URGENT

*TB 1-1520-237-20-265

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

SAFETY OF FLIGHT,

TECHNICAL, RCS CSGLD-1860 (R1), MAIN MODULE PLANETARY CARRIER ASSEMBLY RETIREMENT LIFE, ALL UH-60A, EH-60A AND UH-60Q SERIES AIRCRAFT

Headquarters, Department of the Army, Washington, D. C. 16 June 2003

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

1. Priority Classification. URGENT

NOTE

IAW AR 95-1, para 6-6a, 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.

2. Summary of Problem.

- a. Background Two cracked Planetary Carriers were previously found which resulted in five SOFs imposing inspections and restrictions. UH-60-03-01 required an Ultrasonic Test (UT) inspection of the Main Module Planetary Carrier. The results have been compiled and evaluated by AMCOM engineers. These results, along with extensive modeling and analysis, have resulted in a decision to establish a new retirement life for the Main Module Planetary Carrier Assembly. UH-60-03-03 (TB 1-1520-237-20-264, dated 04 April 2003) was issued to establish a new retirement life for the Main Module Planetary Carrier Assembly of 3700 hours. Provisions were also made to allow flight above 3700 hours provided a recurring Ultrasonic Test (UT) is completed at 50 hour intervals until 31 May 03. Due to contingency operations and less than expected production, replacement modules have not been made available to meet the 31 May 03 deadline. Additionally, a recent interim TM change (I02) improperly established a retirement life on the Main Module rather than the Planetary Carrier.
 - b. The purpose of this TB is to -
 - (1) Establish a new retirement life for the Main Module Planetary Carrier Assembly of 3700 hours.
 - (2) Supersede flight restrictions of UH-60-03-01, paragraph 7.2.

^{*} This TB supersedes USAAMCOM Safety Of Flight (SOF) message, 151600Z FEB 03 (UH-60-03-03), USAAMCOM Safety of Flight (SOF) Message, 221230Z MAY 03, UH-60-03-04, and TB 1-1520-237-20-264, dated 04 April 2003.

- (3) Permit flight for aircraft at and above 3700 hours until 30 Sep 03 provided the recurring 50 hour Ultrasonic Test (UT) is completed at 50 hour intervals.
 - (4) Rescind Interim Change I02 to TM 1-1520-237-23-1, dated 28 February 2003.
- 3. End Items to be Inspected. All UH-60A, EH-60A and UH-60Q series aircraft
- 4. Assemblies/Components/Parts Affected.
 - a. Suspect/discrepant assemblies/components/parts -

NOMENCLATURE	PART NO.	NSN
Planetary Carrier	70351-08175-045	1615-01-237-3685

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

NOMENCLATURE	PART NO.	NSN	
Transmission Mech Module	70351-08100-053	1615-01-076-1260	
Transmission Mech Module	70351-08100-054	1615-01-105-1450	
Transmission Mech Module	70351-08100-055	1615-01-129-7330	
Transmission Mech Module	70351-08100-056	1615-01-105-8713	
Transmission Mech Module	70351-08100-057	1615-01-134-7274	
Transmission Mech Module	70351-08100-058	1615-01-128-1749	
Transmission Mech Module	70351-08100-059	1615-01-145-3928	
Transmission Mech Module	70351-08100-060	1615-01-168-2983	
Transmission Mech Module	70351-08100-061	1615-01-284-6419	
Transmission Mech Module	70351-08100-069	1615-01-316-2658	
Transmission Mech Module	70351-08100-070	1615-01-316-2659	
Transmission Mech Module	70351-08100-071	1615-01-375-5846	
Transmission Mech Module	70351-08100-072	1615-01-375-5847	
Transmission Mech Module	70351-08100-073	1615-01-413-7786	
Transmission Mech Module	70351-08100-074	1615-01-415-8387	

c. Additional assemblies/components/parts affected -

NOTE

The following main modules have a new design carrier assembly installed and are currently operating under an Interim Statement of Aircraft Qualification (ISAQ) and are included in this TB in order to establish tracking and an Interim life for those modules. The retirement life of these modules will be determined and updated before the expiration of the ISAQ.

NOMENCLATURE	PART NO.	NSN
Transmission, Helicopter	70351-08100-075	1615-01-503-3114
Transmission, Helicopter	70351-08100-076	1615-01-503-3115

2 PIN NO. 080852–000

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.

Initial TAMMS (The Army Maintenance Management System) Compliance Requirements...

a. Upon receipt of this message, make the following entry on DA Form 2408-13-1. Enter a Red Horizontal Dash //-// status symbol with the following statement: "Comply with requirements of TB 1–1520–237–20–265 (UH–60–03–04) NLT 31 May 03." Commanders who are unable to comply with the requirements of this message within the time frame specified will upgrade the affected status symbol to a Red //X//.

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 Officer.

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 e-mail to "safeadm@redstone.army.mil" NLT 21 Feb 03 IAW AR 95–1. If e-mail is not available, the report may be faxed to SOF Compliance Officer at DSN 897-2111 or (256) 313-2111.
- 6. Task/Inspection Compliance Reporting Requirements.

NOTE

The Task/Inspection Report is only required for aircraft having modules that contain planetary carriers with over 3700 hours TSN.

The Task/Inspection reporting form is available at "www.redstone.army.mil/sof/h60s0303.xls" (use lower case letters only) or you may obtain it from the units servicing LAR. This report will cite message number, date of inspection, aircraft serial number, aircraft hours, main module serial number, main module part number, main module hours, main module hours due replacement, carrier serial number and carrier hours.

- a. Aircraft Submit Task/Inspection compliance report for this TB to Log POC NLT 04 June 03.
- b. Retail Stock (Installation level and below) N/A.
- c. Wholesale Stock (Including Depot Stock, Depot Maintenance and Single Stock Fund) N/A.
- 7. Special Provisions to TB Requirements (Aircraft). N/A.
- 8. Technical Procedures/Instructions.

NOTE

TB 1-1520-237-20-258 provides instructions to determine the TSN of the Main Module Planetary Carrier Assembly and establish an Interim Life Limit of the Carrier Assembly.

- a. All requirements of TB 1–1520–237–20–264 (SOF UH–60–03–03), including recurring inspections and flight restrictions, remain unchanged except as follows.
- b. Change the Main Module (Transmission) DA Form 2408-16 for the Main Module Planetary Carrier Assembly from 2000 hours Interim Life limit to 3700 hours retirement life. ULLS-A units will use this message as authority to change the Component Master Files to 3700 hours.

- c. Clear entry required by UH-60-03-01.
- d. Conduct records review to determine the TSN of the Main Module Planetary Carrier.
- e. If the Main Module Planetary Carrier assembly TSN is 3700 hours or greater, make the following entry on DA Form 2408-13-1. Enter a circle red //X// status symbol with the following statement: "Main Module Carrier exceeds retirement life. Operate aircraft IAW SOF UH-60-03-04 (TB 1-1520-237-20-265) and replace main module NLT 30 Sep 03". Clear Circled Red //X// entry required by TB 1-1520-237-20-264 (SOF UH-60-03-03).

NOTE

Flight operations are unrestricted for Main Modules with Planetary Carrier Assemblies under 3700 hours TSN. Flight operations are also unrestricted for modules with Carrier assemblies at or above 3700 hours TSN provided that a UT was completed within the previous 50 flight hours.

- f. Aircraft with Main Module Planetary Carrier Assembly that reach 3700 hours will comply with requirements of this message. Aircraft with Main Module Planetary Carriers that exceed 3700 hours may continue to operate until 30 Sep 03 provided that the 50 hour recurring UT inspection is completed IAW TB 1–1520–237–20–264 (UH–60–03–03).
- g. Perform recurring UT IAW instructions provided in UH-60-03-01 every 50 hours on all Planetary Carriers that exceed 3700 hours. Make appropriate entry on DA Form 2408-13-1 as required. Flight is not permitted unless last UT was completed within the previous 50 flight hours except as stated in paragraph 7.e.
- h. The following applies only to aircraft that are deployed for contingency operations and aircraft away from home station. Aircraft that exceed the retirement life and have not had a UT within the previous 50 flight hours, are authorized a one-time mission flight, not to exceed 10 hours (with intermediate stops) to a secure maintenance facility that will support a UT inspection or main module replacement. This flight will be flown IAW the following flight restrictions.

NOTE

The briefing officer will brief the applicable restrictions for each mission.

- (1) Operations in instrument meteorological conditions (IMC) are permitted if weather for the entire route being flown is equal to or greater than 1000 ft ceiling and 3 miles visibility. Operations where suitable forced landing areas are not available, are not authorized. This includes but is not limited to VMC, IMC, and over-water flights where a suitable forced landing area is beyond autorotational glide distance.
 - (2) ERFS, internal auxiliary fuel and air volcano operations are not authorized.
- (3) Aircraft restricted to 120 KIAS or 80 percent dual engine torque, whichever occurs first, except actual maintenance test flights and emergencies.
 - (4) Only mission essential crew/passengers will be transported.
- i. Aircraft experiencing low transmission oil pressure or main module sump chip light indications will land as soon as possible and perform normal maintenance procedures. Aircraft experiencing low oil pressure in combination with chips or large, aluminum foil like chips exceeding existing TM criteria, shall contact the Technical POC for further guidance. Required information will consist of symptoms experienced, total time since new on the main module, main module part number, past history of problems experienced on any modules in main transmission, indicated oil quantity level and presence of any debris evidenced on the screens or main oil filter. Retain any debris found for analysis.
 - i. Clear the initial entry from para 4.a. and note compliance on DA Form 2408-5-1 (Main Module).
 - k. Rescind Interim Change I02 to TM 1-1520-237-23-1, dated 28 February 2003.
- 9. Procedures/Instructions for Assemblies/Components/Parts in Work or Stock (At all Levels Including War Reserves). N/A.
- 10. Special Tools and Fixtures Required. N/A.

4 PIN NO. 080852–000

11. Supply/Parts (Requisition/Disposition).

NOTE

HQDA-ADCS-G-3 will prioritize units and repair parts distribution.

a. Parts Required -

NOMENCLATURE	PART NO./NSN	QTY	COST
Transmission, Helicopter	70351-08100-075	1	\$290,775.00
	1615-01-503-3114		

Total Cost per Aircraft - \$290,775.00

- 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) "XE1" (X-ray-Echo-One).

NOTE

Project Code "XE1" 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 Dispose of using normal supply procedures. All turn-in documents must include Project Code (CC 57-59) "XE1" (X-ray-Echo-One).
- e. Disposition of Hazardous Material IAW Environmental Protection Agency directives as implemented by your servicing environmental coordinator (AR 200-1).

12. Maintenance Application.

- a. Category of maintenance AVUM.
- b. Estimated time required -
 - (1) Time to inspect/update records total of 0.5 man-hours using 1 person with no downtime.
- (2) Time for UT inspection total of 6 man-hours using 2 persons with 3 hours downtime per end item.
- (3) Time for repair/replacement total of 144 man-hours using 4 persons with 36 hours downtime per end item.

13. Publication Requirements.

- a. References -
 - (1) AR 95-1.
 - (2) DA PAM 738-751.
- b. Publication Changes TB 1–1500–341–01 and TM 1–1520–237–23–1 shall be changed to reflect this message. A copy of this message will be used as authority to implement the change until the official change is received.

14. Points of Contact.

- a. Technical Engineer POC's are -
- (1) Primary Mr. Scott Abernathy, AMSAM-RD-AE-P-S, DSN 897-2350, ext 5203 or (256) 319-5203. Fax is (256)705-9922, Email is "scott.abernathy@rdec.redstone.army.mil".
- (2) Alternate # 1 Mr. Jim Conner, AMSAM-RD-AE-P-S, DSN 897-2350 ext 5219 OR (256) 319-5219. Email is "jim.conner@rdec.redstone.army.mil".

- (3) Alternate # 2 Mr. Ralph Vemmer, (256) 705–9719. Fax is, (256) 705–9896. Email 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. Fax is DSN 897-3778 or (256)313-3778. Email is "joe.hoover@uh.redstone.army.mil"
- c. Forms and Records point of contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 897-5564. Fax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@redstone.army.mil".
 - d. Safety points of contact are:
- (1) Primary Mr. Randall Rushing (SAIC), AMSAM-SF-A, DSN 897-2092 or (256) 313-2092, Fax is DSN 897-2111 or (256) 313-2111. Email is "randall.rushing@redstone.army.mil".
- (2) Alternate Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636. Fax is DSN 897-2111 or (256) 313-2111. Email is "ron.price@redstone.army.mil".
- e. Foreign Military Sales is Primary Mr. Ronnie W. Sammons, AMSAM-SA-AS-UT, DSN 897-0407 or (256) 313-0407. Fax is DSN 897-0411 or (256) 313-0411. Email is "ronnie.sammons@redstone.army.mil".
- f. After hours, contact AMCOM Command Operations Center (AOC) DSN 897-2066/7 or (256) 313-2066/7.
- 15. 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, 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. For the World Wide Web use: https://amcom2028.redstone.army.mil.

By Order of the Secretary of the Army:

JOHN M. KEANE General, United States Army Chief of Staff

Official:

JOEL B. HUDSON
Administrative Asssistant to the
Secretary of the Army

Jul B. Hulm

0315507

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN), 314094, requirements for TB 1-1520-237-20-265.

6 PIN NO. 080852-000

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

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.