ROUTINE

***TB 1–1520–237–20–216**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAINTENANCE MANDATORY
RCS CSGLD–1860 (R1)
ALL H–60 AIRCRAFT
CYCLIC STICK WIRING BUNDLE

Headquarters, Department of the Army, Washington, D. C.
17 March 2000

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. Routine

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 inspection of paragraph 8 below 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 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 and required corrective action taken.

c. Aircraft Undergoing Maintenance. Aircraft will not be released until compliance with this TB has been completed and corrective action taken.

d. Aircraft in Transit.

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

(2) Ferry Status. Same as paragraph 1.a.

NOTE

Those aircraft that have a DD 250 and are at Sikorsky Aircraft will be inspected and required corrective action will be taken prior to ferry to final destination.

e. Maintenance Trainers (Category A, and B). Same as paragraph 1.a.

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

(1) Wholesale Stock. N/A.

*This TB supersedes USAAMCOM Aviation Safety Action Message 1409Z 12 Dec 99, UH–60–00–ASAM–02.

(2) Retail Stock. N/A.

g. Component/Parts In Work (Depot Levels and Others). N/A.

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

3. **Reporting Compliance Suspense Date**. No later than 3 January 2000 IAW 14.a of this TB.

4. **Summary of the Problem**.

a. During an inspection it was found that the wire bundle for the pilots cyclic stick was causing interference with stick movement when the stick was pushed all the way to the left side. This is a safety concern since it could prevent movement of the cyclic stick through its full range of motion. A subsequent inspection of 46 aircraft at Fort Rucker revealed 30 of the inspected aircraft required repositioning of the wire bundle on one or both cyclic sticks to avoid a potential interference problem.

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

c. The purpose of this message is to require a one time inspection of the cyclic stick wire bundles on every aircraft in the fleet and eliminate any interference that may exist. All wire bundle installations which do not have the proper clearances will be repositioned. In addition, the technical manuals will be changed to provide more detailed installation instructions for the cyclic wire bundles, including requirements to ensure proper clearances.

5. **End Items to be inspected**. All H–60 aircraft.

6. **Assembly components to be Inspected**. N/A.

NOMENCLATURE	PART NUMBER
Control stick, aircraft pitch pilots and copilots	70400–01222–041
Stick Assy	70400–01222–045
Stick Assy, Pilot and Copilot, pitch	70400–01222–048
Stick Assy, Pilot and Copilot Cyclic Pitch	70400–01222–049
Stick Assy, Pilot and Copilot Cyclic Pitch	70400–01222–050
Stick Assy, Pilot and Copilots Cyclic Pitch	70400–85222–043

7. **Parts to be Inspected**. N/A.

8. **Inspection Procedures**.

a. Unzip cyclic stick boots on both the pilots and copilots sticks.

b. Visually inspect each wire harness in the area adjacent to the cyclic stick stops. Inspect for chafing or wear. Repair as required. Re–attach harness.

c. Check that the harness is held securely in the airframe clamp and cannot be slid through the clamp under light finger pressure. If harness does not meet these criteria, re–attach harness utilizing the applicable clamping procedure specified in paragraph 9.

d. Apply hydraulic power to the aircraft.

e. With collective half way up and pedals centered, move the cyclic stick through the full range of motion (full left to right and full forward to AFT). Throughout the full control range, the pilots and co–pilots wire harnesses must must remain clear of all cyclic stick stops. If the harness do not remain clear of the stick stops, re–clamp, utilizing the applicable clamping procedure specified in paragraph 9.

f. Return cyclic and pedals to centered position, collective full down, and turn off hydraulic power.

g. Zip up both cyclic stick boots.

9. Correction Procedures.

CAUTION

Proper harness clamping is required to prevent interference between the harness assembly and cyclic stick stops.

a. Wiring harness clamping procedure for UH–60A, L, Q and EH–60A and EH–60L aircraft.

(1) Turn off all electrical and hydraulic power to the aircraft.

(2) Measure 7 (seven) inches along the length of the wire bundle from where the bundle exits the stick tube to the location of the clamp here marker sleeve. This distance must be between 7.0 and 7.25 inches. If necessary, install a new marker sleeve at this location. Bond the wire bundle to marker sleeve at this location. Bond the wire bundle to marker sleeve using adhesive, item 49, Appendix D, TM 1–1520–237–23–9 (PLIOBOND #20, NSN 8040–00–266–7429 or equivalent). Verify marker sleeve is located 7.0 to 7.25 inches from the exit point of the wire bundle from the cyclic stick to the clamp.

(3) Clamp wire harness to the airframe, ensuring the marker sleeve is inside the clamp. Bond the marker sleeve to the clamp using adhesive, item 49, Appendix D, TM 1–1520–237–23–9 (PLIOBOND #20, NSN 8040–00–266–7429, or equivalent).

(4) Apply hydraulic power to the aircraft.

(5) With collective half way up and pedals centered, move the cyclic stick through the full range of motion (full left to right and full forward to aft). Throughout the full control range, the pilots and co–pilots wire harnesses must remain clear of al the cyclic stick stops.

(6) Return cyclic and pedals center position, collective to full down, and turn off hydraulic power.

(7) Zip up both cyclic stick boots.

b. Wire harness clamping procedure for MH–60K Aircraft:

(1) Turn off all electrical and hydraulic power to the aircraft.

(2) Pilots stick: Measure 8 (eight) inches along the length of the wire bundle from where the bundle exits the stick tube to the location of the clamp here – pilot marker sleeve. This distance must be between 8.0 and 8.25 inches. If necessary, install a new marker sleeve at this location. Bond the wire bundle to marker sleeve using adhesive, item 63, Appendix D, TM 1–1520–237–23–6 (PLIOBOND #20, NSN 8040–00–266–7429 or equivalent). Verify marker sleeve is located 8.0 to 8.25 inches from the exit point of the wire bundle from the cyclic stick to the clamp.

(3) Copilots stick: Measure 9 (nine) inches along the length of the wire bundle from where the bundle exits the stick tube to the location of the clamp here – copilot marker sleeve. This distance must be between 9.0 and 9.25 inches. If necessary, install a new marker sleeve at this location. Bond the wire bundle to marker sleeve using adhesive, PLIOBOND #20 (NSN 8040–00–266–7429, or equivalent). Verify marker sleeve is located 9.0 to 9.25 inches from the exit point of the wire bundle from the cyclic stick to the clamp.

(4) Clamp wire harness to the airframe, ensuring the marker sleeve is inside the clamp. Bond the marker sleeve to the clamp using adhesive, PLIOBOND #20 (NSN 8040–00–266–7429, or equivalent).

(5) Apply hydraulic power to the aircraft.

(6) With collective half way up and pedals centered, move the cyclic stick through the full range of motion (full left to right and full forward to aft). Throughout the full control range, the pilots and co–pilots wire harnesses must remain clear of all the cyclic stick stops.

(7) Return cyclic and pedals to center, collective to full down position, and turn off hydraulic power.

(8) Zip up both cyclic stick boots.

10. **Supply/Parts and Disposition**.

a. Parts Required. N/A.

b. Requisitioning Instructions. N/A.

c. Bulk and Consumable Materials.

NOMENCLATURE	NATIONAL STOCK NUMBER
Adhesive, PLIOBOND #20	8040–00–266–7429

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, Jigs and Fixtures Required**. N/A.

12. **Application**.

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM maintenance.

b. Estimated Time Required.

(1) Total of 1 man–hours using 1 person.

(2) Total of 1 hour downtime for one end item.

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.

(1) TM 1–1520–237–23.

(2) TM 1–1520–250–23.

These publications shall be changed to reflect this message. A copy of this message shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

13. **References**.

a. TM 1–1520–237–23

b. TM 1–1520–250–23

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 “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 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 IAW DA Pam 738–751, 15 March 1999.

NOTE

ULLS–A Users will use the 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.

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–C–U, DSN 897–3887 or commercial (256) 313–3887. E–Mail is darrell.hutson@uh.redstone.army.mil. Datafax is DSN 897–4923 or (256) 313–4923.

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

c. Wholesale materiel POC (Spares) – N/A.

d. 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.

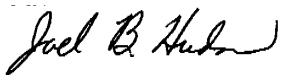
e. Safety point of contact for this TB is Mr. Ron Price, AMSAM–SF–A, DSN 788–8636 or commercial (256) 842–8636, Datafax is (256) 313–2111. E–mail is ron.price@redstone.army.mil.

f. 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 8978–0681 or (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 sammons–rw@redstone.army.mil. Huntsville, Alabama is GMT minus 6 hours.

g. After hours contact AMCOM Command Operations Center (COC) DSN 897–2066/7 or commercial (314)263-2066/7.

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 35898–5000. 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:



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Distribution:
To be distributed in accordance with Initial Distribution Number (IDN) 313877, requirements for TB 1-1520-237-20-216.

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.