URGENT

*TB 1-1520-237-20-261

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAINTENANCE MANDATORY RCS CSGLD-1860 (R1), UH-60 SERIES AIRCRAFT INSPECT AN/ARC-220 WIRING FOR CHAFING

Headquarters, Department of the Army, Washington, D. C. 31 October 2002

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

1. Priority Classification. URGENT

NOTE

IAW AR 95-1, para 6-6a/6-14a, MACOM Commanders may authorize temporary exception from 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. Upon receipt of this TB, make the following entry on the DA Form 2408-13-1. Enter a red horizontal dash //-// status symbol with the following statement: "inspect aircraft records IAW TB 1-1520-237-20-256 within the next 10 flight hours, but not later than 9 October 2002." When the procedures IAW paragrph 8 and 9. are completed, clear the red horizontal dash //-// entry The affected aircraft shall be inspected as soon as practical but no later than 9 October 2002. Commanders who are unable to comply with the requirements of this TB within the time frame specified will upgrade the affected aircraft status symbol to a red //x//.
 - b. Aircraft In Maintenance.
 - (1) Aircraft in AVUM, AVIM or depot level maintenance same as paragraph 1.a..
 - (2) Aircraft at contractor facility same as paragraph 1.a..
 - c. Aircraft in Transit.
 - (1) Surface/air shipment Within 10 hours/14 days of arrival.
 - (2) Ferry status Same as paragraph 1.a..
 - d. Maintenance Trainers (Category A and B). Same as paragraph 1.a..
 - e. Component/Parts in Stock at All Levels (Depot Level and Others), including War Reserves. N/A.
 - f. Components/Parts in Work (Depot Level and Others). N/A.

^{*} This TB supersedes USAAMCOM Aviation Safety Action Message, (ASAM) 241955Z SEP 02 (UH-60-02-ASAM-11).

- **2**. **Task/Inspection Suspense Date.** Complete the inspection IAW paragraph 8. within the next 10 flight hours but NLT 9 October 2002.
- **3. TAMMS Reporting Compliance Suspense Date**. Report compliance IAW paragraph 14.a.(1) NLT 2 October 2002.

4. Summary of Problem -

- a. Background -
- (1) TB 1-1520-237-20-256 was issued to require inspection for wire chafing on UH-60 aircraft that have been modified by MWO 1-1520-237-50-76 to introduce the AN/ARC-220 HF communications capability.
- (2) If the AN/ARC-220 was installed, the TB required unit modification of the P368R connector ar J9726 connector to the power amplifier/coupler by changing the inline connector backshell to a 90-degree backshell within the next 100 flight hours but NLT 12 June 2003.
 - b. Manpower/downtime and funding impacts See paragraph 12.
 - c. The purpose of this TB is to -
- (1) Notify units that if the AN/ARC-220 is installed, but has not been modified IAW TB 1-1520-237-20-256, the modification will be completed by the Airframe Condition Evaluation (ACE) Team at their next scheduled visit to the unit but NLT 31 March 2004.
- (2) Require a recurring 100 hour inspection of the wiring harness until ACE Team completes modification.
- 5. End Items to be inspected. All UH-60 aircraft.
- 6. Assembly Components to be Inspected. N/A.
- 7. Parts to be Inspected. N/A.
- 8. Inspection Procedures.
- a. Inspect the DA Form 2408-5 to determine if the aircraft has been modified with MWO 1-1520-237-50-76 (AN/ARC-220 installed).
- (1) If MWO 1-1520-237-50-76 (AN/ARC-220 installed) has not been applied, the inspection is complete. Clear the red horizontal dash //-/ status symbol required by paragraph 1.a. of this TB.
- (2) If MWO 1-1520-237-50-76 (AN/ARC-220 installed) has been applied, and the aircraft has been modified IAW TB 1-1520-237-20-256, the inspection is complete. Clear the red horizontal dash // // status symbol required by paragraph 1.a. of this TB.
- (3) If MWO 1-1520-237-50-76 (AN/ARC-220 installed) has been applied and the aircraft has not been modified IAW TB 1-1520-237-20-256, conduct a records check of the DA Form 2408-13-1 for the following red dash / / // entry: "HF Power Amplifier/coupler (AM-7531/URC) connector P368R at (J9726) due modification IAW TB 1-1520-237-20-256 within the next 100 flight hours but NLT 12 June 2003." If the modification has not been completed
 - (a) Clear the original red dash / / / / entry required by TB 1-1520-237-20-256.
 - (b) Make the following red dash // // entry on the DA Form 2408-13-1 "HF Power Amplifier/ Coupler (AM-7531/URC) connector P368R at (J9726) due modification by ACE Team IAW TB 1-1520-237-20-261 NLT 31 March 2004".
 - (c) Make and entry on the DA Form 2408-18 for "AN/ARC-220 Wiring Inspection" IAW TB 1-1520-237-20-261 due at aircraft hours at time of completion of TB 1-1520-237-20-256 plus 100, and every 100 hours thereafter until modified by ACE Team. Note ULLS-A units will use this message as authority to add this inspection to the inspection master file and use inspection number 800 for this recurring inspection.

- b. Perform the following inspection at the next 100 hour inspection and subsequent 100 hour inspections until the modification has been completed by the ACE Team.
 - (1) Gain access to HF equipment shelf -- transition area at WL 207.69. STA 464 TO STA 465.
- (2) Locate on the ARC-220 power amplifier/coupler wires P366R, P368R and P372R, which are connected to connectors J9724, J9726 and J9721 respectively.
- (3) Carefully inspect each wire harness IAW TM 1-1500-204-23-4 (Electrical and Instrument Maintenance Procedures and Practices) for damage to the spiral wrap caused by chafing against bulkhead (Former) directly aft of the connectors or from foot traffic.
 - (4) If no damage is noted, the inspection is complete.
- (5) If any damage is noted, remove black (Spiral) wrap. Discard Spiral wrap. Inspect integrity of service loops emanating from the connectors.
 - (a) If no wiring damage is noted inspection is complete. Apply new spiral wrap to wiring harness. Inspect HF equipment shelf and secure transition area.
 - (b) If wiring damage is noted but within tolerances IAW above TM reference, repair IAW above TM and notify technical point of contact in paragraph 16.a. with a description of damage. Inspect HF equipment shelf and secure transition area.
- (6) If any wire damage exceeds tolerance IAW above TM reference enter a circle red // X // on the DA Form 2408-13-1 "ARC-220 wiring damaged (i.e. chafed, cut, or broken) in transition area at power amplifier/coupler (AM-7531/URC), aircraft restricted from AN/ARC-220 operation". Disable HF power supply by physically disengaging the 30 AMP HF circuit breaker on the copilot's circuit breaker panel, apply a plastic tie-wrap to prevent closure of circuit breaker and notify technical point of contact in paragraph 16.a. with a description of damage. If any arcing has occurred as a result of chafed wiring, enter a red // X // on the DA Form 2408-13-1 "AN/ARC-220 wiring and structure damaged from arcing in transition area at power amplifier/coupler (AM-7531/URC)" and notify technical point of contact in paragraph 16.a..

9. Correction Procedures.

- a. The ACE Team will modify power amplifier/coupler (AM-7531/URC) connector as follows -
 - (1) Disconnect connector P368R AT J9726.
 - (2) Remove inline connector backshell P/N M85049/52-1-22W.
- (3) Install 90-degree connector backshell P/N M85049/51-1-22W rotating the installed backshell downward to the 180 degree position.
 - (4) Reconnect connector P368R at J9726.
 - (5) Locate connector P366R at J7924; follow wiring to former at STA 485.
- (6) Drill one 0.194 inch diameter hole in the former one inch inboard of the former splice. Deburr hole. Treat all exposed areas with alodine.
- (7) Install clamp (MS21919WDG7) around control wiring. Attach clamp to former using one screw (MS51958-64), two washers(NAS1149C0332R) and one nut (MS21042L3).
- (8) Remove excess service looping to prohibit any of the wire harness from touching the bulk-head (former). Loosen and re-tighten cable tie down station as necessary to remove excessive service looping.
- (9) Wrap power and signal harness separately with protective tape NSN 5970-00-955-9976 (CAGE CODE 81349, P/N MIL-I-46852 or equivalent).
 - (10) Inspect all reworked areas. Secure transition area.
- b. When the modification to the Power Amplifier/Coupler (AM-7531/URC) connector by the ACE Team is completed, clear red dash / / // entry required by paragraph 8.a.(3)(b), and remove requirement on the DA Form 2408-18 for "ARC/ARC-220 wiring 100 hour inspection".

10. Supply/Parts and Disposition.

a. Parts required – None. The repair parts listed below will be provided as a kit by the supporting ACE Team.

NOMENCLATURE

PART NO.

NSN

NOMENCLATURE	PART NO.	NSN	QTY	COST	TOTAL
BACKSHELL	M85049/51-1-22W	5935-01-190-6817 or 5935-00-501-0569	1 EA	\$ 5.29 EA	\$ 5.29
CLAMP	MS21919WDG7	5340-00-200-8559	1 EA	\$ 0.34 EA	\$ 0.34
SCREW	MS51958-64	5305-00-059-3660	1 EA	\$ 3.44 HD	\$ 0.03
WASHERS	NAS1149C0332R	5310-01-463-8841	2 EA	\$ 0.06 EA	\$ 0.12
NUT	MS21042L3	5310-00-807-1474	1 EA	\$ 9.06 HD	\$ 0.09
TAPE, INS, ELE	MIL-I-46852	5970-00-955-9976	1 RL	\$ 9.23 RL	\$ 9.23
ALODINE	MIL-C-5541	8030-00-142-9272		\$ 4.50 PT	\$ 4.50

- b. Requisitioning Instructions N/A.
- c. Bulk and Consumable Materials N/A.
- d. Disposition N/A.
- e. Disposition Of Hazardous Material IAW Environmental Protection Agency directives as implemented by your servicing Environmental Coordinator (AR 200-1).

11. Special Tools, and Fixtures Required. As required.

12. Application.

- a. Category of Maintenance AVUM. Aircraft downtime will be charged to AVUM maintenance. Report aircraft non-mission capable maintenance (NMCM) while undergoing inspection and correction IAW this TB.
 - b. Estimated Time Required:
 - (1) Time to complete inspection -
 - (a) Total of .5 man-hour using 1 person.
 - (b) Total of 0 hours downtime for one end item.
 - (2) Time for repair/replacement N/A.
 - c. Estimated cost impact to the field None. Parts will be provided by the ACE Team.
 - d. TB/MWO's to be applied prior to or concurrently with this inspection MWO 1-1520-237-50-76.
 - e. Publications which require change as a result of this inspection: N/A.

13. Reference.-

- a. DA PAM 738-751,15 March 1999.
- b. TM 1-1500-204-23-4, 31 JUL 92.
- c. TM 1-1520-237-23-1, 29 MAY 98.

14. Recording and Reporting Requirements.

- a. Aircraft:
 - (1) TAMMS Reporting Compliance Suspense.

Upon entering requirements of this message on DA Form 2408-13-1 for all affected aircraft, commanders

will forward a priority message, datafax or e-mail to CDR, AMCOM, ATTN: AMSAM-SF--A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1, NLT date specified in paragraph 3. Datafax number IS DSN 897-2111 OR (256) 313-2111. E-mail address is "safeadm@redstone.army.mil". The report will cite this TB number, date of entry in DA Form 2408-13-1, the aircraft mission design series, and aircraft serial numbers in numerical order.

- (2) Task/Inspection Reporting Suspense. N/A.
- b. Wholesale Spare Parts/Assemblies. N/A.
- 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 March1999.

NOTE

ULLS-A users will use applicable "E" forms.

- (1) DA Form 2408-5, Equipment Modification Record.
- (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) DA Form 2408-18, Equipment Inspection List.
- 15. Weight and Balance. N/A.
- 16. Points of Contact.
- a. Technical Point Of Contact for this TB is Mr. Ralph Vemmer, AMSAM-RD-AE-I-D-U, DSN 897-2350 EXT 9719, or (256) 705-9719. Alternate phone number, (256) 705-9717. DATAFAX is DSN 897-9896 or (256) 705-9896. E-mail is "ralph.vemmer@rdec.redstone.army.mil"
- b. Logistical Point Of Contact is Mr. Joe Hoover, SFAE-AV-UH-L, DSN 645-7898 or (256) 955-7898, DATAFAX is DSN 897-3778 or (256) 313-3778. Email is "joe.hoover@uh.redstone.army.mil"
- c. Forms and Records Point Of Contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 897-5564, DATAFAX is DSN 746-4904 or (256) 876-4904. Email 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 (256) 842-8631, DATAFAX is DSN 897-2111 or (256) 313-2111. Email is "frank.rosebery@redstone.army.mil".
- (2) Alternate Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636, DATAFAX is DSN 897-2111 or (256) 313-2111. Email is "ron.price@redstone.army.mil".
 - e. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact:
- (1) Primary: Mr. Ronnie W. Sammons, AMSAM-SA-AS-UT, DSN 897-0407 or (256) 313-0407. DATAFAX is DSN 897-0411 or (256) 313-0411. Email "ronnie.sammons@redstone.army.mil".
- f. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or (256) 313-2066/7.
- 17. Reporting of Errors and Recommended Improvements. You can 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), or DA Form 2028-2 located in the back of this manual, directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM--MMC-MA-NP, Redstone Arsenal, AL 35898-5000. A reply will be furnished to you. You may also provide DA Form 2028 information to AMCOM via e-mail, fax, or the World Wide Web. Our fax number is: DSN 788-6546 or

Commercial 256-842-6546. Our e-mail address is: 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028. For the World Wide Web use: https://amcom2028.redstone.army.mil.

By Order of the Secretary of the Army

ERIC K. SHINSEKI

General, United States Army Chief of Staff

Official:

Joel B Hul

AdministrativeAssistant to the Secretary of the Army 0229802 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

Address: 4300 Park
 City: Hometown

5. *St:* MO6. *Zip:* 77777

Date Sent: 19-OCT-93
 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

23. Figure: 7 24. Table: 8 25. Item: 9 26. Total: 123 27. **Text:**

This is the text for the problem below line 27.

PIN: 080448-000