SUBJ - SAFETY-OF-FLIGHT ADVISORY FOR UH-1 HEL.
A. MY MSG, 3219462 JUL 75, SUBJ - INSPECTION OF TAIL ROTOR PITCH CHANGE MECHANISM, UH-1 ACFT.
B. MY MSG, 171714Z JUL 75, SUBJ - SAFETY INSPECTION OF UH-1 ACFT.

1. REF A AND B ARE RESCINDED;
2. CURRENT INFO IS NOW CONTAINED IN CDR USAAVSOSCOM MSG, AMSAV-FEU, 022020Z AUG 75, SUBJ - SAFETY-OF-FLIGHT ADVISORY MSG QUOTE TECHNICAL/MAINTENANCE UNQUOTE FOR AH-1/UH-1 HEL (AH-1-74-11) (UH-1-77-9), AND CDR USAAVSOSCOM MSG, AMSAV-FEU, 152013Z AUG 75, SUBJ - SAFETY-OF-FLIGHT ADVISORY MSG QUOTE TECHNICAL/MAINTENANCE UNQUOTE FOR UH-1 HEL (UH-1-75-7).
NOT CLN THIS IS A SAFETY-OF-FLIGHT MESSAGE AND HAS NOT, REPEAT HAS NOT, BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSES; ADDRESSES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS AFFECTED OR CONCERNED; THE RETRANSMITTAL SHALL REFERENCE THIS MESSAGE.

PROJECT 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

UNCLASS

INSTRUCTIONS 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: ON A RECENT PRECAUTIONARY LANDING EVENT HAS OCCURRED DUE TO LOSS OF TAIL ROTOR CONTROL DUE TO EXCESSIVELY WORN SPLINES IN THE PITCH CHANGE MECHANISM. PREVENTIVE INSPECTION PROCEDURES ARE INCLUDED IN THIS MESSAGE.

2. OTHER HELICOPTERS RESULTED IN REJECTION OF ADDITIONAL WORN PARTS.

3. OTHER REPORTS RECEIVED INDICATE WORN PARTS ARE FAIRLY COMMON.

4. OTHER REPORTS OF BURNING P/C 224-140972-6 CONTROL SHAFT CONTROL HOUSING INSPECTION OF OTHER HELICOPTERS RECOMMENDS A REPLACEMENT OF ADDITIONAL WORN PARTS.

5. IT IS RECOMMENDED THAT THESE HELICOPTERS BE PERFORMED AT THE NEXT INTERMEDIATE OR PERIODIC INSPECTION WHEREVER OCCURS FIRST.

ALL AFFECTED HELICOPTERS TO AVOID TAIL ROTOR FIXED PITCH PROBLEMS.

ADDED PMS AND PMP INSPECTION SEQUENCES ARE CLN.
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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.


TM 55-1920-216-27 AND TM 55-1920-221-27 IS GLN.

RE: A) AFTER ASOP NOTIFICATION OF HIGH CONCENTRATIONS OF COPPER, ALUMINUM, IRON, SLUDGE, OR A COMBINATION OF THESE IN THE 97 DEGREE GEARBOX GLN.

F. INSPECT THE TAIL ROTOR CONTROL TUBE FOR WEAR AND EXCESSIVE GEARAGE.

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G. INSPECT TAIL ROTOR CONTROL QUILL ASSEMBLY FOR WEAR.

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

I. RESAMPLE OIL PER ASOP INSTRUCTIONS.

J. 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.

K. THE BEARING SET IS DESIGNATED DE, THRUST FACES BACK TO BACK.

SEE TM 55-1920-222-20 FIGURE 10-17 FOR ILLUSTRATION SHOWING CORRECT BEARING STACKUP.

L. FORWARD REJECTED HOUSINGS ARE CONTROL TUBES TO GLN COMMANDER.

MCP 6 INST SUPPORT ACTIVITY (AVSCON)
ATTN GLN AHSAV-LEP
BLDR 284
GRANITE CITY, IL 62203
NOTE: THIS IS A SAFETY-OF-FLIGHT MESSAGE AND HAS NOT BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSEES. ADDRESSEES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS.

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 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 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/N 204-011-712-1 INSTALLED BACKWARDS MAY BE VALID.

AN INSPECTION OF THE TAIL ROTOR GULL 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-PMS IS INCLUDED IN THIS MESSAGE. A SPECIAL INSPECTION TO BE USED FOLLOWING ASOAP NOTIFICATION OF HIGH ALUMINUM HIGH COPPER HIGH ION 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 WHENEVER 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 WEAK THREADS FOR ERAS METAL PARTICLES." THIS INSPECTION SHALL BE PERIODIC FOR TM 55-1520-
B. "REMOVE THE TAIL HOI \ ORIL QUILL ASSEM BY AND C CK FOR WEAR ON SPLINES \ ACME THREADS AND SPROCKET." THIS INSPECTION SHALL BE PERFORMED EVERY THIRD 3RD PERIODIC FOR TM 55-1520-219-PM S \ SEQ NO. 6 2.2 TM 55-1520-220-PM S \ SEQ NO. 6 7.2 TM 55-1520-210-PM S \\ SEQ NO. 11.7.2.

C. ADD ABOVE INSPECTION SEQUENCES TO NOTED FM S AND FPM 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.

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 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.

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