SUBJECT - AVIATION SAFETY ACTION MESSAGE, MAINTENANCE MANDATORY, NCE CIII-1840181, ALL UH-1 AND AH-1 SERIES HELICOPTERS WITH T53 ENGINE INSTALLED, ONE TIME INSPECTION OF POWER SHAFT BOLTS, UH-1, AH-1-01-ASAAM-05, AH-1-01-ASAAM-04 (T3 1-1520-243-20-29).

NOTE

THIS IS AN AVIATION SAFETY ACTION MESSAGE ISSUED IAW AR 95-1, CHAPTER 6, 1 SEP 97. THIS MESSAGE HAS NOT BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSEES. ADDRESSEES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS AFFECTED OR CONCERNED. THE RETRANSMITTAL SHALL REFERENCE THE MESSAGE. ACTION ADDRESSES WILL IMMEDIATELY VERIFY THIS TRANSMISSION TO CDR, AMCOM, ATTN: AMSAM-SF-A (SOF COMPLIANCE OFFICER).

1. PRIORITY CLASSIFICATION -
   NOTE

   IAW AR 95-1, PARA 6-6A, MACOM COMMANDERS MAY AUTHORIZE TEMPORARY EXCEPTION FROM ASAAM 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.


   B. AIRCRAFT IN MAINTENANCE -

(1) AIRCRAFT IN AVN, AVIM, OR DEPOT LEVEL MAINTENANCE - SAME AS PARA 1A.
(2) AIRCRAFT AT CONTRACTOR FACILITY - U.S. HELICOPTERS WILL INSPECT DD 250 AIRCRAFT PRIOR TO those AIRCRAFT DEPARTING FOR FERRY TO FINAL DESTINATION.
C. AIRCRAFT IN TRANSIT -
(1) SURFACE/AIR SHIPMENT - SAME AS PARA 1A.
(2) FERRY STATUS - SAME AS PARA 1A.
D. MAINTENANCE TRAINERS (CATEGORY A AND B) - N/A.
E. COMPONENT/PARTS IN STOCK AT ALL LEVELS (DEPOT AND OTHERS) INCLUDING WAR RESERVES - UPON RECEIPT OF THIS MESSAGE, DEPOT AND MATERIEL ACTIVITY COMMANDERS WILL ENSURE THE MATERIEL CONDITION TAGS OF ALL ITEMS IN ALL CONDITION CODES LISTED IN PARAGRAPHS 6 AND 7 ARE ANNOTATED TO READ: "MH-1-01-ASFM-05, AH-1-01-ASFM-04 (TB 1-1520-243-20-29), INSPECTION OF POWER SHAFT BOLTS NOT COMPLIED WITH."
F. WHOLESALE STOCK - UPON RECEIPT OF THIS MESSAGE, DEPOT AND MATERIEL ACTIVITY COMMANDERS WILL ENSURE ALL ITEMS IN CONDITION CODES /A/ AND /B/ LISTED IN PARAGRAPHS 6 AND 7, ARE PLACED IN CONDITION CODE /S/ 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 MESSAGE IAW PARAGRAPH 14B(2) NLT 12 OCTOBER 2001.
(2) RETAIL STOCK - UPON RECEIPT OF THIS MESSAGE, 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 ON SUSPECT MATERIEL. DISPOSE OF DISCREPANT MATERIEL IAW PARAGRAPH 10.
F. COMPONENTS/PARTS IN WORK (DEPOT LEVEL AND OTHERS) - N/A.
2. TASK/INSPECTION SUSPENSE DATE - COMPLETE THE INSPECTION IAW PARA 8 WITHIN THE NEXT 150 FLIGHT HOURS BUT NLT 30 JUNE 2002.
4. SUMMARY OF PROBLEM -
B. FOR MANPOWER/DOWNTIME AND FUNDING IMPACTS SEE PARA 12.
C. THE PURPOSE OF THIS MESSAGE IS TO REQUIRE A MANDATORY MAGNETIC PARTICLE INSPECTION OF ALL POWER SHAFT BOLTS, PART NUMBER 1-140-067-14.
5. END ITEMS TO BE INSPECTED - ALL UH-1 AND AH-1 SERIES AIRCRAFT WITH T53 SERIES ENGINE INSTALLED.
6. ASSEMBLY COMPONENTS TO BE INSPECTED -
<table>
<thead>
<tr>
<th>NOMENCLATURE</th>
<th>PART NO.</th>
<th>NSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGINE, AIRCRAFT, TURBINE</td>
<td>1-000-060-22</td>
<td>2840-00-134-4803</td>
</tr>
<tr>
<td>ENGINE, AIRCRAFT, TURBINE</td>
<td>1-000-060-23</td>
<td>2840-00-621-1860</td>
</tr>
</tbody>
</table>
7. PARTS TO BE INSPECTED -
<table>
<thead>
<tr>
<th>NOMENCLATURE</th>
<th>PART NO.</th>
<th>NSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAFT, SHOULDERED</td>
<td>1-140-067-14</td>
<td>3040-00-943-0054</td>
</tr>
</tbody>
</table>
8. INSPECTION PROCEDURES -
A. REMOVE POWER SHAFT BOLT (TM 1-2840-260-23P, FIGURE 19, ITEM 5) IAW TM 55-2840-229-23.
ACCUAITE MEASUREMENT OF THE SHIM THICKNESS DURING DISASSEMBLY WILL SAVE SIGNIFICANT EFFORT WHEN THE ENGINE IS REASSEMBLED. 

(1) RECORD SHIM THICKNESS (TM 1-2840-260-23P, FIGURE 19, ITEM 4), AND RETAIN FOR REUSE. 
(2) DISCARD RING (TM 1-2840-260-23P, FIGURE 19, ITEM 6). THE ENGINE MAINTENANCE MANUAL (TM 55-2840-229-23) WILL BE CHANGED TO SHOW THIS RING AS A ONE TIME USE ITEM. 

NOTE 

THE MAGNETIC PARTICLE (MP) INSPECTION OF THIS BOLT IS AN AVIATION LEVEL TASK THAT WILL BE PERFORMED USING A HORIZONTAL WET UNIT. THE PORTABLE TEST UNIT IS NOT APPROVED FOR THIS INSPECTION DUE TO THE NEED TO DETECT SUBSURFACE FLAWS. 

B. INSPECT POWER SHAFT BOLT IAW TM 55-2840-229-23, PARA 4-7.4. BOTH THE VISUAL AND MAGNETIC PARTICLE INSPECTIONS ARE REQUIRED IAW TM 55-2840-229-23, PARA H-19, WITH THE FOLLOWING CHANGES - 

(1) CLEAN CONTACT AREA ON BOLT ENDS TO ENSURE GOOD CONDUCTION. 
(2) END-TO-END AMPS SHALL BE 400 (NOT 700/900 AS SPECIFIED IN THE TM). 
C. THE FOLLOWING CRITERIA APPLY FOR THIS INSPECTION - 

(1) BOTH SURFACE AND SUBSURFACE DEFECTS - NO CRACKS, CRACK LIKE INDICATIONS, LAMINATIONS, SEAMS, LAPS, OR BURSTS ARE ALLOWED. ALSO, SURFACE AND SUBSURFACE INDICATIONS REPRESENTING DISCONTINUITIES CAUSED BY PITS OR POROSITY SHALL BE REJECTED. 
(2) SURFACE NONMETALLIC INCLUSIONS - TOTAL LENGTH OF ALL INDICATIONS IN ANY ONE SQUARE INCH AREA SHALL NOT EXCEED 0.25 INCHES. NO SINGLE INDICATION SHALL EXCEED 0.030 INCHES IN LENGTH. PARALLEL INDICATIONS SHALL BE SEPARATED BY AT LEAST 0.180 INCHES. INDICATIONS SHALL NOT EXTEND OVER MACHINED EDGES OR CHAMFERS, OR INTO HOLES OR FILLETS. 
(3) SUBSURFACE NONMETALLIC INCLUSIONS - TOTAL LENGTH OF ALL INDICATIONS IN ANY ONE SQUARE INCH AREA SHALL NOT EXCEED 0.25 INCHES. NO SINGLE INDICATION SHALL EXCEED 0.030 INCHES IN LENGTH. PARALLEL INDICATIONS SHALL BE SEPARATED BY AT LEAST 0.120 INCHES. 
D. IF THE POWER SHAFT BOLT DOES NOT MEET THE INSPECTION CRITERIA IAW PARAGRAPHS 8B AND 8C, PROCEED TO PARA 9A. 
E. IF THE POWER SHAFT BOLT DOES NOT MEET THE INSPECTION CRITERIA IAW PARAGRAPHS 8B AND 8C, PROCEED TO PARA 9B. 

9. CORRECTION PROCEDURES - 
A. REPLACE ALL POWER SHAFT BOLTS THAT DO NOT MEET THE REQUIREMENTS SPECIFIED IN PARAGRAPHS 8B AND 8C. 

NOTE 

PAY PARTICULAR ATTENTION TO THE SPECIFIED
TORQUE SCALES WHEN RE-ASSEMBLING THE ENGINE.
THE POWER SHAFT BOLT IS TORQUED IN INCH-POUNDS,
AND THE RING/NUT IS TORQUED IN FOOT-POUNDS.

C. REASSEMBLE ENGINE IAW TM 55-2840-229-23 PROCEDURES, AND
CLEAN THE RED HORIZONTAL DASH /// /// ENTRY.

10. SUPPLY/PARTS AND DISPOSITION -
A. PARTS REQUIRED - ITEMS CITED IN PARA 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) "X0Y" (X-RAY ZERO YANKEE).

NOTE
PROJECT CODE "X0Y" IS REQUIRED TO TRACK
AND ESTABLISH A DATA BASE OF STOCK FUND
EXPENDITURES INCURRED BY THE FIELD AS A
RESULT OF SOF ACTIONS.

C. BULK AND CONSUMABLE MATERIALS
NOMENCLATURE PART NUMBER NSN
RING, EXTERNALLY THR 1-140-233-02 5365-00-156-8958
SEAL RETAINER 1-300-462 5330-00-253-1722
PROTECTIVE STKEL MIL-C-10578 6850-00-174-9672
CORROSION LUBRICANT, DRY FILM MIL-1-2339B 9150-01-260-2534

D. DISPOSITION - DEMILITARIZE/MUTILATE IAW TM 1-1500-328-23
ANY PART/COMPONENT WHICH DOES NOT MEET INSPECTION CRITERIA.
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 -
NOMENCLATURE PART NUMBER NSN
SOCKET, WRENCH, FACE LTCT506 5120-00-473-7591
SOCKET, WRENCH LTCT505 4920-00-473-7589

12. APPLICATION -
A. CATEGORY OF MAINTENANCE - AVIM. AIRCRAFT DOWNTIME WILL
BE CHARGED TO AVIM MAINTENANCE. REPORT AIRCRAFT NON-MISSION
CAPABLE MAINTENANCE (NMC) WHILE UNDERGOING INSPECTION AND
CORRECTION IAW THIS MESSAGE.
B. ESTIMATED TIME REQUIRED -
(1) H-1 = TOTAL OF 4 MAN-HOURS USING 1 PERSON. TOTAL
OF 4 HOURS DOWNTIME FOR ONE END ITEM.
(2) H-1 = TOTAL OF 6 MAN-HOURS USING 1 PERSON. TOTAL
OF 6 HOURS DOWNTIME FOR ONE END ITEM. ADDITIONAL TIME FOR AB-1 IS
FOR REMOVAL/REPLACEMENT OF THE IR SUPPRESSOR.

C. ESTIMATED COST IMPACT TO THE FIELD -
NOMENCLATURE PART NO./NSN QTY COST EA. TOTAL $
RING EXTERNALLY THR 1-140-233-02 1 $27.29 $27.29
5365-00-156-8958
SHAFT, SHOULDRED 1-140-067-14 1 46.50 46.50
3040-00-943-0054
SEAL, RETAINER 1-300-462 1 32.36 32.36
5330-00-253-1722

D. TB/HWCS TO BE APPLIED PRIOR TO OR CONCURRENTLY WITH THIS
INSPECTION - N/A.
E. PUBLICATIONS WHICH REQUIRE CHANGE AS A RESULT OF THIS
INSPECTION -
(1) TM 55-2840-229-23 AND DMNR 1-2840-113 WILL BE
CHANGED TO REFLECT THE LOWER END-TO-END AMP AND CLEANING
REQUIREMENTS IDENTIFIED IN PARAGRAPH 8B.

http://www.redstone.army.mil/sof/sofmng/uh1/0105.asm
01/29/2002
(2) TM 55-2840-229-23 WILL BE CHANGED TO SHOW P/N 1-140-233-02 AS A ONE TIME USE ITEM.

(3) A COPY OF THIS MESSAGE SHALL BE INSERTED IN THE APPROPRIATE PUBLICATIONS AS AUTHORITY TO IMPLEMENT THE CHANGE UNTIL THE PRINTED CHANGE IS RECEIVED.

13. REFERENCES
   A. DA FORM 738-751, 15 MAR 99.
   B. TM 1-2840-260-23P.
   C. TM 55-2840-229-23.
   D. TM 1-1500-328-23.
   E. DMR 1-2840-113.

14. RECORDING AND REPORTING REQUIREMENTS
   A. AIRCRAFT
      (1) TAMMS REPORTING COMPLIANCE SUSPENSE - UPON ENTERING REQUIREMENTS OF THIS MESSAGE ON DA FORM 2408-13-1 FOR ALL EFFECTED AIRCRAFT, COMMANDERS WILL FORWARD A PRIORITY MESSAGE, DATAXFAX OR EMAIL TO CDR, AMCOM, ATTN: AMSCM-SP-A (SOF COMPLIANCE OFFICER), REDSTONE ARSENAL, AL 35898-5000, IAM AR 95-1, NLT DATE SPECIFIED IN PARAGRAPH 3. DATAXFAX NUMBER IS DSN 977-2111 OR 256) 313-2111. EMAIL ADDRESS IS SAFEAMCREDSTONE.MIL. THE REPORT WILL CITE THIS 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 - NO SPECIAL REPORT OF THE RESULTS OF THIS INSPECTION IS REQUIRED.
   B. WHOLESALE SPARE PARTS/ASSEMBLIES
      (1) REPORTING MESSAGE RECEIPT - N/A.
      (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 16C NLT DATE SPECIFIED IN PARAGRAPH 16(1). PROVIDE AN ESTIMATE OF THE COST REIMBURSABLE FUNDING REQUIRED TO MOVE SERVICEABLE ITEMS ON HAND LISTED IN PARAGRAPHS 6 AND 7 TO A WORK AREA, UNPACK THE MATERIEL, REPLACE THE MATERIEL AFTER INSPECTION BY AMCOM INSPECTORS, AND TO RETURN THE MATERIEL TO STORAGE, AS APPROPRIATE.
      (3) TASK/INSPECTION REPORTING SUSPENSE - N/A.
   C. RETAIL SPARE PARTS/ASSEMBLIES
      (1) REPORTING MESSAGE RECEIPT - N/A.
      (2) TASK/INSPECTION REPORTING SUSPENSE - N/A.
   D. THE FOLLOWING FORMS ARE APPLICABLE AND ARE TO BE COMPLETED IAM DA FORM 738-751, 15 MAR 99 -

   NOTE
   ULLS-A USERS WILL USE APPLICABLE "E" FORMS.
   (1) DA FORM 2408-5-1, EQUIPMENT MODIFICATION RECORD (ENGINE).
   (2) DA FORM 2408-13, AIRCRAFT STATUS INFORMATION RECORD.
   (3) DA FORM 2408-13-1, AIRCRAFT INSPECTION AND MAINTENANCE RECORD.
   (4) DD FORM 1574/DD FORM 1574-1, SERVICEABLE TAG/LABEL - MATERIEL (COLOR YELLOW). ANNOTATE REMARKS BLOCK WITH "INSPECTED SERVICEABLE IAM UN-1-01-ASAM-05, AH-1-01-ASAM-04 (TB 1-1520-243-20-29)."
   (5) DD FORM 1575/DD FORM 1575-1, SUSPENDED TAG/LABEL - MATERIEL (COLOR BROWN). ANNOTATE REMARKS BLOCK WITH "SUSPENDED IAM UN-1-01-ASAM-05, AH-1-01-ASAM-04 (TB 1-1520-243-20-29)."
   (6) DD FORM 1576/DD FORM 1576-1, TEST/MODIFICATION TAG/LABEL - MATERIEL (COLOR BLUE). ANNOTATE AUTHORITY BLOCK WITH "UN-1-01-ASAM-05, AH-1-01-ASAM-04 (TB 1-1520-243-20-29)."

http://www.redstone.army.mil/sof/sofmsg/uhl/0105_asm

01/29/2002