

URGENT

TB 1-1520-240-20-167

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

**MANDATORY MAINTENANCE
FOR
AFT LONGITUDINAL CYCLIC TRIM (LCT) ACTUATOR
ON ALL CH-47D, CH-47F, MH-47D AND MH-47E AIRCRAFT**

Headquarters, Department of the Army, Washington D.C.
30 May 2006

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

NOTE

This message is effective until rescinded or superseded.

NOTE

This message is issued IAW AR 95-1 and has not been transmitted to units subordinate to addressees. Addressees will immediately retransmit this message to all subordinate units, activities or elements affected or concerned. MACOMs will immediately verify this transmission to the AMCOM SOF Compliance Officer (AMSAM-SF-A, safeadm@redstone.army.mil).

NOTE

MACOM Commanders may authorize temporary exception from message requirements IAW AR 95-1, Ch 6. 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.

NOTE

Commanders unable to comply with the requirements of this message within the time frame specified will change the affected aircraft status symbol to a red //X//.

1. SUMMARY.

a. Background. Two of thirteen Aft Longitudinal Cyclic Trim (LCT) Actuators overhauled by professional aircraft accessories were rejected because the lower rod end fitting was installed 180 degrees off. The rod end has a flat side and a tabbed side. The tabs are anti-rotational lugs. The tabbed surface of the lower rod end fitting is to be installed facing opposite the LCT motor side of actuator.

b. Message Purpose. Inspect for eleven suspect serial number LCT Actuators and Yoke Support Assembly damage.

2. END ITEMS AFFECTED – ALL H-47 SERIES AIRCRAFT.

3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED.

- a. Suspect/discrepant assemblies/components/parts:

NOMENCLATURE	PN	NSN
LCT Actuator Assembly, Aft	145CS114-2	1680-01-120-7641

- b. Additional assemblies/components/parts to be inspected:

NOMENCLATURE	PN	NSN
Yoke Support Assembly, Aft	114C3043-6	1615-00-115-4718

NOTE

When complying with the requirements of this message, complete forms and records entries IAW DA PAM 738-751. ULLS-A units will use appropriate "E" Forms.

4. INITIAL TAMMS (THE ARMY MAINTENANCE SYSTEM) COMPLIANCE REQUIREMENTS.

- a. 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: "Comply with requirements of CH-47-06-ASAM-03 NLT 21 May 2006".

NOTE

The TAMMS Compliance Reporting Form is available at "www.redstone.army.mil/sof/tamms.xls" (use lower case letters only) or may be obtained from the units servicing LAR. Alternate forms may be approved by the AMCOM SOF Compliance Officer.

NOTE

The TAMMS Compliance Report only confirms the unit has made the initial logbook entry for assigned aircraft. TAMMS Compliance Reports will include aircraft serial numbers (in numerical order), date of entry on DA Form 2408-13-1, unit address, local POC name and phone number.

- b. TAMMS Compliance Report. Submit TAMMS Compliance Report via priority email to "safeadm@redstone.army.mil" NLT 18 May 2006, IAW AR 95-1. If email is not available, the report may be faxed to: SOF Compliance Officer at DSN 897-2111 or (256) 313-2111.

5. TASK/INSPECTION COMPLIANCE REPORTING REQUIREMENTS.

NOTE

The Task/Inspection Reporting Form is available at "www.redstone.army.mil/sof/log.xls" (use lower case letters only) or may be obtained from the units servicing LAR. This report will cite the message number, date of inspection, aircraft serial number, aircraft hours, component serial number, component hours, and results of the inspection.

- a. Aircraft. Submit Task/Inspection Compliance Report for this message to LOG POC NLT 24 May 2006.
- b. Retail Stock (Installation level and below). Provide Unit POC, address and phone number. Submit Task/Inspection Compliance Report for this message to LOG POC NLT 24 May 2006.

c. Wholesale Stock (Including Depot Stock, Depot Maintenance and Single Stock Fund). Provide Local POC, address and phone number. Report compliance with this message IAW para 8 to Wholesale POC NLT 24 May 2006.

6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT).

a. Aircraft in AVIM or Depot Level Maintenance. Commanders, Facility Managers and Contractors will not issue aircraft until they are in compliance with this message.

b. Aircraft at Contractor Facility. DD 250 aircraft will be in compliance with this message prior to departure.

c. Aircraft in Transit. Unit Commanders in receipt of deployment orders and are unable to comply prior to the date specified in para 4.a. may defer initial requirements IAW Surface/Air Shipment or Ferry Status Instructions, as appropriate.

(1) Surface/Air Shipment. Comply with message requirements within 10 days of arrival.

(2) Ferry Status. Comply with message requirements within 10 days of arrival at final destination.

(3) Aircraft Away From Home Station. Comply with message requirements within 10 days of arrival at final destination.

7. TECHNICAL PROCEDURES/INSTRUCTIONS.

a. Inspect Aircraft LCT Actuator, Aft, PN 145CS114-2, NSN 1680-01-120-7641 to determine if one of the following serial numbers is installed:

34-238	40-702	40-706	42-997
55-312	90-792	56-2221	59-1140A
73-1118	108-613	116-459	

(1) If any of the eleven LCT Actuators are installed proceed to para 7.b.

(2) If none of the eleven LCT Actuators are installed proceed to para 7.c.

b. Inspect the suspect LCT Actuator's lower rod end fitting to ensure that the anti-rotational lugs (tabs) are facing opposite the LCT Actuator motor.

NOTE

See Ch-47D/F Maintenance Manual TM 1-1520-240-23-9, Task 11-206, Step 12, MH-47E Maintenance Manual TM 1-1520-252-23-13, Task 11-224, Step 8, or MH-47G Maintenance Manual TM 1-1520-272-23-13, Task 11-224, Step 8, for a visual guide to proper orientation of the anti-rotational lugs that should face opposite the actuator motor. Please note that the Forward Actuator Task is referenced only because it provides the better visual guide to correct anti-rotational lug orientation. This orientation is the same for Aft and Forward Actuators.

(1) If the LCT Actuator is found to be non-conforming make the following red //X// entry on the DA Form 2408-13-1 "LCT Actuator SN "XXXXX" requires replacement IAW CH-47-06-ASAM-03". Proceed to para 7.d. Enter "XXXXX" as serial number of suspect LCT Actuator.

(2) If the LCT Actuator is found to be conforming, proceed to para 7.c.

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c. Inspect the inboard faces of yoke assembly at LCT fitting using a flashlight and mirror, for visible signs of damage caused by interference (gouging) from the anti-rotational lugs of a non-conforming LCT Actuator lower rod end fitting.

- (1) If damage to the Yoke Assembly is suspected, proceed to para 7.d.
- (2) If there is no damage to the Yoke Assembly, proceed to para 7.e.

d. Remove the LCT Actuator per one of the following tasks:

CH-47D/F	TM 1-1520-240-23-9	Task 11-218
MH-47E	TM 1-1520-252-23-13	Task 11-236
MH-47G	TM 1-1520-272-23-13	Task 11-236

(1) Inspect Yoke Support Assembly for potential damage caused by interference (gouging) from the anti-rotational lugs of the non-conforming LCT Actuator lower rod end fitting.

(2) If required, remove Yoke Support Assembly per one of the following tasks:

CH-47D/F	TM 1-1520-240-23-9	Task 11-227
MH-47E	TM 1-1520-252-23-13	Task 11-245
MH-47G	TM 1-1520-272-23-13	Task 11-245

(3) If required, install new Yoke Support Assembly per one of the following tasks:

CH-47D/F	TM 1-1520-240-23-9	Task 11-233
MH-47E	TM 1-1520-252-23-13	Task 11-251
MH-47G	TM 1-1520-272-23-13	Task 11-251

(4) Replace LCT Actuator per one of the following tasks:

CH-47D/F	TM 1-1520-240-23-9	Task 11-221
MH-47E	TM 1-1520-252-23-13	Task 11-239
MH-47G	TM 1-1520-272-23-13	Task 11-239

(5) After completion of required replacement or maintenance clear entry from para 7.b.1 proceed to para 7.e.

e. Clear the initial entry from para 4.a and note compliance on DA Form 2408-15.

8. PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENTS/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES). Annotate the serviceability tag with: "CH-47-06-ASAM-03, Aft LCT Actuator, not complied with". Do not remove original condition tags.

a. Items in Retail Stock. Commanders and Facility Managers that maintain retail stock at installation level and below will complete the following procedures.

- (1) Suspend issue of affected items until in compliance with message requirements.

- (2) Contact the supported aviation unit, as required, to perform the procedures required on affected items.
- (3) Comply with inspection and correction procedures as required to return items to serviceable stock.
- (4) Submit a Task/Inspection Report to LOG POC IAW para 5.

b. Items in Single Stock Fund and in Work (Overhaul/Repair Facility).

- (1) Items listed in para 3 will not be issued until they are in compliance with this message.
- (2) Submit Task/Inspection Compliance Report to Wholesale POC IAW para 5.

c. Items in Wholesale Stock. Depot storage facilities will complete the following procedures.

- (1) Report message receipt to Wholesale POC IAW para 5.c.
- (2) Suspend issue of affected items until in compliance with message requirements. Commanders and Facility Managers will ensure all items in condition codes //A//, //B//, //C//, //D//, and //E// that are affected by this message are placed in condition code //J// and tagged with a Suspended Tag/Label - Materiel, DD Form 1575/DD Form 1575-1. Do not remove original condition tags.
- (3) Submit DD Form 1225 (Storage Quality Control Report) to the Wholesale POC. Include an estimate of the cost reimbursable funding required to move serviceable items on hand affected by message to a work area, unpack the materiel, repack the materiel after inspection, and to return the materiel to storage, as appropriate. Report, by original serviceable condition code, the quantity of materiel placed in condition code //J//.
- (4) Comply with additional instructions provided by the Wholesale POC to return items to their original condition code.

9. SPECIAL TOOLS AND FIXTURES REQUIRED. N/A.

10. SUPPLY/PARTS (REQUISITION/DISPOSITION).

a. Parts Required:

NOMENCLATURE	PN/NSN	QTY	COST EA.	TOTAL \$
LCT Actuator, Aft	145CS114-2/ 1680-01-120-7641	1	\$22,103.00	\$22,103.00
Yoke Support Assembly	114C3043-6/ 1615-00-115-4718	1	\$4,403.00	\$4,403.00
TOTAL COST PER AIRCRAFT =				\$26,506.00

b. Bulk and Consumable Materials - N/A.

c. Requisitioning Instructions. Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code (CC 57-59) "X3V" (X-ray-Three-Victor).

NOTE

Project Code "X3V" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

d. Disposition of Discrepant Parts/Components. Unit will submit a Cat 1 QDR. Dispose of using normal supply procedures. All turn-in documents must include Project Code (CC 57-59) "X3V" (X-ray-Three-Victor).

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- e. Disposition of Hazardous Material - N/A.

11. MAINTENANCE APPLICATION.

- a. Category of Maintenance - AVUM.
- b. Estimated Time Required.

(1) Time to Complete Inspection - Total of 0.2 man-hours using 1 person with no "Not Mission Capable Maintenance" (NMCM) time per end item.

NOTE

The time stated below does not include time for maintenance operational checks or maintenance test flights, if required.

(2) Time for Repair/Replacement - 6 man-hours using 2 persons, plus 1 hour for 6 persons to lock out/in the rotor head for a total of 4 hours "NMCM" time per end item.

12. PUBLICATION REQUIREMENTS.

- a. References.
 - (1) AR 95-1.
 - (2) DA Pam 738-751.
 - (3) TM 1-1520-240-23.
 - (4) TM 1-1520-252-23.
 - (5) TM 1-1520-272-23.
- b. Publication Changes. N/A.

13. POINTS OF CONTACT.

- a. Technical POCs are:

(1) Primary. Mr. Timothy A. Aultman, AMSRD-AMR-AE-C, DSN 645-6421 or (256) 955-6421. Fax is DSN 897-4348 or (256) 313-4348. Email is "timothy.aultman@peoavn.redstone.army.mil".

(2) Alternate. Mr. James R. Hamilton, AMSRD-AMR-AE-C, DSN 897-3380 or (256) 313-3380. Fax is DSN 897-4726 or (256) 313-4726. Email is "james.hamilton@peoavn.redstone.army.mil".

- b. Logistical POCs are:

(1) Primary. Mr. James T. Appleton, SFAE-AV-CH-O, DSN 897-0729 or (256) 313-0729. Fax is 645-6453 or (256) 955-6453. Email is "james.t.appleton@peoavn.army.mil".

(2) Alternate. Mr. Bill Olson, SFAE-AV-CH-O, DSN 897-0721 or (256) 313-0721. Fax is 897-4726 or (256) 313-4726. Email is "william.olson@peoavn.army.mil".

- c. Wholesale Materiel POC (Spares) is Mr. Robert King, AMSAM-MMC-AV-CA, DSN 897-3363 or (256) 313-3363. Fax is DSN 955-6453. Email is "robert.king24@us.army.mil".

d. Forms and Records POCs are:

(1) Primary. Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564. Fax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@redstone.army.mil".

(2) Alternate. Ms. Sibyl Johnson, AMSAM-MMC-MA-NM, DSN 788-6696 or (256) 842-6696. Fax is DSN 746-4904 or (256) 876-4904. Email is "sibyl.johnson@redstone.army.mil".

e. Safety POCs are:

(1) Primary. Mr. Frank Roseberry (SAIC), AMSAM-SF-A, DSN 788-8631 or (256) 842-8631. Fax is DSN 897-2111 or (256) 313-2111. Email is frank.roseberry@redstone.army.mil".

(2) Alternate. Mr. Russell Peusch, AMSAM-SF-A, DSN 788-8632 or (256) 842-8632. Fax is DSN 897-2111 or (256) 313-2111. Email is "russell.peusch@redstone.army.mil".

f. Foreign Military Sales POC is Mr. Ronnie W. Sammons, AMSAM SA-AS-UT, DSN 897-6825 or (256) 313-6825. Fax is DSN 897-0411 or (256) 313-0411. Email is "ronnie.sammons@redstone.army.mil".

g. After hours, contact the AMCOM Operations Center (AOC) DSN 897-2066/7 or (256) 313-2066/7.

NOTE

A listing of published safety messages can be viewed at "<https://ams14.redstone.army.mil/safety/sof/index.html>". This is a secured website which requires an Army Knowledge Online (AKO) ("www.us.army.mil") ID and password.

14. REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS.

You can help improve this publication. 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 to Publications and Blank Forms) directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000. You may also submit your recommended changes by E-Mail directly to 2028@redstone.army.mil or by fax (256) 842-6546/DSN 788-6546. A reply will be furnished directly to you. Instruction for sending an electronic 2028 may be found at the back of this publication.

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By Order of the Secretary of the Army:

Official:



JOYCE E. MORROW
*Administrative Assistant to the
Secretary of the Army*
0614308

PETER J. SCHOOMAKER
*General, United States Army
Chief of Staff*

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 314173 requirements for TB 1-1520-240-20-167.

These are the instructions for sending an electronic 2028

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
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.

PIN: 083212-000