

URGENT

*TB 1-1520-238-20-70

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

REPLACEMENT OF THE INBOARD BALANCE
WEIGHT ATTACHMENT BOLTS
ON AH-64A HELICOPTERS

Headquarters, Department of the Army, Washington, D.C.
31 July 1996

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

NOTE

This TB is in effect until superseded or rescinded.

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 **red horizontal dash // - //**. **The red horizontal dash // - //** may be cleared when the task described in paragraph 9 below is completed. The affected aircraft/blades shall have this maintenance performed as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this 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 TB has been completed.
- c. Aircraft Undergoing Maintenance. Aircraft will not be issued until compliance with this TB has been completed.
- d. Aircraft in Transit.

(1) Surface/Air Shipment. Prior to first flight.

(2) Ferry Status -

(a) Inspect at final destination.

(b) Those aircraft that have a DD Form 250 and are at McDonnell Douglas Helicopter Systems (MDHS) will be inspected prior to ferry to the final destination.

*This TB supersedes TB 1-1520-238-20-70, dated 30 April 1996, and supersedes Aviation Safety Action Message, 121919Z June 96, AH 64-96-ASAM-08.

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

f. Components/Parts in Stock at All Levels (Depot and Others) Including War Reserves - Upon receipt of this TB, the material condition tags of all items in all condition codes listed in paragraph 6 below shall be annotated to read "Replacement of Inboard Balance Weight Attachment Bolts not complied with

(1) Materiel Located in All Wholesale Depots Including All Satellite Wholesale Depots and War Reserve Depots - Report receipt of this TB in accordance with paragraph 14c(1). Upon receipt of this TB, Depot Commanders and others maintaining wholesale stock shall ensure that serviceable materiel (Condition Codes //A//, //B//, and //C//) is placed in condition code J and tagged with a suspended tag/label - Materiel DD Form 1576/1576-1. Annotate the remarks block with "Replacement of Inboard Balance Weight Attachment Bolts, not complied with. Do not remove existing materiel condition tags. Report compliance with this TB in accordance with paragraph 14d(1).

(2) Materiel Located in Installation/Unit Storage - Report receipt of this TB in accordance with paragraph 14c(2). Upon receipt of this TB, commanders and others maintaining retail stock shall contact the supported aviation organization to perform the inspection required by paragraph 8 and to perform the correction procedures of paragraph 9 on discrepant materiel. Report compliance with this TB in accordance with paragraph 14d(2).

g. Components/Parts in Work - Assembly components listed in paragraph 6 will not be issued until compliance with this TB.

2. Task/Inspection Suspense Date. Within 10 hours/14 days.

3. Reporting Compliance Suspense Date. No later than 9 August 1996 per para 14a of this TB. This publication is effective until 31 July 1998 unless sooner rescinded or superseded.

4. Summary of Problem.

a. There have been cases of the main rotor blade shouldered studs PIN 7-211412071 -3 cracking due to hydrogen embrittlement.

b. For manpower/downtime and funding impacts refer to paragraph 12.

c. The purpose of this TB is to ensure the replacement of the affected shouldered studs.

5. End Items to be inspected. Paragraph 8 lists the affected main rotor blades by serial number.

6. Assembly Components to be Inspected:

| <u>NOMENCLATURE</u> | <u>PART NO.</u> | <u>NSN</u> |
|---------------------|-----------------|------------------|
| Blade, Main Rotor | 7-311412000-3 | 1615-01-310-4978 |
| Blade, Main Rotor | 7-311412000-3A | 1615-01-330-5098 |
| Blade, Main Rotor | 7-311412000-5 | 1615-01-332-0702 |
| Blade, Main Rotor | 7-311412000-5A | 1615-01-415-6397 |

7. Parts to be Inspected:

| <u>NOMENCLATURE</u> | <u>PART NO.</u> | <u>NSN</u> |
|---------------------|-----------------|------------------|
| Stud, Shouldered | 7-211412071-3 | 5307-01-179-7405 |
| Nut, Self Locking | HS262-624 | 5310-01-172-5136 |
| Washer, Flat | MS20002-6 | 5310-00-149-9130 |
| Washer, Flat | HS306-233H | 5310-01-173-2221 |

8. Inspection Procedures. Inspect the main rotor blades for the following affected blade serial numbers:

| | | | | | |
|----------|----------|----------|----------|----------|----------|
| C10-5462 | C10-5463 | C10-5464 | C10-5465 | C10-5466 | C10-5467 |
| C10-5468 | C10-5469 | C10-5470 | C10-5471 | C10-5472 | C10-5473 |
| C10-5474 | C10-5475 | C10-5476 | C10-5477 | C10-5478 | C10-5479 |
| C10-5480 | C10-5481 | C10-5482 | C10-5483 | C10-5484 | C10-5485 |
| C10-5486 | C10-5487 | C10-5488 | C10-5489 | C10-5490 | C10-5491 |
| C10-5492 | C10-5493 | C10-5494 | C10-5495 | C10-5496 | C10-5497 |
| C10-5498 | C10-6499 | C10-5500 | C10-5501 | C10-5502 | C10-5503 |
| C10-5504 | C10-5505 | C10-5506 | C10-5507 | C10-5508 | C10-5509 |
| C10-5510 | C10-5511 | C10-5512 | C10-5513 | C10-5514 | C10-5515 |
| C10-5516 | C10-5517 | C10-5518 | C10-5519 | C10-5520 | C10-5521 |
| C10-5522 | C10-5523 | C10-5524 | C10-5525 | C10-5526 | C10-5527 |
| C10-5528 | C10-5529 | C10-5530 | C10-5531 | C10-5532 | C10-5533 |
| C10-5534 | C10-5535 | C10-5536 | C10-5537 | C10-5538 | C10-5539 |
| C10-5540 | C10-5541 | C10-5542 | C10-5543 | C10-5544 | C10-5545 |
| C10-5546 | C10-5547 | C10-5548 | C10-5549 | C10-5550 | C10-5551 |
| C10-5552 | C10-5553 | C10-5554 | C10-5555 | C10-5556 | C10-5557 |
| C10-5558 | C10-5559 | C10-5560 | C10-5561 | C10-5562 | C10-5563 |
| C10-5582 | C10-5583 | C10-5584 | C10-5585 | C10-5586 | C10-5587 |
| C10-5588 | C10-5589 | C10-5590 | C10-5591 | C10-5592 | C10-5593 |
| C10-5594 | C10-5595 | C10-5596 | C10-5597 | C10-5598 | C10-5599 |
| C10-5600 | C10-5601 | C10-5602 | C10-5603 | C10-5604 | C10-5605 |
| C10-5606 | C10-5607 | C10-5608 | C10-5609 | C10-5610 | C10-5611 |
| C10-5612 | C10-5613 | C10-5614 | C10-5615 | C10-5616 | C10-5617 |
| C10-5618 | C10-5619 | C10-5620 | C10-5621 | C10-5622 | C10-5623 |
| C10-5624 | C10-5625 | C10-5626 | C10-5627 | C10-5628 | C10-5629 |
| C10-5630 | C10-5631 | C10-5632 | C10-5633 | C10-5634 | C10-5635 |
| C10-5636 | C10-5637 | C10-5638 | C10-5639 | C10-5640 | C10-5641 |
| C10-5642 | C10-5643 | C10-5644 | C10-5645 | C10-5646 | C10-5647 |
| C10-5648 | C10-5649 | C10-5650 | C10-5651 | C10-5652 | C10-5653 |
| C10-5654 | C10-5655 | C10-5656 | C10-5657 | C10-5658 | C10-5659 |
| C10-5660 | C10-5661 | C10-5662 | C10-5663 | C10-5664 | C10-5665 |
| C10-5666 | C10-5667 | C10-5668 | C10-5669 | C10-5670 | C10-5671 |
| C10-5672 | C10-5673 | C10-5674 | C10-5675 | C10-5676 | C10-5677 |

| | | | | | |
|----------|----------|----------|----------|----------|----------|
| C10-5678 | C10-5679 | C10-5680 | C10-5681 | C10-5682 | C10-5683 |
| C10-5684 | C10-5685 | C10-5686 | C10-5687 | C10-5688 | C10-5689 |
| C10-5690 | C10-5691 | C10-5692 | C10-5693 | C10-5694 | C10-5695 |
| C10-5696 | C10-5697 | C10-5698 | C10-5699 | C10-5700 | C10-5701 |
| C10-5702 | C10-5703 | C10-5704 | C10-5705 | C10-5706 | C10-5707 |
| C10-5708 | C10-5709 | C10-5710 | C10-5711 | C10-5712 | C10-5713 |
| C10-5714 | C10-5715 | C10-5716 | C10-5717 | C10-5718 | C10-5719 |
| C10-5720 | C10-5721 | C10-5722 | C10-5723 | C10-5724 | C10-5725 |
| C10-5726 | C10-5727 | C10-5728 | C10-5729 | C10-5730 | C10-5731 |
| C10-5732 | C10-5733 | C10-5734 | C10-5735 | C10-5736 | C10-5737 |
| C10-5738 | C10-5739 | C10-5740 | C10-5741 | C10-5742 | C10-5743 |
| C10-5744 | C10-5745 | C10-5746 | C10-5747 | C10-5748 | C10-5749 |
| C10-5750 | C10-5751 | C10-5752 | C10-5753 | C10-5754 | C10-5755 |
| C10-5756 | C10-5757 | C10-5758 | C10-5759 | C10-5760 | C10-5761 |
| C10-5762 | C10-5763 | C10-5764 | C10-5765 | C10-5766 | C10-5767 |
| C10-5768 | C10-5769 | C10-5770 | C10-5771 | C10-5772 | C10-5773 |
| C10-5774 | C10-5775 | C10-5776 | C10-5777 | C10-5778 | C10-5779 |
| C10-5780 | C10-5781 | C10-5782 | C10-5783 | C10-5784 | C10-5785 |
| C10-5786 | C10-5787 | C10-5788 | C10-5789 | C10-5790 | C10-5791 |
| C10-5792 | C10-5793 | C10-5794 | C10-5795 | C10-5796 | C10-5797 |
| C10-5798 | C10-5799 | C10-5800 | C10-5802 | C10-5803 | C10-5804 |
| C10-5805 | C10-5806 | C10-5807 | C10-5808 | C10-5809 | C10-5810 |
| C10-5811 | C10-5812 | C10-5813 | C10-5814 | C10-5815 | C10-5816 |
| C10-5817 | C10-5818 | C10-5819 | C10-5820 | C10-5822 | C10-5823 |
| C10-5824 | C10-5825 | C10-5826 | C10-5828 | C10-5830 | C10-5831 |
| C10-5832 | C10-5833 | C10-5835 | C10-5837 | C10-5838 | C10-5839 |
| C10-5840 | C10-5841 | C10-5844 | C10-5846 | C10-5847 | C10-5850 |
| C10-5852 | C10-5853 | C10-5854 | C10-5855 | C10-5857 | C10-5858 |
| C10-5859 | C10-5860 | C10-5862 | C10-5863 | C10-5864 | C10-5868 |
| C10-5871 | C10-5872 | C10-5873 | | | |

9. Correction Procedures. Reference TM 1-1520-238-23-3, para 5.16 for correction procedures.

- a. Safe the helicopter per TM 1-1520-238-23-1, para 1.57.

NOTE

It is not necessary to remove blade to do the following correction procedure.

- b. Replace studs (7-211412071-3) and self-locking nuts (HS262-624) per TM 1-1520-238-23-3, task 5.16.
- c. Inspect the washers (MS20002-6) for damage in accordance with TM 1-1 500-204-23. If no damage is present, retain the washers for reuse.

CAUTION

Failure to reinstall the same weights on the same blade from which they were removed will result in an out-of-balance condition of the main rotor hub. Keep the weights together, tag and identify weights according to the blade serial number from which they were removed.

10. Supply/Parts and Disposition.

- a. Parts Required. Items cited in paragraph 7 of this TB are required to replace unserviceable items.
- b. Requisitioning Instructions. Contact the Logistical POC for a one-time free issue of the required shouldered stud per paragraph 16b.
- c. Bulk and Consumable Materials. N/A.
- d. Disposition. Dispose of removed parts/components in accordance with normal supply procedures. A QDR is not required.
- e. Disposition 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 one-half (1/2) man-hours using one (1) person per blade.
 - (2) Total of two (2) hours downtime per aircraft.
- c. Estimated Cost Impact of Stock Fund Items to the Field.

| <u>Nomenclature</u> | <u>Part No./NSN</u> | <u>Quantity Cost Ea.</u> | <u>Total \$</u> |
|--------------------------|---------------------|--------------------------|-----------------|
| Stud, Shouldered | 7-211412071-3 | (8) \$20.12 | \$160.96 |
| Nut, Self locking | HS 262-624 | (8) \$2.29 | \$18.32 |
| Washer, Flat | MS20002-6 | (8) \$3.41 | \$27.28 |
| Washer, Flat | HS306-233H | (8) \$.80 | <u>\$6.40</u> |
| Total cost per aircraft: | | | \$212.96 |

- d. TBs/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.

13. References.

- a. TM 1-1520-238-23 series, Aviation Unit and Intermediate Maintenance Manual, AH-64A Helicopter, dated 16 May 94.
- b. TM 1 -1500-204-23 series, General Aircraft Maintenance Manuals.

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. Data fax number is DSN 693-2064 or Commercial 3141263-2064. E-mail address is "AMSATRXS @ EMH4.STL.ARMY.MIL." The report will cite this TB number, date of entry in a 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 Compliance Suspense Date (Spares).

(1) Materiel in Wholesale Depot Storage - Report receipt of this message to the wholesale materiel (Spares! point of contact listed in paragraph 16c within 3 working days from the date of this TB.

(2) Materiel in Retail Storage - Report receipt of this TB to the logistical point of contact listed in paragraph 16b within 7 days from the date of this TB.

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

(1) Materiel in Wholesale Depot Storage - Report compliance with this TB to the wholesale materiel point of contact (Spares) listed in paragraph 16c within 7 days of the date of this TB. Provide an estimate of the cost reimbursable funding required to move the items listed in paragraph 6 to a work area, unpack the materiel, repack the materiel after inspection by ATCOM inspectors, and return the materiel to storage. Report the serial numbers, by original serviceable condition code, of all materiel placed in condition code J.

(2) Materiel in Retail Storage - Report compliance with this TB to the logistical point of contact in paragraph 16b within 14 days of the date of this message. Report the quantity inspected by condition code and the resulting condition code. Report the serial numbers of all materiel requiring correction.

e. The following forms are applicable and are to be completed in accordance with DA PAM 738751, 15 June 92

(1) DA Form 2408-5-1, Equipment Modification Record Blade, Main Rotor.

(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) DD Form 1574 (Yellow Tag) for in stock items that are determined to be serviceable. (Mark "inspected serviceable" in accordance with this TB.)

(6) DD Form 1575 (Brown Tag) for in stock items in suspended status awaiting inspection. (Mark "suspended" in accordance with this TB.)

(7) DD Form 1577 (Red Tag) Unserviceable (Condemned) for in stock items that are determined to be unserviceable. (Mark "Unserviceable" in accordance with this TB.)

(8) DD Form 1577-2 (Green Tag) Unserviceable (Reparable) for in stock items that are determined to be reparable. (Mark "Unserviceable" in accordance with this TB.)

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical Point of Contact for this TB is Mr. Lawrence Powitzky, AMSAT-R-EIA, DSN 693-9869 or commercial (314) 263-9869.

b. Logistical Point of Contact for this TB is Mr. Jim Mason or Ms. Pam Brady, SFAE-AV-AAH-LF, DSN 693-1947/0877 or commercial (314) 263-1947/0877.

c. Wholesale Materiel Point of Contact (Spares) for this TB is Mr. Tullus Samples, AMSAT-ISAAA, DSN 693-5969 or commercial (314) 263-5969, and fax DSN 693-5936 or commercial (314) 263-5936.

d. Forms and Records Point of Contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or commercial (314) 260-2318.

e. Safety Point of Contact for this message is Mr. Jim Wilkins, AMSAT-R-X, DSN 693-2258 or commercial (314) 263-2258.

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

g. After hours contact ATCOM Command Operations Center, DSN 693-2066/ 2067 or commercial (31 4) 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 the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes of Publications and blank forms) directly to: Commander, U.S. Army Aviation and Troop Command, ATTN.: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you. You may also submit your recommended changes by E-mail directly to <mtmp@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

DENNIS J. REIMER
General, United States Army
Chief of Staff

Official:

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
02153

DISTRIBUTION:

To be distributed in accordance with DA Form 12-31-E, block no. 3577, requirements for TB 1-1520-238-20-70.

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

