

ROUTINE

*TB 1-1520-237-20-224

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAINTENANCE MANDATORY, RCS CSGLD-1-1860(R1), ALL H-60A AIRCRAFT, TAIL NUMBERS 77-22720 THROUGH 82-23746, THAT HAVE BEEN REFURBISHED, ONE TIME INSPECTION OF WIRE HARNESS CONNECTING THE NO. 1 AND NO.2 JUNCTION BOXES

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

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

1. **Priority Classification. ROUTINE**

NOTE

IAW AR 95-1, para 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 message, make the following entry on the DA Form 2408-13-1. Enter a Red Horizontal Dash //--// status symbol with the following statement: "Inspect wire harnesses connecting the No. 1 and No. 2 junction boxes IAW TB 1-1520-237-20-224 within the next 10 flight hours but NLT 15 September 2000". Clear the Red Horizontal //--// entry when the procedures IAW paragraph 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than 15 September 2000. Commanders who are unable to comply with the requirements of this message within the time frame specified will upgrade the affected aircraft status symbol to a Red //X//.

b. Aircraft in Depot Maintenance. Same as para 1a.

c. Aircraft Undergoing Maintenance. Same as para 1a.

* This TB supersedes USAAMCOM Aviation Safety of Flight Message UH-60-00-ASAM-07, 311455Z Aug 00.

- d. Aircraft in transit.
 - (1) Surface/air shipment. Same as para 1a.
 - (2) Ferry status.
 - (a) Same as para 1a.
 - (b) Sikorsky will inspect DD Form 250 aircraft prior to those aircraft departing for ferry to final destination.
- e. Maintenance trainers (Category A and B). Same as para 1a.
- f. Component/Parts in Stock at All Levels (Depot and Others), Including War Reserves. N/A
- g. Components/Parts in Work (Depot Level and Others). N/A

2. Task/Inspection Suspense Date. Complete the inspection IAW paragraph 8 within the next 10 flight hours but NLT 15 September 2000 and report IAW para 14b.

3. Reporting Compliance Suspense Date. Report compliance IAW para 14a NLT 22 September 2000.

4. Summary of the Problem.

a. Several field units have reported finding chafing and burn marks on two adjacent AC electrical power wire harnesses that run from the No. 1 junction box to the No. 2 junction box. The burn marks were the result of electrical arcing caused by chafing of the wire shielding. The chafing was the result of the harnesses being installed without a required mounting plate (wire saddle) during replacement of the Kapton Wiring. Replacement of the Kapton Wiring was accomplished as part of the refurbishment program (MWO 1-1520-237-55-7).

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

c. The purpose of this TB is to:

(1) Inspect all suspect aircraft for evidence of chafing and burn marks on the wire harness and relay panels.

(2) Repair any damage that is found.

(3) Ensure the required mounting plate is installed to prevent future damage.

5. End Items to be inspected. UH-60A aircraft serial number 77-22720 through 82-23746 that have been refurbished.

6. Assembly Components to be Inspected. N/A

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NSN
Wire Harness	70552-02109-065	N/A
Wire Harness	70552-02109-066	N/A
Mounting Plates	TC-92	5340-00-728-1389
Left Hand Relay Panel	70552-02105-043	5945-01-101-4073
	70552-02105-045	5345-01-108-3512
	70552-02105-048	5945-01-129-7331
	70552-02105-050	5945-01-129-7331
	70552-02105-051	5945-01-221-0478
	70552-02105-054	5945-01-289-2695

NOMENCLATURE	PART NUMBER	NSN
Left Hand Relay Panel	70070-55073-059	5945-01-348-9730
	70070-55073-060	5945-01-349-5270
	70552-55073-061	5945-01-329-0762
	70070-55145-041	5945-01-348-2399
	70070-55145-042	5945-01-348-9731
	70070-55145-043	5945-01-349-5271
	70070-55145-044	5945-01-327-7699
	70070-55171-041	5945-01-344-2312
	70070-55171-042	5945-01-345-0813
	70070-55171-043	5945-01-345-4038
	70070-55171-044	5945-01-346-1943
Right Hand Relay Panel	70550-02102-045	5945-01-083-7880
	70550-02102-047	5945-01-139-1126
	70550-02102-049	5945-01-224-2864
	70550-02102-051	5945-01-289-2696
	70550-02102-056	5945-01-325-0624
	70550-55172-041	5945-01-351-6019
	70550-55172-042	5945-01-352-8628
	70070-55172-043	5945-01-353-3090
	70070-55232-041	5945-01-388-9028
	70070-55232-042	5945-01-388-9030
	70070-55232-043	5945-01-388-9029

8. Inspection Procedures..

a. Inspect the DA Form 2408-5, Equipment Modification Record, to determine if MWO 1-1520-237-55-7 has been applied.

(1) If the MWO has not been applied, the inspection is complete.

(2) If the MWO has been applied, proceed to paragraph 8b.

(3) If the aircraft tail number is between 77-22720 through 82-23746, and it cannot be determined if the MWO has been applied contact the logistics POC in paragraph 16b.

b. Prepare the aircraft for inspection IAW TM 1-1520-237-23-5, para 9-4-2.1.1.

c. Perform the following inspections:

(1) Locate the wire harnesses (P/N 70552-02109-065/-066), TM 1-1520-237-23P-3, dated 3 April 2000, Figure 152, Items 21 and 22. Inspect the wire harness for evidence of chafing or burn marks on the wires. If no chafing or burn marks are found proceed to paragraph 8c(4).

(2) Inspect the left and right hand relay panels for burn marks. If either panel has burn marks, perform an operational check of the relay panel IAW TM 1-1520-237-23-5, para 9-2-20 and para 9-2-21.

(3) Inspect for any other damage to adjacent structure of hardware.

(4) Inspect for installation of required mounting plates (wire saddles), (P/N TC-92, NSN 5340-00-728-1389). Each wire harness has two mounting plates (wire saddles), one located at each end of the wire harness as shown in TM 1-1520-237-23P-3, dated 3 April 2000, Figure 152, Item 7.

- d. If any abnormalities are noted during the inspection IAW paragraph 8c, proceed to paragraph 9.
- e. If there is no evidence of chafing or burning of the wire harness, no burning or abnormalities noted during inspection of the relay panels, the required mounting plates (wire saddles) are installed, and no damage is noted to adjacent structure or hardware, proceed to paragraph 9e.

9. Correction Procedures.

- a. If any evidence of chafing or burn marks are found during the inspection procedure IAW paragraph 8c(1), repair the damaged harness IAW TM 1-1520-204-23-4. Ensure that harnesses are secured using all required P-clamps and mounting plates, as shown in TM 1-1520-237-23P-3, dated 3 April 2000, Figure 152.
- b. If the left or right hand relay panel failed the operational check IAW paragraph 8c(2), replace the relay panel.
- c. If there is damage to adjacent structure or hardware IAW the inspection in paragraph 8c(3), repair or replace the damaged parts IAW TM 1-1520-237-23 and TM 1-1500-204-23-4.
- d. If the inspection IAW paragraph 8c(4) reveals that one or both mounting plates (wire saddles) are missing, install the mounting plates (P/N TC-92, NSN 5340-00-728-1389) as shown in TM 1-1520-237-23P-3, dated 3 April 2000, Figure 152.
- e. Reinstall the right and left relay panels IAW TM 1-1520-237-23-5, paragraph 9-4-2.1.1 after installing the relay panels

(1) Use a mirror to visually verify that there is a minimum of 0.25 inches clearance between the subject wire harnesses and the tops of the relay panels.

(2) If any of the subject wires touch the top of either relay panel, or if there is less than 0.25 inches clearance, remove the relay panels IAW TM 1-1520-237-23-5, paragraph 9-4-2.1.1 and make the necessary adjustments to the wire harness mounting brackets and clamps to ensure that the potential for chafing has been eliminated.

f. When all damaged components have been repaired or replaced IAW paragraphs 9a through 9d, and proper clearance between the wire harnesses and the relay panel has been visually verified IAW paragraph 9e, the Red Horizontal; Dash //--// entry may be cleared.

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 (CC57-59) "X03" (xray-zero-three).

NOTE

Project Code "X03" 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

NOMENCLATURE	PART NUMBER	NSN
Wire	MS22759/43-10-9	N/A

d. Disposition. Dispose of removed parts/components using normal supply procedures. All turn-in documents must include Project Code (CC 57-59) "X03".

e. Disposition of Hazardous Material. IAW Environmental Protection Agency directives as implemented by your servicing environment coordinator (AR 200-1).

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

12. Application.

a. Category of Maintenance. Category of maintenance and aircraft downtime will be AVUM for the inspection, repair of the wire harness, and removal and installation of the relay panels. Category of maintenance and aircraft downtime will be AVIM for completion of the relay panel operational check.

b. Estimated Time Required.

(1) Estimated time to perform the inspections IAW paragraph 8:

(a) Total of 1 man-hours using 1 persons.

(b) Total of 1 hours of downtime for one end item.

(2) Estimated time to perform the corrections IAW paragraph 9:

(a) Total of 6 man-hours using 2 persons.

(b) Total of 3 hours of downtime for one end item.

c. Estimated cost impact to the field:

Nomenclature	Part No./NSN	Qty	Cost Each	Total Cost
Mounting Plates	TC-92 5340-00-728-1389	4	\$0.22	\$0.88
Lt Hand Relay Panel	70550-02105-057 5945-01-332-9907	1	\$7677.00	\$7677.00
Rt Hand Relay Panel	70550-02102-056 5945-01-325-0624	1	\$10577.00	\$10577.00

Total cost per aircraft = \$18254.88

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. N/A

13. References.

a. DA PAM 738-751, 15 Mar 99.

b. TM 1-1520-237-23.

c. TM 1-1520-237-23P-3.

d. TM 1-1520-204-23-4.

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, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1. Datafax number is DSN 897-2111 or commercial (256) 313-2111. E-Mail address is "SAFE-ADM@REDSTONE.ARMY.MIL". The report will cite TB 1-1520-237-20-224, 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 the Logistical POC listed in para 16b. The report will cite TB 1-1520-237-20-224, date of inspection, aircraft serial number, aircraft hours, and results of the inspection. Inspection report will be completed NLT 18 September 2000.

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 2408-5, Equipment Modification Record. (Referenced only for application of MWO 1-1520-237-55-7)

(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 1577-2/DD Form 1577-3, Unserviceable (Repairable) Tag/Label-Material (Color Green). Annotate remarks block with "Unserviceable IAW TB 1-1520-237-20-224".

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. Darrell Hutson, AMSAM-RD-AE-I-D-U, DSN 897-5203 or (256) 313-5203. Datafax is (256) 313-5501 or (256)-313-5206. Alternate phone number is DSN 897-5198 or (256) 313-5198. E-mail is "darrell.hutson@redstone.army.mil".

b. Logistical point of contact for this TB is Mr. Joe Hoover, AMSAM-DSA-UH-L, DSN 645-7898 or (256) 955-7898. Datafax is DSN 897-3778 or (256) 313-3778. E-mail is "joe.hoover@uh.redstone.army.mil".

c. Forms and records point of contact for this TB is Ms. Ann Waldelk, AMSAM-MMC-RE-FF, DSN 746-5564 or (256) 876-5564. Datafax is DSN 746-4904. E-mail is "waldeck-ab@redstone.army.mil".

d. Safety points of contact are:

(1) Primary. Mr. Harry E. Trumbull (SAIC), AMSAM-SF-A, DSN 897-2095 or (256) 313-2095. Datafax is DSN 897-2111 or (256) 313-2111. E-mail is "harry.trumbull@redstone.army.mil".

(2) Alternate. Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636. Datafax is (256) 313-2111. E-mail is "ron.price@redstone.army.mil".

e. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact: CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0410 or (256) 313-0410. E-mail is "wittstrom-jl@redstone.army.mil or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0408 or (256) 313-0408. Datafax is DSN 897-0411 or (256) 313-0411. E-mail "sammonssrw@redstone.army.mil". Huntsville, Alabama is GMT minus 6 hours.

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 you letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5000. You may also submit your recommended changes by E-mail directly to ls-lp@redstone.army.mil. A reply will be furnished directly to you.

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
0027103

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 313931, requirements for TB 1-1520-237-20-224.

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.