

UH-1-08-AMAM-02 Cyclic Bearing

UNCLASSIFIED

MSG DTG 281400Z APR 08

FROM COMMANDER, AMCOM, REDSTONE ARSENAL, AL //AMSAM-SF-A//

SUBJECT - AVIATION MAINTENANCE ACTION MESSAGE (AMAM), MAINTENANCE MANDATORY, RCS CSGLD-1860(R1), ALL UH-1 SERIES AIRCRAFT, CYCLIC FLIGHT CONTROL BEARING INSPECTION, UH-1-08-AMAM-02

.....NOTE.....
....This message is effective until rescinded or superseded.

.....NOTE.....
....This message is issued IAW AR 750-6 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. Commanders of ACs, ARNG, USAR, ASCCs, and DRUs will immediately verify this retransmittal to the AMCOM SOF Compliance Officer (AMSAM-SF-A, safeadm@conus.army.mil).

.....NOTE.....
....Commanders or Directors (not lower than the grade of Major General or civilian equivalent) of ACs, ARNG, USAR, ASCCs, and DRUs may authorize temporary exception from message requirements IAW AR 750-6, para 2-9. 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//.

.....NOTE.....
....Commanders, Facility Managers, and Contractors at all levels, to include DD 250 aircraft, will not issue aircraft until they are in compliance with this message.

.....NOTE.....
....A listing of published safety messages, to include TAMMS Reports, Inspection Reports, and any Supplements/Addendums required by this message can be viewed/downloaded at: "https://asmprd.redstone.army.mil". This is a secure website which requires an Army Knowledge Online (AKO) ("www.us.army.mil") ID and password.

1. SUMMARY -
 - 1.1. Background - Bearings, PN MS27643, are designed to be internally self-aligning for a minimum of 10 degrees in any direction. Bearings, PN MS27643-4, manufactured by Schatz Bearing Corporation prior to 2 OCT 07 allow only an 8.5 degree angular rotation. Bearing installations where a 10 degree angular rotation is required have been identified. These installations are limited to locations in the cyclic flight control system.
 - 1.2. Message Purpose - Require a one time inspection and replacement of any suspect MS27643-4 Schatz bearings installed in the cyclic flight control system.
2. END ITEMS AFFECTED - All UH-1 series aircraft.

UH-1-08-AMAM-02 Cyclic Bearing

3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED -

3.1. Suspect/Discrepant Assemblies/Components/Parts -

..Nomenclature	PN	NSN
..Bearing	MS27643-4	3110-00-042-1045

3.2. Additional Assemblies/Components/Parts to be Inspected -

..Nomenclature	PN	NSN
..Lever Assembly, Flight	204-001-356-001	1560-00-633-0882
..Lever Assembly, Cyclic	204-001-357-001	1680-00-847-7438
..Lever Assembly, Cyclic	204-001-357-005	1680-00-847-7439
..Lever Assembly	204-001-332-001	N/A
..Lever Assembly	204-001-332-005	N/A

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.....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.

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4. INITIAL AIRCRAFT TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM)

ENTRY - 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 UH-1-08-AMAM-02 before [####.#] aircraft hours, but NLT 28 APR 2010." Calculate [####.#] as next scheduled 150 hour Phase Maintenance Inspection (PMI).

5. COMPLIANCE REPORTING REQUIREMENTS -

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.....NOTE.....

....Units will report compliance with this message for
....all assigned aircraft via AMTRACKS. Unit personnel
....designated to submit compliance reports that have not
....registered with AMTRACKS must establish a profile before
....submitting their compliance reports. Access AMTRACKS at
...."<https://amtracks.redstone.army.mil>".

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5.1. Aircraft Initial Compliance Report - Submit Initial Compliance Report via AMTRACKS NLT 5 MAY 08 IAW AR 750-6. The Initial Compliance Report consists of the aircraft SN, MDS, and date of initial TAMMS entry for all assigned aircraft. This report only confirms that the unit has made the initial logbook entry.

5.2. Aircraft Final Compliance Report - Submit Final Compliance Report via AMTRACKS within 3 days of replacing the suspect bearings, but NLT 28 APR 2010 IAW AR 750-6. This report will include date of inspection, aircraft hours, inspection results/comments (enter number of suspect bearings found installed), and date replaced (if no bearings are replaced use the TAMMS entry date in this block).

5.3. Retail Stock Task/Inspection Compliance Report (Installation level and below) - N/A.

5.4. Wholesale Stock Task/Inspection Compliance Report (Including Depot stock, Depot Maintenance and Single Stock Fund) - N/A.

6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT) - Aircraft in Transit (Surface/Air Shipment/Ferry Status/ Aircraft Away From Home Station) - Unit Commanders unable to comply with the requirement specified in para 4 may defer making the initial Aircraft TAMMS entry until arrival at final destination.

7. TECHNICAL PROCEDURES/INSTRUCTIONS -

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.....NOTE.....

....This message includes a required Addendum. If the
....Addendum is not included with this message, it may be
....viewed/downloaded at (use lower case letters only):
...."<https://asmprd.redstone.army.mil>". This is a secure
....website which requires an Army Knowledge Online (AKO)

UH-1-08-AMAM-02 Cyclic Bearing

....("www.us.army.mil") ID and password. Adobe Reader or
....Adobe Acrobat, Version 7 or higher, is required to
....view the addendum. Adobe Reader may be downloaded
....free of charge from "www.adobe.com".

- 7.1. Prepare aircraft for maintenance.
- 7.2. Inspect Cyclic Control Lever Assemblies PN 204-001-356-001 and PN 204-001-332-001 or -005. Reference TM 55-1520-210-23P-2 Figure 359, Item 47 and Item 50.
- 7.2.1. Reference TM 55-1520-210-23, Chapter 11, Paragraph 11-68 for steps to gain access to Lever Assemblies.

.....NOTE.....
....Installed bearings with manufacturer identification
....other than Schatz Bearing Corporation and "new design"
....Schatz bearings are acceptable for continued operation
....subject to normal serviceability requirements.

- 7.2.2. Inspect bearings (Reference TM 55-1520-210-23P-2, Figure 359, Item 48A and Item 51A) in all 3 lug locations and determine if Schatz bearings are installed.
- 7.2.2.1. Bearings manufactured by Schatz Bearing Corporation will have the word SCHATZ imprinted on the bearing seal retainer on at least one side of the bearing as shown in Figure 1 of the Addendum.
- 7.2.2.2. Bearings manufactured by Schatz which do not meet the 10 degree minimum angular rotation requirement (i.e. "old design") can be identified by the straight shoulder inner race design as illustrated in Figure 2 of the Addendum.
- 7.2.2.3. Redesigned bearings manufactured by Schatz which do meet the 10 degree minimum angular rotation requirement (i.e. "new design") can be identified by the under cut shoulder inner race design as illustrated in Figure 2 of the Addendum.
- 7.2.3. If no "old design" Schatz bearings are found in any of the lugs, proceed to para 7.3.
- 7.2.4. If "old design" Schatz bearings are found in any of the lugs they must be removed and replaced. Reference TM 55-1520-210-23-2, Chapter 11, Paragraphs 11-68 through 11-71 for disassembly of the Tube and Lever Assembly and bearing replacement.
- 7.2.5. Due to access limitations it may be difficult to replace the bearing in the lateral lug of PN 204-001-356-001. If necessary the work aid shown in Figures 3 and 4 of the Addendum may be fabricated locally and used to ring stake the lateral lug bearing.
- 7.2.6. Reassemble and install Tube and Lever Assembly IAW TM 55-1520-210-23-2, Paragraph 11-72.
- 7.3. Access and inspect Pilot and Co-Pilot Cyclic Stick Lever Assemblies PN 204-001-357-001 and PN 204-001-357-005. Reference TM 55-1520-210-23P-2, Figure 356, Item 7 and Figure 358, Item 26.
- 7.3.1. Reference TM 55-1520-210-23, Chapter 11, Paragraph 11-59 for steps to gain access to Lever Assemblies.
- 7.3.2. Inspect bearings installed in the fore/aft and lateral lugs in both Pilot and Co-Pilot Lever Assemblies for Schatz bearings. Reference steps 7.2.2.1 through 7.2.2.3 of this message for identification of Schatz bearings.
- 7.3.3. If no "old design" Schatz bearings are found in the lugs, the inspection is complete. Proceed to para 7.4.
- 7.3.4. If "old design" Schatz bearings are found in any of the lugs they must be removed and replaced. Reference TM 55-1520-210-23-2, Chapter 11, Paragraphs 11-59 through 11-62 for disassembly of the Pilot and Co-Pilot Cyclic Stick Assemblies and bearing replacement.
- 7.3.5. Due to access limitations it may be difficult to replace the bearings in the PN 204-001-357-001 and -005. If necessary the work aid shown in Figures 3 and 4 of the Addendum may be fabricated

UH-1-08-AMAM-02 Cyclic Bearing

locally and used to ring stake the bearings.

7.3.6. Reassemble and install Pilot and Co-Pilot cyclic stick Assemblies IAW TM 55-1520-210-23-2, Paragraph 11-63 and 11-64.

7.4. Clear the initial entry from para 4 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: "UH-1-08-AMAM-02, Cyclic Flight Control Bearing Inspection not complied with". Do not remove original condition tags.

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

10. SUPPLY/PARTS (REQUISITION/DISPOSITION) -

10.1. Parts Required -

..Nomenclature	PN/NSN	Qty	Cost ea.	Total \$
..Bearing, Ball, Airframe	MS27643-4	7	\$23.93	\$167.51
.....	3110-00-042-1045			
..Bushing, sleeve	120-013-4A	7	1.06	7.42
.....	3120-00-624-5248			
.....	Total cost per aircraft = \$174.93			

10.2. Bulk and Consumable Materials - N/A.

10.3. Requisitioning Instructions - Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code (CC 57-59) "X54" (X-ray-five-four).

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.....NOTE.....
....Project Code "X54" is required to track and establish
....a data base of stock fund expenditures incurred by
....the field as a result of message actions.

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10.4. Disposition of Discrepant Parts/Components - Demilitarize/mutilate IAW TM 1-1500-328-23.

11. MAINTENANCE APPLICATION -

11.1. Category of maintenance - AVUM.

11.2. Estimated Time Required -

11.2.1. Time to complete inspection - Total of 0.5 man-hours using 2 persons.

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.....NOTE.....
....The time stated below does not include time for
....Maintenance Operational Checks or Maintenance Test
....Flights, if required.

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11.2.2. Time for repair/replacement - Total of 2.0 man-hours per bearing using 2 persons.

12. PUBLICATION REQUIREMENTS -

12.1. References -

12.1.1. AR 750-6.

12.1.2. DA Pam 738-751.

12.1.3. TM 55-1520-210-23.

12.1.4. TM 55-1520-210-23P.

12.2. Publication Changes - N/A.

13. POINTS OF CONTACT -

13.1. Technical POCs are -

13.1.1. Primary - Mr. Brad Mason, DSN 897-2376 or (256) 313-2376.

Fax is DSN 897-3206 or (256) 313-3206.

Email is "brad.mason@us.army.mil".

13.1.2. Alternate - Mr. Roger Redick (westar), DSN 897-2431

or (256) 313-2431. Fax is DSN 897-3206 or (256) 313-3206.

Email is "redick@westar.com".

13.2. Project/Product Manager's (PM) Office POCs are -

13.2.1. Primary - Mr. Robert Bell, III, DSN 645-7528

or (256) 955-7528. Fax is DSN 645-7125 or (256) 955-7125.

Email is "robert.bell@peoavn.army.mil".

UH-1-08-AMAM-02 Cyclic Bearing

13.2.2. System Safety - Mr. Mark Hudnall (SAIC), DSN 788-1379 or (256) 842-1379. Fax is DSN 645-7125 or (256) 955-7125. Email is "mark.hudnall@us.army.mil".

13.2.3. Logistics - Mr. Howard Lee Reeves, DSN 645-9701 or (256) 955-9701. Fax is DSN 645-7125 or (256) 955-7125. Email is "howard.reeves@us.army.mil"

13.3. Wholesale Materiel POC (spares) is Felicia S. Barwell, DSN 695-5208 or (804) 279-5208. Fax is DSN 695-5567 or (804) 279-5567. Email is "felicia.barwell@dla.mil".

13.4. Forms and Records POCs are -

13.4.1. Primary - Ms. Ann Waldeck, DSN 746-5564 or (256) 876-5564. Fax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@conus.army.mil".

13.4.2. Alternate - Ms. Sibyl Johnson, DSN 788-6696 or (256) 842-6696. Fax is DSN 746-4904 or (256) 876-4904. Email is "sibyl.johnson@conus.army.mil".

13.5. Safety POCs are -

13.5.1. Primary - Steve Lindsey (SAIC), DSN 897-2092 or (256) 313-2092. Fax is DSN 897-2111 or (256) 313-2111. Email is "steven.lindsey@us.army.mil".

13.5.2. Alternate - Don Swallow, DSN 788-8641 or (256) 842-8641. Fax is DSN 897-2111 or (256) 313-2111. Email is "donald.swallow@us.army.mil".

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

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