

URGENT

TB 1-1520-240-20-125

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MANDATORY INSPECTION OF UNTESTED FLIGHT SAFETY PART (FSP) BOLTS, PART NUMBER 114R3650-7 ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
3 October 2000

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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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 part number 114R3650-7 bolts on H-47 aircraft in accordance with CH-47-00-ASAM-07, (TB 1-1520-240-20-125) within 15 flight hours but no later than 26 OCT 00, whichever comes first". Clear the red horizontal dash // - // entry when the inspection procedures in accordance with paragraph 8 are completed. The affected aircraft shall be inspected as soon as practical but no later than 26 OCT 00. 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. Commanders and Facility managers will not issue aircraft until they are in compliance with this Technical Bulletin.

d. Aircraft in Transit.

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

This TB supersedes USAAMCOM Message 261600Z SEP 00 CH-47-00-ASAM-07.

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- (2) Ferry Status. Same as paragraph 1a.
- e. Maintenance Trainers (Category A and B). Same as paragraph 1a.
- 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 listed in paragraph 7, in all condition codes, are annotated to read; "CH-47-00-ASAM-07 (TB 1-1520-240-20-125), inspection for untested P/N 114R3650-7 bolts, not complied with".
 - (1) Wholesale Stock. N/A.
 - (2) Retail Stock. N/A.
- g. Components/Parts in Work (Depot Level and Others). N/A.

2. Task/Inspection Suspense Date. Inspect untested P/N 114R3650-7 bolts within the next 15 flight hours, but no later than 26 OCT 00 and report in accordance with paragraph 14b.

3. Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14a no later than 17 OCT 00.

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. A change in the Army Flight Safety Part (FSP) policy in October 1995 required that parts originally qualified by the prime contractor be fatigue tested for all of the prime contractor's authorized vendors/suppliers. The 114R3650-7 bolt assembly is a flight safety part which attaches the aft cyclic trim actuator, and fixed link, to the swashplate. Some of the 114R3650-7 bolts manufactured by Boeing authorized vendors/suppliers were fielded before they were 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 inspect for and direct the replacement of 114R3650-7 bolts manufactured by untested vendors and bolts whose vendors cannot be identified on H-47 aircraft with 114R3650-7 bolts manufactured by known tested sources. Replacement of untested/unidentifiable 114R3650-7 bolts is required at the next H-47 phase maintenance inspection interval but no later than 31 JAN 01, 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, SELF-RETAINING	114R3650-7	1615-00-003-1156

8. Inspection Procedures.

a. Locate both 114R3650-7 bolt assembly, attachments, aft cyclic trim actuator, and fixed link, to the swashplate (TM 55-1520-240-23P, Figure 177, Item 39 and Figure 376, Item 45) or (TM 1-1520-252-23P, Figure 05-6, Item 39 and Figure 11-16, Item 41).

b. Identify the five digit manufacturers cage code on the bolt head.

NOTE

There may be two different five digit cage codes marked on the part. The five digit cage code 81996 is not the manufacturers cage code. If found, the number 81996 identified the part as having been manufactured in accordance with a government technical data package (TDP). Use the other five-digit cage code which is the manufacturers.

c. If the manufacturers cage code is either of the following, the bolts are serviceable:

- (1) 56878 (SPS Technologies Inc.)
- (2) 84256 (Avibank Manufacturing Co.)

d. If the 114R3650-7 bolts are determined serviceable, the red horizontal dash // - // will be cleared and compliance with this message and TB 1-1520-240-20-125 will be noted and reported in accordance with paragraph 14b.

e. If the manufacturers cage code is anything other than the two cage codes in paragraph 8c above, or if no manufacturers cage code can be identified, proceed to the correction procedure in paragraph 9.

9. Correction Procedures.

a. Clear the red horizontal dash // - // entry of paragraph 1a. Enter a red horizontal dash // - // status symbol and the following statement on the DA Form 2408-13-1: "Replace untested P/N 114R3650-7 bolts at XXXX ACFT hours (next phase maintenance inspection interval) or 31 JAN 01, whichever comes first."

b. Prepare the aircraft for safe ground maintenance.

c. Remove and replace unserviceable 114R3650-7 bolts at the next scheduled phase maintenance inspection interval, but no later than 31 JAN 01, whichever occurs first, with a tested bolt from the supply system that is serviceable as defined in paragraph 8 above. Refer to TM 55-1520-240-23, Task 5-117 (removal) and Task 5-133 (install), or TM 1-1520-252-23, Task 5-169 (removal) and Task 5-188 (install).

d. After completion of the above correction procedure, the red horizontal dash // - // status symbol entry will be cleared and compliance with this message and TB 1-1520-240-20-125 will be noted and reported in accordance with paragraph 14b.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited in paragraph 7 may be required to replace defective items. Any 114R3650-7 bolt received from supply which is not marked with cage code 56878 or 84256 is considered unserviceable and is to be disposed of in accordance with paragraph 10d below.

b. Requisitioning Instructions. Requisition replacement parts using normal supply procedures. All requisitions shall use project code (CC 57-59) "X07", "x-ray-zero-seven".

NOTE

Project code "X07", "x-ray-zero-seven" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of SOF and ASAM actions.

c. Bulk and Consumable Materials. N/A.

d. Disposition. Demilitarize/mutilate in accordance with TM 1-1500-328-23 any 114R3650-7 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.

b. Estimated Time Required-

- (1) For inspection -
 - (a) Total of 1 man-hours using 1 person.
 - (b) Total of 0 hours downtime for one end item.

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(2) For Replacement –

(a) Total of 16 man-hours using 2 persons.

(b) Total of 8 hours downtime for one end item.

c. Estimated Cost Impact to the Field.

NOMENCLATURE	PART NUMBER	QUANTITY	COST EACH	TOTAL
BOLT	114R3650-7	2	\$115.67	\$231.34
NUT	AN320-10	2	\$1.06	\$2.12
PIN,COTTER	MS24665-374	2	\$.03	\$.06
WASHER, FLAT	AN960-1016	2	\$.03	\$.06
WASHER, RE-CESS	MS20002C10	2	\$.17	\$.34

TOTAL COST PER AIRCRAFT = \$233.92

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, 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 this Technical Bulletin 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, Commanders will forward a priority message to: Commander, AMCOM, ATTN: SFAE-AV-CH-L, Logistical point of contact in paragraph 16b. The report will cite this Technical Bulletin and Technical Bulletin 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 10 NOV 00.

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) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label – Materiel (color yellow). Annotate remarks block with "Inspected serviceable in accordance with CH-47-00-ASAM-07 (TB 1-1520-240-20-125)."

(5) DD Form 1577/DD Form 1577-1, Unserviceable (condemned) Tag/Label – Materiel (color red). Annotate remarks block with "Condemned in accordance with CH-47-00-ASAM-07 (TB 1-1520-240-20-125)."

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 (256) 313-4348. E-mail is "william.olson@peoavn.redstone.army.mil".

c. Wholesale Materiel point of contact (SPARES). N/A.

d. 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".

e. 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) 313-8632, datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is "russel.peusch@redstone.army.mil".

f. Foreign Military Sales recipients requiring clarification of action advised by this Technical Bulletin should contact CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0410 or commercial (256) 313-0410. E-mail is "wittstromjl@redstone.army.mil" or 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 "sammonsrw@redstone.army.mil". Huntsville, AL is GMT minus 5 hours.

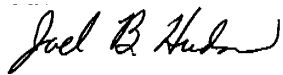
g. After hours contact the AMCOM COMMAND OPERATIONS CENTER (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

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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
0027701

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 313935, requirements for TB 1-1520-240-20-125.

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

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F Fahrenheit temperature 5/9 (after subtracting 32) Celsius temperature °C

PIN: 078525-000