

URGENT

*TB 1-1520-237-20-233

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

SAFETY OF FLIGHT, TECHNICAL, RCS CSGLD-1860 (R1), ALL H-60 SERIES AIRCRAFT, ONE TIME INSPECTION OF MAIN ROTOR BLADE EXPANDABLE PINS

Headquarters, Department of the Army, Washington, D. C.
25 June 2001

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.

a. Aircraft in Use. Upon receipt of this TB make the following entry on the DA Form 2408-13-1. Enter a Red Horizontal Dash // - // status symbol with the following statement: "Inspect main rotor blade expandable pins IAW TB 1-1520-237-20-233 prior to next flight, but NLT 13 June 2001." Clear the Red Horizontal Dash // - // entry when the procedures IAW para 8 and 9 are completed. The affected aircraft shall be inspected prior to the next flight but no later than 13 June 2001. Commanders who are unable to comply with the requirements of this TB within the time frame specified will upgrade the affected aircraft status symbol to a Red // X //.

b. Aircraft in maintenance facility.

(1) Aircraft in AVUM, AVIM or Depot. Same as paragraph 1.a..

(2) Aircraft at Contractor Facility. Same as paragraph 1.a..

* This TB supersedes USAAMCOM Aviation Safety of Flight Message (SOF), 082355ZJUN01, UH-60-01-09.

c. Aircraft in Transit.

- (1) Surface/Air Shipment -Same as paragraph 1.a..
- (2) Ferry Status - Same as paragraph 1.a..

d. Maintenance Trainers (Category A, and B). Comply NLT 13 June 2001.

e. Component/Parts in Stock at All Levels (Depot Level and Others), including War Reserves. Upon receipt of this TB, depot and materiel activity commanders at all levels will ensure the material condition tags of all serviceable items listed in paragraph 7. are annotated to read: "TB 1-1520-237-20-233, main rotor blade expandable pin inspection , not complied with."

(1) Wholesale Stock. Report receipt of this TB IAW 14.b.(1) NLT 13 June 2001. Upon Receipt of this TB, depot and materiel activity commanders will ensure all items in condition codes //A//, //B//, //C//, //D//, and //E//, listed in paragraphs 6 and 7, 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. Report compliance with this TB IAW paragraph 14.b(2), NLT 15 June 2001.

(2) Retail Stock. Upon receipt of this TB, commanders and facility managers maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the procedures required IAW paragraphs 8 and 9. Dispose of discrepant material IAW paragraph 10. Report compliance with this TB IAW paragraph 14.c.(2) NLT 15 June 2001.

f. Components/Parts in Work (Depot Level and Others). N/A.

2. Task/Inspection Suspense Date. Complete the inspection IAW paragraphs 8 and 9 prior to next flight but NLT 13 June 2001 and report IAW para 14.a.(2) NLT 15 June 2001.

3. Reporting Compliance Suspense Date. Report compliance IAW para 14.a.(1) NLT 13 June 2001.

4. Summary of Problem.

a. Several main rotor blade expandable pins have been found with a potentially catastrophic crack in the cam handle. The material investigation indicated that crack initiation was due to stress corrosion cracking. These failures were due to non-conformance in the heat treatment process of the cam handle.

b. Manpower/downtime and funding impacts see para 12.

c. The purpose of this TB is to:

- (1) Require a one time inspection of all main rotor blade expandable pins.
- (2) Remove and replace all main rotor blade expandable pins manufactured by APEX manufacturing company.

5. End Items to be Inspected. All H-60 series aircraft.

6. Assembly Components to be Inspected. N/A

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NSN
Pin, Expanding Grip	70103-08107-102	5315-01-329-0707
Pin, Expanding Grip	70103-08107-103	No NSN

8. Inspection Procedures.

a. Determine the information required in paragraph 14.a(2).

(1) Conduct a records check, DA form 2408-16, to determine the serial number and component hours of the main rotor blade pins.

(2) Confirm above data by performing visual inspection of all main rotor blade pins installed on aircraft.

b. If APEX main rotor blade expandable pin, MFG CAGE Code 2V343 is installed enter a red //X// status symbol with the following statement: "Main rotor blade expandable pins (specify blade as required) require replacement IAW TB 1-1520-237-20-233." Then proceed to paragraph 8.d.. No ground run-ups are allowed with APEX or defective pins.

c. If other than APEX main rotor blade expandable pin, MFG CAGE Code 2V343 is installed, proceed as follows:

(1) Preparation of part. The area of inspection shall be thoroughly cleaned. Clean the flat sides of the cam area of the handle with a soft cotton rag dampened with P-D 680, Type 2, or equivalent.

(2) Inspect the pivot pin area of the cam handle using a 10X magnifier. This inspection will be completed by a technical inspector. Inspect the cam handle surface area within one half inch of the pivot pin (both sides of handle) for cracks or corrosion. No cracks or corrosion allowed in this area. If required, clean the flat sides of the cam area of the handle with a dry soft cotton rag. If any indication of crack or corrosion is found in this area, replace the pin immediately. Dispose of IAW paragraph 10.d.(1)..

(3) If cracks are found, replace IAW paragraph 9..

d. Complete report IAW paragraph 14.a(2) NLT 15 June 2001. This report must be provided to the logistic POC of paragraph 16.b. and the wholesale POC of paragraph 16.c. to receive consideration for initial distribution of replacement pins as the become available.

e. Once procedures above are complied with, the inspection is complete and the red dash // - // entry may be cleared..

9. Correction Procedures. Remove and replace all APEX main rotor blade expandable pins, or other pins failing the 10X inspection IAW appropriate TM.

CAUTION

Do not hit blade pins with a hammer or other object to remove pin.

10. Supply/Parts and Disposition.

NOTE

HQDA will prioritize units and repair parts.

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 (CC 57-59) "X1D" (X-ray-One-Delta).

NOTE

Project code "X1D" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

c. Bulk and Consumable Materials:

NOMENCLATURE	PART No/NSN	QTY
Dry Cleaning Solvent	P-D 680 / Any	As required
Corrosion Prev. Compound (Grade 2 or 4, any Type)	MIL-C-16173	

d. Disposition

(1) For any pin found with a crack in the cam area of the handle, immediately contact the technical POC listed in paragraph 16.a. and submit a category 1 QDR. Hold blade pin pending disposition instructions from the technical POC.

(2) Hold any discrepant pin that does not meet the corrosion inspection criteria contained in this message. The wholesale point of contact in paragraph 16.c. will provide disposition instructions. Notify the

wholesale POC only if and when more than 50 pins are being held for disposition instructions. All turn-in documents must include project code (CC 57-59) "X1D" (X-ray-One-Delta).

(3) For all other causes of removal, demilitarize/mutilate IAW TM 1-1500-328-23 any part/component which does not meet inspection criteria except as provided above

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

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

NOMENCLATURE	PART NUMBER	NSN
Cargo strap, 5000LB Capacity	SP4067	1670-00-725-1437

12. Application.

a. Category of Maintenance. AVUM . Aircraft downtime will be charged to AVUM maintenance. Report aircraft Non-Mission Capable Supply (NMCS) while waiting for parts IAW this TB.

b. Estimated Time Required.

(1) Time to Complete Inspection -

(a) Total of 1.0 man-hours using 1 person.

(b) Total of 0 hours downtime for one end item

(2) Time For Replacement -

(a) Total of 1.5 man-hours using 3 persons.

(b) Total of 0.5 hours downtime for one end item.

(3) Total estimated downtime for inspection and correction - 14 man-hours.

c. Estimated cost impact to the field.

NOMENCLATURE	PART NO./NSN	QTY.	COST EA.	TOTAL
Pin, Expanding Grip	70103-08107-102	8	\$168.61	\$1348.88
	5315-01-329-0707			

Total Cost per Aircraft = \$1348.88

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.

b. TM 1-1520-328-23.

c. TM 1-1520-237-23.

d. TM 1-1520-250-23.

14. Recording and Reporting Requirements.

a. Aircraft:

(1) Reporting Compliance Suspense. Upon entering requirements of this TB on DA Form 2408-13-1 for all effected aircraft, Commanders will 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, NLT date specified in Paragraph 3. Datafax number is DSN 897-2111 or commercial (256)

313-2111. E-Mail address is "safeadm@redstone.army.mil". The report will cite the message and TB number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

(2) Task/Inspection Reporting Suspense Date . Upon completion of inspection, Commanders will forward a priority message to the Logistical Point of Contact listed in para 16.b. and the wholesale POC listed in paragraph 16.c... The report will cite the message and TB number, date of inspection, aircraft serial number, component cage code, component serial number, (confirm VIA records check and visual inspection of the components), component hours, and results of the inspection for all pins. All parts not installed on the aircraft will be included. This report must be received NLT the date specified in paragraph 2 for the unit to be considered during the initial distribution of replacement as they become available from the vendor.

b. Wholesale Spare Parts/Assemblies.

(1) Reporting message receipt. Depot and materiel activity commanders will report receipt of this message by e-mail or datafax to the wholesale materiel (spares) point of contact listed in paragraph 16.c. NLT date specified in paragraph 1.e.(1). Provide local point of contact.

(2) Task/Inspection Reporting Suspense. Depot and materiel activity commanders will provide a DD form 1225 to the wholesale materiel point of contact (spares) listed in paragraph 16.c. NLT date specified in paragraph 1.e.(1). Provide an estimate of the cost reimbursable funding required to move serviceable items on hand listed in paragraphs 6 to a work area, unpack the materiel, repack the materiel after inspection by AMCOM inspectors, and to return the materiel to storage, as appropriate. Report, by original serviceable condition code, the quantity of materiel placed in condition code //J//. Report by e-mail or datafax and provide local point of contact.

c. Retail Spare Parts/Assemblies.

(1) Reporting message receipt – N/A.

(2) Task/Inspection Reporting Suspense - Commanders and facility managers will report inspection results to the logistical point of contact in paragraph 16.b. NLT date specified in paragraph 1.e.(2). The report will cite this message and TB number, date of inspection, component cage code, component serial number, (confirm VIA records check and visual inspection of the components), component hours, and results of the inspection for all pins. All parts not installed on the aircraft will be included. Report by e-mail or datafax and provide local point of contact.

d. The following forms are applicable and are to be completed in accordance with DA Pam 738-751, 15 Mar 99.

NOTE

(1) DA Form 2408-5-1, Equipment Modification Record (blade expandable pin).

(2) DA Form 2408-13, Aircraft Status Information Record.

(3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

(4) DA Form 2408-16, Aircraft Component Historical Record.

(5) DA Form 2410, Component Removal and Repair/Overhaul Record (only if the blade expandable pin is removed and or replaced).

(6) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label - Materiel (color yellow). Annotate remarks block with "Inspected serviceable IAW UH-60-01-09 (TB 1-1520-237-20-233)".

(7) DD Form 1577/DD Form 1577-1, Unserviceable (Condemned) Tag/Label - Materiel (color red). Annotate remarks block with "Inspected serviceable IAW UH-60-01-09 (TB 1-1520-237-20-233) and mutilated IAW TM 1-1500-328-23".

(8) DA Form 1577-2/DD Form 1577-3, Unserviceable (repairable) Tag/Label - Materiel (color green). Annotate remarks block with "Unserviceable IAW UH-60-01-09 (TB 1-1520-237-20-233)".

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact is Mr. Darrell Hutson, AMSAM-RD-AE-I-D-U, DSN 897-2413 or 897-6030, Commercial (256) 313-2413 or (256)313-6030.. Datafax is 897-3844 or 897-5206, Commercial (256)313-3844 or (256)313-5206, E-mail is "darrell.hutson@redstone.army.mil".

b. Logistical point of contact 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. Wholesale materiel point of contact (Spares) is Ms. Julia Moore, AMSAM-MMC-VS-UA, DSN 897-1176 or (256) 313-1176, datafax is DSN 897-4769. E-mail is "julia.moore@redstone.army.mil".

d. Forms and records point of contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564, Datafax is DSN 746-4904. E-mail is "ann.waldeck@redstone.army.mil".

e. Safety points of contact are:

(1) Primary - Mr. Randall Rushing, (SAIC), AMSAM-SF-A, DSN 897-2092 or commercial (256) 313-2092, Datafax is DSN 897-2111 or (256) 313-2111. E-mail is "randall.rushing@redstone.army.mil".

(2) Alternate - Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636, datafax is DSN 897-2111 or (256) 313-2111. E-mail is "ron.price@redstone.army.mil".

f. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact

(1) Primary: Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or (256) 313-6856. Datafax is DSN 897-6630 or (256) 313-6630. E-mail "ronnie.sammons@redstone.army.mil".

(2) Alternate: MR. Paul W. Tarr, AMSAM-SA-CS-NF, DSN 897-6861 or (256) 313-6861. Datafax is DSN 897-6630 or (256) 313-6630. E-mail "paul.tarr@redstone.army.mil".

g. 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 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-MA-NP, Redstone Arsenal, AL 35898-5000. You may also submit your recommended changes by E-mail directly to 2028@redstone.army.mil. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official: _____



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0116301

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