R3116-5 | 3120-01-129-7493 |

d. Disposition - Demilitarize/mutilate in accordance with TM 1-1500-328-23 any subject bolt which does not meet inspection criteria.

e. Disposition of Hazardous Material - N/A.

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

12. Application.

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

Technical Bulletin. Report aircraft non-mission capable supply (NMCS) while waiting for parts in accordance with this Technical Bulletin.

- b. Estimated Time Required-
 - (1) Time to complete Inspection –
 - (a) Total of 2 man-hours using 1 person.
 - (b) Total of 0 hours downtime for one end item
 - (2) Time for Replacement of Bolts –
 - (a) Total of 30 man-hours using 5 persons.
 - (b) Total of 6 hours downtime for one end item.
- c. Estimated Cost Impact to the Field.

| NOMENCLATURE | PN/NSN | QUANTITY | COST EACH | TOTAL |
|---------------|-----------------------------------|----------|-----------|----------|
| BOLT ASSEMBLY | 114R3650-9/ 1615-00-003-1154 | 2 | \$105.38 | \$210.76 |
| BOLT ASSEMBLY | BACB30ST10-40 5306-00-008-5032 | 1 | \$62.25 | \$62.25 |

TOTAL COST PER AIRCRAFT = \$273.01

- 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 55-1520-240-23 and TM 1-1520-252-23 shall be changed to reflect this Technical Bulletin. A copy of this Technical Bulletin shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

13. References.

- a. DA PAM 738-751, 15 MAR 99..
- b. TM 55-1520-240-23.
- c. TM 55-1520-240-23P.
- d. TM 1-1520-252-23.
- e. TM 1-1520-252-23P.
- f. TM 1-1500-328-23.

14. Recording and Reporting Requirements.

- a. Aircraft –
 - (1) TAMMS Reporting Compliance Suspense Date – Upon entering requirements of this Technical Bulletin on DA Form 2408-13-1 for all effected aircraft, Commanders will forward a priority message, data-fax or e-mail to Commander, 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 commercial (256) 313-2111. E-mail address is safeadm@redstone.army.mil. The report will cite this message and TB number (CH-47-01-ASAM-09, TB 1-1520-240-20-139), 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 - No special report of the results of this inspection is required.
- b. Wholesale Spare Parts/Assemblies – N/A.

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- c. Retail Spare Parts/Assemblies – N/A.
- 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 1574/DD Form 1574-1, Serviceable Tag/Label – Materiel (color yellow). Annotate remarks block with "Inspected Serviceable in accordance with CH-47-01-ASAM-09 (TB 1-1520-240-20-139).
- (5) DD Form 1577/DD Form 1577-1, Unserviceable (condemned) Tag/Label – Materiel (color red). Annotate remarks block with "Condemned in accordance with CH-47-01-ASAM-09, (TB 1-1520-240-20-139), and mutilated in accordance with TM 1-1500-328-23."

15. Weight and Balance. N/A.

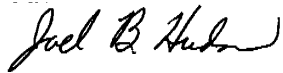
16. Points of Contact.

- a. Technical point of contact for this Technical Bulletin is Mr. Larry Wieschhaus, AMSAM-RD-AE-I-P-C, DSN 897-3341 or commercial (256) 313-3341, datafax extension is DSN 897-4348 or commercial (256) 313-4348. E-mail is "larry.wieschhaus@redstone.army.mil".
- b. Logistical point of contact for this Technical Bulletin is Mr. Bill Olson, SFAE-AV-CH-L, DSN 897-3379 or commercial (256) 313-3379, datafax is 897-4348. E-mail is "william.olson@peoavn.redstone.army.mil".
- c. Forms and Records point of contact for this Technical Bulletin is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or commercial (256) 876-5564, datafax is DSN 746-4904. E-mail is "ann.waldeck@redstone.army.mil".
- d. Safety Points of Contact are –
 - (1) Primary – Mr. Frank Rosebery (SAIC), AMSAM-SF-A, DSN 788-8631 or commercial (256) 842-8631, datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is "frank.rosebery@redstone.army.mil".
 - (2) Alternate – Mr. Russell Peusch, AMSAM-SF-A, DSN 788-8632 or commercial (256) 842-8632, datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is "russell.peusch@redstone.army.mil".
- e. Foreign Military Sales recipients requiring clarification of action advised by this Technical Bulletin should contact -
 - (1) Primary -- Mr. Ronnie Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or commercial (256) 313-6856, datafax is DSN 897-6630 or commercial (256) 313-6630. E-mail is "ronnie.sammons@redstone.army.mil".
 - (2) Alternate – Mr. Paul W. Tarr, AMSAM-SA-CS-NF, DSN 897-6861 or commercial (256) 3113-6861. Datafax is DSN 897-6630 or commercial (256) 313-6630. E-mail is "paul.tarr@redstone.army.mil".
- f. After hours contact the AMCOM COMMAND OPERATIONS CENTER (COC) DSN 897-2066/7 or commercial (256) 313-2066/7. Huntsville, AL is GMT minus 6 hours.

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By Order of the Secretary of the Army:

Official:



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To be distributed in accordance with Initial Distribution Number (IDN) 314002, requirements for TB 1-1520-240-20-139.

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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: 079275-000