MSG DTG 271230Z APR 09

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

SUBJECT - SAFETY OF FLIGHT (SOF), TECHNICAL, ALL OH-58D SERIES AIRCRAFT, PYLON AREA ROLL STAKED BEARINGS, H-58-09-SOF-03

NOTE

This message is effective until rescinded or superseded.

NOTE

This message is issued IAW AR 750-6 and has not been officially transmitted to units subordinate to addressees. Commanders of Army Commands (AC), Army National Guard (ARNG), United States Army Reserve (USAR), Army Service Component Commands (ASCC), and Direct Reporting Units (DRU) will immediately retransmit this message to all subordinate units, activities or elements affected or concerned, and immediately confirm this retransmittal by notification to the AMCOM SOF Compliance Officer at "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, 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), "https://www.us.army.mil", user ID and password.

1. SUMMARY -

1.1. Background - Bell Helicopter received reports concerning Bearings that were incorrectly installed in the Swashplate Anti-Drive Link Assembly, Liner and Bearing Assembly, and Bellcrank Assembly. Investigation revealed that, although the inspection witness marks were applied on the parts, the Bearings had not been properly Roll Staked during manufacture. 1.2. Message Purpose - To require a one-time inspection of Anti-Drive Link Assemblies, Liner and Bearing Assemblies, and Bellcrank Assemblies with a SN prefix of "TI" or "TIFS".

2. END ITEMS AFFECTED - All OH-58D series aircraft.

3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED -

3.1. Suspect Assemblies/Components/Parts -				
Nomenclature	PN	NSN		
Link Assy, Anti-Drive,	406-010-432-105	1615-01-171-3861		
Main Rotor				
Bearing	406-010-417-105	1615-01-164-8109		
and Liner Assembly				
Bell Crank	406-001-505-105	1560-01-181-4089		
3.2. Additional Assemblies/Components/Parts Affected				
Nomenclature	PN	NSN		
Swashplate	406-010-401-111	1615-01-275-2165		
and Support Assembly				

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 AIRCRAFT TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM) ENTRY - 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 H-58-09-SOF-03 prior to next flight, but NLT 04 May 2009."

5. COMPLIANCE REPORTING REQUIREMENTS -

NOTE

Report compliance with this message, as defined below, via the AMCOM Message Tracking System (AMTRACKS) at "https://amtracks.redstone.army.mil". Unit personnel designated to submit compliance reports, that have not registered with AMTRACKS, must establish a profile at this web site before submitting their compliance reports.

5.1. Aircraft Initial Compliance Report - All reporting requirements will be accomplished as part of the "Final Compliance Report".

5.2. Aircraft Final Compliance Report - Submit Final Compliance Report via AMTRACKS NLT 07 MAY 2009 IAW AR 750-6. This report will include Aircraft SN, MDS, Date of Initial TAMMS Entry, for each Component listed below provide Inspection Results/Comments (enter "PASS" or "FAIL" for each PN), and check the box "Entered on DA Forms 2408-5-1 (Anti-Drive Link Assembly and the Liner Bearing Assembly) and "Entered on DA Form 2408-15".

Component #1: Anti-Drive Link Assemblies, PN 406-010-432-105 Component #2: Liner & Bearing Assembly, PN 406-010-417-105 Component #3: Bellcrank Assembly, PN 406-001-505-105

5.3. Retail Stock Task/Inspection Compliance Report (Installation level and below) - Submit Retail Stock Task/Inspection Compliance Report via AMTRACKS NLT 07 MAY 2009 IAW AR 750-6. This report will include Component Nomenclature, PN, SN (if available), and Inspection Results (enter "PASS" or

"FAIL").

5.4. Wholesale Stock Task/Inspection Compliance Report (Including Depot Stock, Depot Maintenance and Single Stock Fund) - Report compliance with this message IAW para 8 to the Wholesale POC in para 13.3 NLT 07 MAY 2009.

6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT) -Aircraft in Transit - Unit commanders unable to comply with the requirement specified in para 4 may defer initial requirements IAW Surface/Air Shipment or Ferry status instructions, as appropriate.

6.1. Surface/Air Shipment - Comply with message requirements prior to first flight after arrival.

6.2. Ferry Status/ Aircraft Away From Home Station - Aircraft are authorized a one-time flight, not to exceed 5 hours (with intermediate stops) to a secure maintenance facility to facilitate message compliance.

7. TECHNICAL PROCEDURES/INSTRUCTIONS -

NOTE

This message includes a required Addendum. If the Addendum is not included with this message, it may be viewed/downloaded at <u>"https://asmprd.redstone.army.mil"</u>. This is a secure website which requires an Army Knowledge Online (AKO), <u>"https://www.us.army.mil"</u>, user ID and password

NOTE

Unless otherwise stated, all maintenance tasks will be performed IAW TM 1-1520-248-23.

NOTE

Replacement of the bearing and application of the Roll Stake is authorized for each of these assemblies; however, the TM does not sufficiently describe the procedures. All three assemblies may be repaired with the application of proper Roll Stake at the AVIM IAW procedures contained in the message Addendum. These procedures will be added to a future release of TM 1-1520-248-23.

7.1. Remove Forward Pylon Fairing, PN 406-060-801-117 or -147, from aircraft to gain access to Swashplate Anti-Drive Link
Assembly, Liner and Bearing Assembly, and Bellcrank Assembly.
7.2. Anti-Drive Link Assembly Inspection - Inspect for installation of PN 406-010-432-105 with a SN prefix of "TI" or "TIFS".

7.2.1. If the SN can be determined and does not have SN prefix of "TI" or "TIFS", the inspection is complete. Proceed to para 7.3.

NOTE

Task 5-2-29 contains an incorrect tolerance regarding acceptable gaps in the bearing lip. Use the tolerance specified within the Addendum to H-58-09-SOF-03. The TM will be changed to reflect this correction. If in doubt, remove Anti-Drive Link Assembly, PN 406-010-432-105, and inspect the Bearing for correct staking and SN Prefix verification.

7.2.2. If the SN has a SN prefix of "TI" or "TIFS", or if SN cannot be determined, perform the following. 7.2.2.1. Using a 10X magnifying glass inspect Anti-Drive Link Assembly, PN 406-010-432-105, to ensure that Bearing, PN 406-310-403-101, is correctly and securely Roll Staked in place within the Assembly IAW IETM, Task 5-2-29, and the Addendum to H-58-09-SOF-03. 7.2.2.2. If Anti-Drive Link Assembly has been inspected and Bearing found to be properly Roll Staked within the link, the inspection is complete. Proceed to para 7.3. 7.2.2.3. If Anti-Drive Link Assembly fails inspection, make the following entry on DA Form 2408-13-1. Enter a RED //X// status symbol with the following statement: "Swashplate Anti-Drive Link Assembly unserviceable IAW H-58-09-SOF-03." 7.3. Swashplate Liner and Bearing Assemblies Inspection -Inspect for installation of both Swashplate Liner and Bearing Assemblies, PN 406-010-417-105, with a SN prefix of "TI" or "TIFS". 7.3.1. If the SN can be determined and does not have SN prefix of "TI" or "TIFS", the inspection is complete. Proceed to para 7.4. 7.3.2. If the SN has a SN prefix of "TI" or "TIFS", or if SN cannot be determined, perform the following. 7.3.2.1. Using a 10X magnifying glass, inspect both Swashplate Liner and Bearing Assemblies, PN 406-010-417-105, to ensure that Bearing, PN 406-310-403-101, is correctly and securely Roll Staked in place within the Assemblies IAW IETM, Task 5-2-35, and the Addendum to H-57-09-SOF-03. 7.3.2.2. If each Liner and Bearing Assembly has been inspected and the Bearing is found to be properly Roll Staked, inspection is complete. Proceed to para 7.4. 7.3.2.3. If either Liner and Bearing Assembly fails inspection, make the following entry on DA Form 2408-13-1. Enter a RED //X// status symbol with the following statement: "Swashplate Liner and Bearing Assembly unserviceable IAW H-58-09-SOF-03." 7.4. Cyclic Bellcrank Assembly Inspection - Inspect for installation of Left Cyclic Bellcrank Assembly, PN 406-001-505-105, with a SN prefix of "TI" or "TIFS". If the SN can be determined and does not have SN prefix 7.4.1. of "TI" or "TIFS" the inspection is complete. Proceed to para 7.5. 7.4.2. If the SN has a SN prefix of "TI" or "TIFS" or if SN cannot be determined, perform the following. 7.4.2.1. Using a 10X magnifying glass inspect Bellcrank Assembly, PN 406-001-505-105, to ensure that Bearings, PN 206-010-470-101, is correctly and securely Roll Staked in place within the Assembly IAW IETM, Task 11-3-40, and the Addendum to H-58-09-SOF-03. The lower end of Connecting Link, PN 406-001-021-111, will need to be disconnected in order to gain access to interior side of the aft bearing. However, the bonded

rubber and flat washer should not impede inspection. Use an inspection mirror to view bearing. If in doubt, remove Bellcrank Assembly, PN 406-001-505-105, and inspect the Bearings for correct staking and SN Prefix verification. 7.4.2.2. If Bellcrank Assembly, PN 406-001-505-105, has been inspected and Bearings found to be properly Roll Staked, the inspection is complete. Proceed to para 7.5. 7.4.2.3. If Bellcrank Assembly fails inspection, and bearing found to be either not Roll Staked or improperly Roll Staked within the link, make the following entry on DA Form 2408-13-1. Enter a RED //X// status symbol with the following statement: "Left Cyclic Bellcrank Assembly unserviceable IAW H-58-09-SOF-03." 7.5. Clear the initial entry from para 4 and note compliance on the Aircraft DA Form 2408-15 and the DA Form 2408-5-1 for both

the Anti-Drive Link Assembly and the Liner Bearing Assembly.

8. PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENTS/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES) -

Annotate the serviceability tag with: "Pylon Area Roll Staked Bearings, H-58-09-SOF-03, not complied with." Do not remove original condition tags.

8.1. Items in Retail Stock - Commanders and facility managers that maintain retail stock at installation level and below will complete the following procedures.

8.1.1. Suspend issue of affected items until in compliance with message requirements.

8.1.2. Contact the supported aviation unit, as required, to perform the procedures required on affected items.

8.1.3. Comply with inspection and correction procedures below as required to return items to serviceable stock.

8.1.3.1. Inspect Swashplate Anti-Drive Link Assembly, PN 406-010-432-105, Bellcrank Assembly, PN 406-001-505-105, and Liner and Bearing Assembly, PN 406-010-417-105, IAW para 7 and the message Addendum. If part fails inspection, attach DD Form 1577 (Unserviceable/Repairable).

8.1.3.2. Turn Swashplate Anti-Drive Link Assembly, Bellcrank Assembly, and Liner and Bearing Assembly in to supporting Aviation Intermediate Maintenance (AVIM) Support for Bearing replacement/repair IAW para 7 and the Addendum to H-58-09-SOF-03.

8.1.4. Submit a Task/Inspection report IAW para 5.3.8.2. Items in Wholesale Stock (Including Depot Stock, Depot Maintenance and Single Stock Fund) -

8.2.1. 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. 8.2.2. 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//. 8.2.3. Comply with additional instructions provided by the Wholesale POC in para 13.3 to return items to their original condition code.

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

10. SUPPLY/PARTS (REQUISITION/DISPOSITION) -

10.1. Parts Required -

Nomenclature	PN/NSN	Qty	Cost each	Total \$	
Link Assembly,	406-010-432-105	1	\$1346.71	\$1346.71	
Anti-Drive,	1615-01-171-3861				
Main Rotor					
Bearing and	406-010-417-105	2	\$ 268.57	537.14	
Liner Assembly	615-01-164-8109				
Bell Crank	406-001-505-105	1	\$ 621.00	621.00	
Assembly	1560-01-181-4089				
*Bearing, Plain,	406-310-403-101	3	\$ 125.46	376.38	
Rod End	3120-01-166-4358				
*Bearing, Plain,	206-010-470-101	4	\$ 43.56	174.24	
Self Aligning	3120-01-164-0591				
	Total co	st per	aircraft =	\$3055.47	
* Bearing is repairable/replaceable at AVIM.					
10.2. Bulk and Consumable Materials - N/A.					

NOTE

Project Code "X5X" (X-ray Five X-ray) is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

10.3. Requisitioning Instructions - Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code (CC 57-59) "X5X".
10.4. Disposition of Discrepant Parts/Components - Dispose of using normal supply procedures. All turn-in documents must include Project Code (CC 57-59) "X5X". 10.5. Disposition of Hazardous Material - IAW Environmental Protection Agency directives as implemented by your servicing environmental coordinator (AR 200-1).

11. MAINTENANCE APPLICATION -

11.1. Category of Maintenance - AVUM (Inspection), AVIM (Repair). 11.2. Estimated Time Required -11.2.1. Time to complete inspection - Total of 1.0 man-hour using 2 persons.

NOTE

The time stated below does not include time for Maintenance Operational Checks (MOC) or Maintenance Test Flights (MTF), if required.

11.2.2. Time to complete bearing repair - Total of 2.0 man-hours using 1 person.

12. PUBLICATION REQUIREMENTS -

- 12.1. References -
- 12.1.1. AR 750-6.
- 12.1.2. DA Pam 738-751.
- 12.1.3. AR 200-1.
- 12.1.4. TM 1-1520-248-23.
- 12.1.5. TM 1-1520-248-23P.
- 12.1.6. TM 55-1500-322-24.

12.2. Publication Changes - TM 1-1520-248-23, Inspection of Roll Staked Bearings shall be changed to include information contained in the Addendum to H-58-09-SOF-03. A copy of this message will be used as authority to implement the change until the official TM change is received.

13. POINTS OF CONTACT -

13.1. Technical POCs -Primary - Mr. James Wilkins, DSN 897-4982 or 13.1.1. (256) 313-4982. Fax: DSN 788-6758 or (256) 842-6758. Email: "james.k.wilkins@us.army.mil". 13.1.2. Alternate - Mr. Scott Harris (Avion), DSN 897-2405 or (256) 313-2405. Fax: DSN 788-6758 or (256) 842-6758. Email: "harriss@peoavn.army.mil". 13.2. Project/Product Manager's (PM) Office POC -Mr. Charles Wright, DSN 645-7077 or (256) 955-7077. Fax: DSN 645-7125 or (256) 955-7125. Email: "charles.d.wright@us.army.mil". 13.3. Wholesale POCs -13.3.1. DLA Managed Items - Ms. Susan Wallace, DSN 695-4492 or (804) 279-4492. Email: "susan.wallace@dla.mil".

13.3.2. AMCOM (B17) Managed Items - Mr. Guillermo Calvo, DSN 897-1398 or (256) 313-1398. Email: "guillermo.calvo@us.army.mil". 13.4. Forms and Records POCs -13.4.1. Primary - Ms. Ann Waldeck, DSN 746-5564 or (256) 876-5564. Email: "ann.waldeck@conus.army.mil". 13.4.2. Alternate - Mr. David Derbort, DSN 746-5151 or (256) 876-5151. Email: "david.derbort@conus.army.mil". 13.5. Safety POCs -13.5.1. Primary - Mr. Frank Rosebery (SAIC), DSN 788-8631 or (256) 842-8631. Email: "james.rosebery@conus.army.mil". 13.5.2. Alternate - Mr. Don Swallom, DSN 788-8641 or (256) 842-8641. Email: "donald.swallom@conus.army.mil". 13.6. Foreign Military Sales POCs -13.6.1. Primary - Mr. George Ashmore (CAS), DSN 788-1094 or (256) 842-1094. Email: "george.ashmorel@us.army.mil". 13.6.2. Alternate - Mr. Tom Gibson, DSN 788-1077 or (256) 842-1077. Email: "thomas.b.gibson@us.army.mil". 13.7. After hours, contact the AMCOM Operations Center (AOC), DSN 897-2066/7 or (256) 313-2066/7.