

URGENT

TB 1-1520-240-20-135

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION FOR UNTESTED FLIGHT SAFETY PART (FSP) BOLTS, P/N 114R3650-13 AND 114R3650-15 ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
15 February 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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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 114R3650-13 and 114R3650-15 bolts in accordance with CH-47-01-ASAM-07 (TB 1-1520-240-20-135) at the next phase inspection, but no later than 01 March 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 Depot Maintenance - Depot Commanders will not issue aircraft until they are in compliance with this Technical Bulletin.

c. Aircraft Undergoing Maintenance - Same as paragraph 1a.

d. Aircraft in Transit.

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

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

This TB supersedes USAAMCOM Message 121443Z FEB 01 CH-47-01-ASAM-07

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e. Maintenance Trainers (Category A and B). Comply no later than 12 August 2001.

f. 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-07 (TB 1-1520-240-20-135), inspection for untested flight safety part (FSP) bolts, P/N 114R3650-13 and 114R3650-15, 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.

g. 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 01 March 2002, and report in accordance with paragraph 14b.

3. Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14a no later than 7 March 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 114R3650-13 and 114R3650-15 bolts are flight safety parts. The 114R3650-13 bolt (three per rotor head) is superseded and replaced by the improved 114R3650-16 bolt, and is used to attach the upper end of each pitch link to the pitch arm on both the forward and aft rotor heads. The 114R3650-15 bolt (three per rotor head) is superseded and replaced by the improved 114R3650-17 bolt, and is used to attach the lower end of each pitch link to the swashplate on both the forward and aft rotor heads. Some of the 114R3650-13 and -15 bolts were fielded without being qualified as an alternate source by fatigue testing.

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

c. The purpose of this Technical Bulletin is to -

(1) Inspect all 114R3650-13 and 114R3650-15 bolts installed on H-47 aircraft, installed on spare rotor heads, and in stock.

(2) Replace all 114R3650-13 and 114R3650-15 bolts that do not have the approved CAGE Code or manufacturers name on the bolts with improved 114R3650-16 and 114R3650-17 bolts respectively.

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	114R3650-13 (replaced by 114R3650-16)	N/A 5306-01-301-7793
BOLT ASSEMBLY	114R3650-15 (replaced by 114R3650-17)	N/A 5306-01-301-7794

8. Inspection Procedures.

NOTE

There may be two different five digit codes marked on the part. The five digit code 81996 is not the manufacturers CAGE Code. If found, 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 (4) and 8b (4) to determine the manufacturers CAGE Code.

NOTE

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

a. P/N 114R3650-13 bolt assembly -

(1) Locate the bolt assemblies, three (3) per rotor head, refer to TM 55-1520-240-23P-1, Figure 176, Item 73 (H-47D) or TM 1-1520-252-23P-1, Figure 05-4, Item 75 (MH-47E).

(2) Any of the six (6) bolts per aircraft are serviceable if their part number is 114R3650-16. Proceed to paragraph 8c.

(3) Any of the six (6) bolts per aircraft are unserviceable if their part number cannot be identified, proceed to paragraph 9a.

(4) If any bolts part number is 114R3650-13, identify the five digit manufacturers code or manufacturers name on the bolt head. If the bolt head is marked with one of the CAGE Codes or manufacturers name listed below, the 114R3650-13 bolt is serviceable. Proceed to paragraph 8c.

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

(b) CAGE Code 77272 (Boeing)

(5) If any 114R3650-13 bolt is unserviceable, or if the CAGE Code or manufacturers name cannot be identified, proceed to paragraph 9a.

b. P/N 114R3650-15 bolt assembly -

(1) Locate the bolt assemblies, three (3) per rotor head. Refer to TM 55-1520-240-23P-1, Figure 177, Item 20 (H-47D) or TM 1-1520-252-23P-1, Figure 05-6, Item 20 (MH-47E).

(2) Any of the six (6) bolts per aircraft are serviceable if their part number is 114R3650-17, proceed to paragraph 8c.

(3) Any of the six (6) bolts per aircraft are unserviceable if their part number cannot be identified, proceed to paragraph 9a.

(4) If any bolts part number is 114R3650-15, identify the five digit manufacturers code or manufacturers name on the bolt head. If the bolt head is marked with one of the CAGE Codes or manufacturers name listed below, the 114R3650-15 bolt is serviceable. Proceed to paragraph 8c.

(a) CAGE Code 56878 SPS Technologies Inc.)

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

(c) CAGE Code 77272 (Boeing)

(5) If any 114R3650-15 bolt is unserviceable, or if the CAGE Code or manufacturers name cannot be identified, proceed to paragraph 9a.

c. If all six (6) 114R3650-13 and 114R3650-15 bolts are determined to be serviceable, the red horizontal dash //--// will be cleared and compliance with CH-47-01-ASAM-07 (TB 1-1520-240-20-135) will be entered on the DA Form 2408-15.

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9. Correction Procedures.

a. Remove and replace any unserviceable 114R3650-13 or 114R3650-15 bolt with a 114R3650-16 or 114R3650-17 bolt, respectively, from the supply system.

(1) H-47D Aircraft - Refer to TM 55-1520-240-23-4, Task 5-94.1 (Replace Pitch Link Bolts).

(2) MH-47E Aircraft - Refer to TM 1-1520-252-23-5, Task 5-140 (Replace Pitch Link Bolts).

b. After completion of the above correction procedure, the red horizontal dash//-- status symbol entry will be cleared and compliance with CH-47-01-ASAM-07 (TB 1-1520-240-20-135) will be 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) "XOP", (X-RAY-ZERO-PAPA).

NOTE

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

c. Bulk and Consumable Materials - N/A.

d. Disposition - Demilitarize/mutilate in accordance with TM 1-1500-328-23 any bolt assembly 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 ASAM.

b. Estimated Time Required-

(1) Inspection only -

(a) Total of 2 man-hours using 1 person.

(b) Total of 0 hours downtime for one end item

(2) Replacement -

(a) Total of 12 man-hours using 3 persons.

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

c. Estimated Cost Impact to the Field.

NOMENCLATURE	PN/NSN	QUANTITY	COST EACH	TOTAL
BOLT ASSEMBLY	114R3650-16/ 5306-01-301-7793	6	\$481.78	\$2,890.68
BOLT ASSEMBLY	114R3650-17/ 5306-01-301-7794	6	\$453.34	\$2,720.04

TOTAL COST PER AIRCRAFT = \$5,610.72

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. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this Technical Bulletin on DA Form 2408-13-1 on all subject MDS aircraft, Commanders will forward a priority message, datafax or e-mail to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, in accordance with 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 CH-47-01-ASAM-07 (TB 1-1520-240-20-135), 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) - N/A.
- c. Reporting Message Receipt (SPARES) - N/A.
- d. Task/Inspection Reporting Suspense Date (SPARES) - N/A.
- e. 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) DA Form 2408-16, Aircraft Component Historical Record.
- (5) DA Form 2410, Component Removal and Repair/Overhaul Record (only if bolts are removed/replaced).
- (6) 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-07 (TB 1-1520-240-20-135).
- (7) 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-07, (TB 1-1520-240-20-135), 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 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".

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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) CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0410 or commercial (256) 313-0410. E-mail is "wittstromjl@redstone.army.mil"

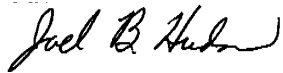
(2) Mr. Ronnie Sammons, AMSAM-SA-CS-NF, DSN 897-0408 or commercial (256) 313-0408, datafax is DSN 897-0411 or commercial (256) 313-0411. E-mail is "sammonsrw@redstone.army.mil".

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.

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
0104703

DISTRIBUTION:

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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: <ls-lp-@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: 078882-000