URGENT

***TB 1-1520-240-20-108**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ALL H-47, ONE TIME AND RECURRING INSPECTION OF HOIST/CARGO HOOK CONTROL PANEL AND WATER INTRUSION IN THE COCKPIT

Headquarters, Department of the Army, Washington, D. C.
5 March 1999

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. Urgent.

a. Aircraft in Use. Upon receipt of this TB the condition status symbol of the cited aircraft will be changed to a red horizontal //-//. The red horizontal //-// may be cleared when the inspection of para 8 is completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this message 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. Same as paragraph 1A.

d. Aircraft in Transit.

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

(2) Ferry Status. Inspect at final destination.

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

f. Component/Parts in Stock at All Levels (Depot and Others) including War Reserves. N/A.

g. Component/Parts in Work (Depot Level and Others). N/A.

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

3. **Reporting Compliance Suspense Date.** No later than 18 March 99 in accordance with paragraph 14A of this message.

4. **Summary of the Problem.**

*This TB supersedes USAAMCOM Message 241820Z FEB. 99 CH-47-99-ASAM-03.

a. Investigations have revealed that the hoist/cargo control panel has chaffed wires and corrosion on the terminal lugs. These conditions could cause electrical shorting and inadvertent jettison of external cargo.

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

c. The purpose of this TB is to perform a one time inspection of the hoist/cargo control panel for corrosion, wire routing, and wire positioning on terminal lugs. In addition, an inspection for water intrusion will be performed. As a result of this condition, establishment of a 200/300 hour recurring inspection during phase will be required for corrosion.

5. End Items to be Inspected. All CH-47D, MH-47D, and MH-47E aircraft.

6. Assembly Components to be Inspected.

NOMENCLATURE	PARTNUMBER	NATIONAL STOCK NUMBER
Hoist/Cargo Control Panel	145E2334-1	1680-01-224-2884

7. Parts to be Inspected. Internal components of the hoist/cargo control panel.

8. Inspection Procedures.

a. Prepare aircraft for safe ground maintenance. This includes disconnecting the battery and all electrical power to the aircraft.

b. Remove hoist/cargo hook panel from overhead console in accordance with TM 55-1520-240-23 and TM 1-1520-252-23.

c. Visually inspect for presence of water/moisture, corrosion, wire chafing, wire routing and wire positioning on terminal lugs (i.e. assure that no wires are shorted.) Correct any discrepancies in accordance with paragraph 9 below.

d. Annotate DA Form 2408-18 that “Recurring phase inspections are required at 200 hours for the CH-47D and at 300 hours for the MH-47D and MH-47E aircraft in accordance with paragraphs 8 and 9 of CH-47-99-ASAM-03, TB 1-1520-240-20-108”.

e. Perform a cockpit water intrusion check as follows.

(1) Use a garden hose to allow water to flow over the outside area above the hoist/cargo hook panel. include sheet metal and windshields.

(2) From inside inspect for and identify all water entry points. For corrective procedures see paragraph 9 below.

NOTE

The inspection for water entry should be completed as soon as practical. Local Commanders are authorized to defer this check as weather conditions dictate but no later than 31 May 1999.

9. Correction Procedures.

a. If corrosion or wire chafing is present, clean corrosion and repair wires in accordance with TM 55-1500-323-24. For all control panels, treat with corrosion prevention compound.

b. For wire routing, assure that wires are tucked between the support posts so that they cannot be pinched or chafed against the console when the panel is installed.

c. For wire connectors on terminal lugs, bend wire connectors away from the other lugs. Maintain as much gap as possible between the wire connector and the nearest terminal lug.

d. For cockpit water/moisture intrusion the following are potential problem areas:

e. For leaks around the cockpit crown window and cockpit lower window panel. Most leaks occur from improper sealing of the window, or improper installation of attachment screws.

(1) Examine fillet seal around window for cracks, cuts, and unbonding. If any of these conditions exist, reseal locally with proseal 890.

(2) If water appears to enter around rivnut locations, remove attaching screw and washer. Remove old sealant from screw and washer. Apply sealant between each screw and washer and between each washer and window. Reinstall screw and torque to 10-14 inch pounds.

(3) After sealant has fully cured, perform a leak check in accordance with paragraph 8d above.

(4) After locally testing for leaks, if there is still water intrusion, it may be necessary to remove the window and replace sealant tape under window. Remove window and inspect sealant tape for tears, cracks and unbonding from aircraft structure. If any of these conditions exist, replace tape and install window in accordance with TM 55-1520-240-23 or TM 1-1520-252-23. Again perform leak check in accordance with paragraph 8d above.

f. For leaks around pilot, copilot or center windshields.

NOTE

Most leaks occur from improper sealing of the window, or improper installation of attachment screws.

(1) Examine fillet seal around window for cracks, cuts, and unbonding. If any of these conditions exist, reseal locally with proseal.

(2) After sealant has fully cured, perform a leak check in accordance with paragraph 8d above.

(3) After locally testing for leaks, if there is still water intrusion, remove window and inspect rubber strip for tears, cracks and unbonding from aircraft structure in accordance with TM 55-1520-240-23 or TM 1-1520-252-23.

(4) If any of these conditions exist, replace rubber strip and install window in accordance with TM 55-1520-240-23 or TM 1-1520-252-23. Perform a leak check in accordance with paragraph 8d above.

g. For leaks from the area above the overhead console.

(1) Remove the forward transmission forward faking in accordance with TM 55-1520-240-23 or TM 1-1520-252-23.

(2) Inspect the sealant in the area forward of the forward transmission to ensure that it has been applied uniformly.

(3) If the sealant appears to have been applied improperly or not uniformly, remove all sealant, clean structure and reapply proseal to all seams In the skin.

(4) For leaks around fasteners (rivets), apply sealant to all of the fasteners in the area. After sealant has fully cured, perform a leak check In accordance with paragraph 8d above.

h. For water/moisture from above the cockpit dome lights.

(1) Open the forward transmission work platforms. Pour a small amount of water in the area of the forward transmission mounts (left and right sides) between the transmission mounts and the work platform hinge.

(2) Check the cockpit for leaks. If any leak is detected, reseal with proseal. After sealant is fully cured, perform a leak check.

i. For water/moisture due to a plugged drain hole.

(1) Inspect drain hole just above and aft of the pilots and w-pilots crown windows at sta. 84.20, WL +55.25, BL 20.48. It is located at the bottom of the vertical row of rivets at this location.

(2) If drain hole is filled with sealant, remove sealant.

10. Supply/Parts and Disposition.

a. Parts Required. N/A.

b. Requisitioning Instructions. N/A.

c. Bulk and Consumable Materials.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER	COST
PROSEAL (OR EQUIV.)	MIL-S-8802	9030-00-685-0915	$14.92
SEALANT TAPE (OR EQUIV.)		9320-00-019-0351	$45.91

d. Disposition. N/A.

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.

b. Estimated Time Required.

(1) Inspection of hoist/cargo hook control panel.

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

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

(2) Inspection for water intrusion.

(a) Total of 22 man hours using 2 persons.

(b) Total downtime will be greater than 2 hours but less than 12 hours per end item dependent on results of the water intrusion inspection.

c. Estimated Cost Impact to the Field. N/A.

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-PM, page 2-70, Change 8, paragraph 10.39 and TM 1-1520-252-PM, page 2-55, page 10.47 shall add inspection for corrosion. It shall read as follows: 'Overhead panel (lowered) for security of components and loose or missing hardware. Wiring and connections for damage, security, chafing, corrosion, proper support. Wiring insulation for cuts, cracks and fraying. Adjacent structure for cracks, damage, corrosion". A copy of this TB shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

13. References.

a. TM 55-1520-240-23

b. TM 1-1520-252-23

c. TM 55-1500-323-24

14. Recording and Reporting Requirements.

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this message on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, datafax or e-mail to CDR, AMCOM, ATTN.: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5222, in accordance with AR 95-1 Datafax number is DSN 897-2111 or (258) 313-2111. E-mail address is "safeadm@redstone.army.mil". The report will cite this message 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). 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 June 1992:

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 2408-18, Equipment Inspection List, the 200/300 hour recurring inspection during phase will be carried on this form until it is incorporated into the phase manual. ULLS-A units will use one of their 800 inspection numbers until it is incorporated into the phase manual.

15. Weight and Balance.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. Michael J. Wright, AMSAM-AR-E-I-C-H, DSN 897-3225/4284 or commercial (256) 313-3225/4284, datafax is DSN 897-4348 OR (256) 313-4348. E-mail is wrightm@avrdecr.redstone.army.mil.

b. Logistical point of contact for this TB is Mr. Bill Olson, SFAE-AV-CH-L, DSN 897-4304 or commercial (256) 313-4304, datafax is DSN 897-4348 or (258) 313-4348. E-mail is olsonw@peoavn.redstone.army.mil.

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

d. Safety point of contact for this TB is Mr. Robert D. Brock, AMSAM-SF-A, DSN 788-8632 or commercial (256) 842-8632, datafax is DSN 897-2111 or (265) 313-2111. E-mail is brockrd@redstone.army.mil.

e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact: CW5 Joseph L. Wittstrom, Security Assistance Management; AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681. E-mail is wittstrom-jl@redstone.army.mil or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (256) 313-0869. Datafax is DSN 897-0411 or (256) 313-0411. E-mail is sammons-rw@redstone.army.mil. Huntsville, AL is GMT minus 6 hours.

f. After hours, contact the AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

17. Reporting of Errors and Recommending 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) directly to: Commander, US Army Aviation and Missile Command, ATTN.: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5230. You may also submit your recommended changes by e-mail directly to ls-lp@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
05300

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To be distributed in accordance with initial distribution number (IDN) 313818, requirements for TB 1-520-240-20-108.

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: Is-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.