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*Army*

20 AUG 75 16 54  
20 AUG 75 16 54

RTTUZEXW RUEDAOA?252 2321540-UUUU--RUWMDTA,  
ZNR UUUUU  
R 201250Z AUG 75 ZEX  
FM CDR ARNG-OAC EDGEWOOD MD //OAC-AVN-L// *ARMY*  
TO AIG 7401  
INFO RUEFHQA/NGS WASH DC //NGS-ARL-A//  
RUWTFPA/CDRUSAAVSCOM STL MD //AMSAV-FEU//  
RUCLHTA/CDRFORS COM FT MCPHERSON GA //AFOP-AU//  
RUMTNFA/CDRUSAFIVE FT SAM HOUSTON TX //AFKB-01-AA//

BT  
UNCLAS  
SUBJ - SAFETY-OF-FLIGHT ADVISORY FOR UH-1/HEL;  
A. MY MSG, 301946Z JUL 75, SUBJ - INSPECTION OF TAIL ROTOR  
PITCH CHANGE MECHANISM, UH-1 ACFT;  
B. MY MSG, 171710Z JUL 75, SUBJ - SAFETY INSPECTION OF UH-1  
ACFT;  
1. REF A AND B ARE RESCINDED;  
2. CURRENT INFO IS NOW CONTAINED IN CDR USAAVSCOM MSG,  
AMSAV-FEU, 262000Z AUG 75, SUBJ - SAFETY-OF-FLIGHT ADVISORY  
MSG QUOTE TECHNICAL/MAINTENANCE UNQUOTE FOR AH-1/UH-1 HEL (AH-  
1-74-11) (UH-1-75-9); AND CDR USAAVSCOM MSG, AMSAV-FEU, 152013Z  
AUG 75, SUBJ - SAFETY-OF-FLIGHT ADVISORY MSG QUOTE TECHNICAL/  
MAINTENANCE UNQUOTE FOR UH-1 HEL (U -1-75-7);  
BT  
#0262

*21*

NNNN

26 AUG 75 13 00

UH-1-75-9  
T/R PIC

PTTUZFDY RUEBDA0A3334 236123Z RUEB-UUUU--RUMKDTA,  
PTTUZEXX RUEBDA0A3334 236123Z-UUUU--RUMKDTA,

ZNR UUUUU

P R 261238Z AUG 75 ZEX

FM ARNG OAC EDGEWOOD MD //OAC-AVN-L//

TO AIG 7481

INFO RUEFHQA/CNGB WASHDC //CGB-APL-A//

ARMY /44-

P R 262882Z AUG 75

FM CDR USAAVSCOM STL MO //ANSV-FEU//

TO AIG 8881

AIG 9242

INFO AIG 9804

CDRUSAPPA FT WORTH TX //SAVUS-E//

BT

UNCLAS

NOTE CLN THIS IS A SAFETY-OF-FLIGHT MESSAGE AND HAS NOT, REPEAT HAS NOT, BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSEES; ADDRESSERS SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS AFFECTED OR CONCERNED; THE RETRANSMITTAL SHALL REFERENCE THIS MESSAGE.

USCT CLN SAFETY-OF-FLIGHT ADVISORY MESSAGE "TECHNICAL/MAINTENANCE" FOR AH-1/UH-1 HELICOPTERS, (AH-1-75-11) (UH-1-75-9), THE PURPOSE OF THIS MESSAGE IS TO ADVISE ALL USERS OF THE POSSIBILITY OF ADDITIONAL

PAGE 2 RUEBDA0A3334 UNCLAS

INSTANCES OF LOSS OF TAIL ROTOR CONTROL DUE TO OPERATING WITH EXCESSIVELY WORN SPLINES IN THE PITCH CHANGE MECHANISM; PREVENTIVE INSPECTION PROCEDURES ARE INCLUDED IN THIS MESSAGE.

1. SUMMARY OF PROBLEM CLN A RECENT PRECAUTIONARY LANDING EVENT WAS COMPLICATED BY TAIL ROTOR PITCH REMAINING FIXED, EXCESSIVELY WORN SPLINES WERE DISCOVERED ON BOTH MATING PARTS P/R 224-818-742-9 CONTROL TUBE AND P/R 224-818-775-3 CONTROL GULL HOUSING. INSPECTION OF OTHER HELICOPTERS RESULTED IN REJECTION OF ADDITIONAL WORN PARTS; OTHER REPORTS RECEIVED INDICATE WORN PARTS ARE FAIRLY COMMON, ONE OTHER REPORT OF BEARING P/R 224-811-712-1 INSTALLED BACKWARDS MAY BE VALID.

AN INSPECTION OF THE TAIL ROTOR GULL ASSEMBLY SUITABLE FOR INSERTION IN TM 55-1528-219-PMS, TM 55-1528-222-PMS, TM 55-1528-218-PMS AND TM 55-1528-221-PMP IS INCLUDED IN THIS MESSAGE; A SPECIAL INSPECTION TO BE USED FOLLOWING ASDAP NOTIFICATION OF HIGH ALUMINUM, HIGH COPPER, HIGH IRON, SLUDGE OR COMBINATIONS OF THESE IS ALSO INCLUDED;

IT IS RECOMMENDED THAT THESE NEXT SCHEDULED INSPECTIONS BE PERFORMED AT THE NEXT INTERMEDIATE OR PERIODIC INSPECTION WHICHEVER OCCURS FIRST.

ALL AFFECTED HELICOPTERS TO AVOID TAIL ROTOR FIXED PITCH PROBLEMS, ADDED PMS AND PMP INSPECTION SEQUENCES ARE CLN

PAGE 3 RUEDA0A2334 UNCLAS

A. "REMOVE THE TAIL ROTOR CONTROL TUBE AND CHECK FOR EXCESSIVE GREASE ON THE SHAFT, SPLINES AND THREADS FOR WEAR, THREADS FOR BRASS METAL PARTICLES." THIS INSPECTION SHALL BE PERIODIC FOR TM 55-1528-219-PMS, SEQ NO. 6.6.2.1; TM 55-1528-220-PMS, SEQ NO. 6.7.1; TM 55-1528-218-PMS, SEQ NO. 5.16.1; AND TM 55-1528-221-PMP, SEQ NO. 11.7.1

B. "REMOVE THE TAIL ROTOR CONTROL QUILL ASSEMBLY AND CHECK FOR WEAR ON SPLINES, ACME THREADS AND SPPOCKET." THIS INSPECTION SHALL BE PERFORMED EVERY THIRD (3RD) PERIODIC FOR TM 55-1528-219-PMS, SEQ NO. 6.6.2.2; TM 55-1528-220-PMS, SEQ NO. 6.7.2; TM 55-1528-218-PMS, SEQ NO. 5.16.2; AND TM 55-1528-221-PMP, SEQ NO. 11.7.2.

C. ADD ABOVE INSPECTION SEQUENCES TO NOTED PMS AND PMP CARDS.

D. THESE ADDED SEQUENCES DO NOT APPLY TO AH-1 WITH MODEL 212 TAIL ROTOR INSTALLED.

7. ADDED SPECIAL INSPECTION FOR TM 55-1528-219-20, TM 55-1528-220-20, TM 55-1528-218-20 AND TM 55-1528-221-20 IS CLM (AREA 5) AFTER ASDAP NOTIFICATION OF HIGH CONCENTRATIONS OF COPPER, ALUMINUM, IRON, SLUDGE, OR A COMBINATION OF THESE IN THE 90 DEGREE GEARBOX CLM

A. INSPECT THE TAIL ROTOR CONTROL TUBE FOR WEAR AND EXCESSIVE GREASE.

PAGE 4 RUEDA0A2334 UNCLAS

B. INSPECT TAIL ROTOR CONTROL QUILL ASSEMBLY FOR WEAR.

C. DRAIN, FLUSH WITH OPERATING OIL TO ELIMINATE SLUDGE. REPEAT IF NECESSARY

D. RESAMPLE OIL PER ASDAP INSTRUCTIONS.

4. AT THIS TIME, INSPECTION OF SPLINE WEAR SHALL BE DONE VISUALLY AND A VALUE JUDGMENT MADE AS TO ACCEPTABILITY. IF THE SPLINE TEETH ARE WORN SUCH THAT LESS THAN HALF (50 PERCENT) OF EACH TOOTH CONTACT AREA REMAINS, THE PART SHOULD BE REJECTED. THE SHAFT OR THE HOUSING CAN BE REPLACED INDEPENDENTLY OF EACH OTHER.

5. THE BEARING SET IS DESIGNATED DB, THRUST FACES BACK TO BACK. SEE TM 55-1528-322-20 FIGURE 18-17 FOR ILLUSTRATION SHOWING CORRECT BEARING STACKUP.

4. FORWARD REJECTED HOUSINGS AND CONTROL TUBES TO CLM

COMMANDER

HC 6 INST SUPPORT ACTIVITY (AVSOON)

ATTN CLM AMSAV-LEP

BLDR 284

GRANITE CITY, IL 62040

BT

#2334

PP 910-367-3543 V 209-397-5043 NR36/07AUG75/DOD  
PT OCG SMF SACRAMENTO CA  
P T SAAAFNG CA SACRAMNTO CA

① 070206Z AUG 75  
FM CDR USASIX SFRAN CA //AFKC-LG-MO//  
TO AIG 8891  
P R 062000Z AUG 75  
FM CDR USAAVSCOM STL MO //AMSAV-FEU//  
TO AIG 8881

BT

UNCLAS

NOTE - THIS IS A SAFETY-OF-FLIGHT MESSAGE AND HAS NOT REPEAT 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 THIS MESSAGE.

SUBJECT - SAFETY-OF-FLIGHT ADVISORY MESSAGE "TECHNICAL/MAINTENANCE" FOR AH-1/UH-1 HELICOPTERS \AH-1-75-11\ \UH-1-75-9\ THE PURPOSE OF THIS MESSAGE IS TO ADVISE ALL USERS OF THE POSSIBILITY OF ADDITIONAL INSTANCES OF LOSS OF TAIL ROTOR CONTROL DUE TO OPERATING WITH EXCESSIVELY WORN SPLINES IN THE PITCH CHANGE MECHANISM. PREVENTIVE INSPECTION PROCEDURES ARE INCLUDED IN THIS MESSAGE.

1. SUMMARY OF PROBLEM - A RECENT PRECAUTIONARY LANDING EVENT WAS

PAGE 2 HUWMBHA9962 UNCLAS

COMPLICATED BY TAIL ROTOR PITCH REMAINING FIXED. EXCESSIVELY WORN SPLINES WERE DISCOVERED ON BOTH MATING PARTS P/N 204-010-742-9 CONTROL TSBE AND P/N BWPR-010-775-3 CONTROL QUILL HOUSING. INSPECTION OF OTHER HELICOPTERS RESULTED IN REJECTION OF ADDITIONAL WORN PARTS. OTHER REPORTS RECEIVED INDICATE WORN PARTS ARE FAIRLY COMMON. ONE OTHER REPORT OF BEARING P/N 204-011-712-1 INSTALLED BACKWARDS MAY BE VALID.

AN INSPECTION OF THE TAIL ROTOR QUILL ASSEMBLY SUITABLE FOR INSERTION IN TM 55-1520-219-PMS\ TM 55-1520-220-PMS\ TM 55-1520-210-PMS AND TM 55-1520-221-PMP IS INCLUDED IN THIS MESSAGE. A SPECIAL INSPECTION TO BE USED FOLLOWING ASOAP NOTIFICATION OF HIGH ALUMINUM\ HIGH COPPER\ HIGH IRON\ SLUDGE OR COMBINATIONS OF THESE IS ALSO INCLUDED.

IT IS RECOMMENDED THAT THESE NEW SCHEDULED INSPECTIONS BE PERFORMED AT THE NEXT INTERMEDIATE OR PERIODIC INSPECTION WHICHEVER OCCURS FIRST FOR ALL AFFECTED HELICOPTERS TO AVOID TAIL ROTOR FIXED PITCH PROBLEMS.

2. ADDED PMS AND PMP INSPECTION SEQUENCES ARE -

A. "REMOVE THE TAIL ROTOR CONTROL TUBE AND CHECK FOR EXCESSIVE GREASE ON THE SHAFT\ SPLINES AND THREADS FOR WEAR\ THREADS FOR BRASS METAL PARTICLES." THIS INSPECTION SHALL BE PERIODIC FOR TM 55-1520-

ACTION:

INFC:

SAC

SAA

PAGE 3 RUWMBHA9962 UNCLAS

1520-210-PMS\ SEQ NO. 6.16.\ AND TM 55-1520-221-PMP\ SEQ NO. 11.7.1  
B. "REMOVE THE TAIL ROTOR CONTROL QUILL ASSEMBLY AND CHECK FOR WEAR ON SPLINES\ ACME THREADS AND SPROCKET." THIS INSPECTION SHALL BE PERFORMED EVERY THIRD \3RD\ PERIODIC FOR TM 55-1520-219-PMS\ SEQ NO. 6.2.2\ TM 55-1520-220-PMS\ SEQ NO. 6.7.2\ TM 55-1520-210-PMS\ SEQ NO. 6.16.2\ AND TM 55-1520-221-PMP\ SEQ NO. 11.7.2.

C. ADD ABOVE INSPECTION SEQUENCES TO NOTED PMS AND PMP CARDS.  
D. THESE ADDED SEQUENCES DO NOT APPLY TO AH-1 WITH MODEL 212

TAIL ROTOR INSTALLED.

3. ADDED SPECIAL INSPECTION FOR TM 55-1520-219-20\ TM 55-1520-220-20\ TM 55-1520-210-20 AND TM 55-1520-221-20 IS -  
\AREA 6\ AFTER ASOAP NOTIFICATION OF HIGH CONCENTRATIONS OF COPPER\ ALUMINUM\ IRON\ SLUDGE\ OR A COMBINATION OF THESE IN THE 90 DEGREE GEARBOX -

A. INSPECT THE TAIL ROTOR CONTROL TUBE FOR WEAR AND EXCESSIVE GREASE.

B. INSPECT TAIL ROTOR CONTROL QUILL ASSEMBLY FOR WEAR.

C. DRAIN\ FLUSH WITH OPERATING OIL TO ELIMINATE SLUDGE. REPEAT IF NECESSARY

D. RESAMPLE OIL PER ASOAP INSTRUCTIONS.

PAGE 4 RUWMBHA9962 UNCLAS

4. AT THIS TIME\ INSPECTION OF SPLINE WEAR SHALL BE DONE VISUALLY AND A VALUE JUDGEMENT MADE AS TO ACCEPTABILITY. IF THE SPLINE TEETH ARE WORN SUCH THAT LESS THAN HALF \50 PERCENT\ OF EACH TOOTH CONTACT AREA REMAINS\ THE PART SHOULD BE REJECTED. THE SHAFT OR THE HOUSING CAN BE REPLACED INDEPENDENTLY OF EACH OTHER.

THE BEARING SET IS DESIGNATED DB\ THRUST FACES BACK TO BACK.  
E TM 55-1500-322-25 FIGURE 10-17 FOR ILLUSTRATION SHOWING CORRECT BEARING STACKUP.

6. FORWARD REJECTED HOUSINGS AND CONTROL TUBES TO -

COMMANDER

HQ & INST SUPPORT ACTIVITY \AVSCOM\

ATTN - AMSAV-LEP

BLDG 204

GRANITE CITY\ IL 62040

BT

9962