PRIORITY

UH-1-77-2

shoes

PTUZBDX RUINBAAT-714 2282392-89U111111-RUWMGTA1
Z1R UUUU
PR 2282392 JAN 77 ZEBX
FM ARMY = CAG EDGEWOOD MD //MGP=AVV=9//
TO AIL 7401
INFO RUEFHGA/CNP WASH DC //MGP=ARL=1//
PR 2282392 JAN 77
FM CIVFMOC STL MO //DRSAV=FEU//
TO AIL 8881
ST

UNLIS SECTION 1 OF 1

NOTE: THIS IS A MAINTENANCE ADVISORY MESSAGE AND HAS NOT REPEATED.

HAS NOT BEEN TRANSMITTNo UNITS SUBORDINATE TO ADDRESSEES

ADRESSES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL

SUBORDINATE UNITS. ACTIVITIES OR ELEMENTS AFFECTED OR ON ERNED

THE RETRANSMITTING SHALL REFERENCE THIS MESSAGE;

SUBJECT: MAINTENANCE ADVISORY MESSAGE CONCERNING USE OF NON-

STANDARD/LOCALLY MANUFACTURED HEAVY-DUTY SKID SHOES ON

UH-1/AH-1 SERIES AIRCRAFT (UH-1-77-2 AND AH-1-77-2)

A. TH 55-1829-21-34P, DATED APR 74,

B. TH 55-1829-22-34P, DATED AUG 75,

C. TH 55-1829-23-34P, DATED MAY 75, OHD 5

1. RECENT ENGINEERING ACTIONS ON THE H-1 LANDING GEAR ASSEMBLIES

HAVE SHOWN THAT WITH THE INSTALLATION OF NONSTANDARD ARMY ISSUE SKID

SHOES OR WITH NO SHOES AT ALL NORMAL AIRFRAME FLIGHT VIBRATIONS ARE

EXPERIENCED IN THE LANDING GEAR ASSEMBLY WITH NO DAMAGING EFFECTS.

HOWEVER, WITH THE INSTALLATION OF NONSTANDARD/LOCALLY MANUFACTURED

HEAVY-DUTY SKID SHOES WHICH ARE HEAVIER IN PHYSICAL WEIGHT, THE

NORMAL AIRFRAME VIBRATIONS EXPERIENCED IN THE LANDING GEAR ARE

REINFORCED; I.E., THE AMPLITUDE IS INCREASED. THE RESULTING

REINFORCED VIBRATION LEVELS NOW EXCEED THE ENDURANCE CAPABILITY OF

THE LANDING GEAR ASSEMBLY.

2. Bell Helicopter Textron (BHT) HAS BEEN TASKED BY AVSOM TO

DEVELOP A NEW LANDING GEAR ASSEMBLY FOR BOTH THE UH-1 AND AH-1

AIRCRAFT SYSTEM COMPRised OF NEW, LIGHTWEIGHT, HEAVY-DUTY SKID

SHOES AND ASSOCIATED STRENGTHENED CROSSBARS; THE AH-1 ASSEMBLY

HAS RECENTLY COMPLETED SIX (6) MONTH FIELD USAGE EVALUATION

SHOWING EXCELLENT RESULTS;

3. IN LIGHT OF THE UH-1/AH-1 PRODUCT IMPROVEMENT PROGRAMS UNDERWAY

AND RECOGNIZING THE FACT THAT LOCALY MANUFACTURED, HEAVY-DUTY SKID

SHOES ARE DETRIMENTAL TO THE STRUCTURAL INTEGRITY OF THE AIRCRAFT

SYSTEM, THE PRIMARY COURSE OF ACTION WOULD BE TO REQUIRE REMOVAL

FROM USE OF ALL NONSTANDARD SKID SHOES; HOWEVER, AVSOM RECOGNIZES

THE REQUIREMENTS OF CERTAIN UNITS TO PERFORM A FORMAL TRAINING
THREE RUVTFFA1578 UNCLAS

VISION OR PILOT STANDARDIZATION TRAINING, EITHER OF WHICH RESULTS
IN A HIGH USAGE/REPLACEMENT RATE OF THE STANDARD ISSUE SKID SHOE.
ACCORDINGLY, AVSOM RECOMMENDS THE DISCONTINUED USE OF ANY
NONSTANDARD, HEAVY-DUTY SKID SHOES ON ANY UH-1/AH-1 AIRCRAFT EXCEPT
REPEAT EXCEPT: THOSE AIRCRAFT ASSIGNED TO AN APPROVED TRANSITION
SOURCE OR THOSE AIRCRAFT SPECIFICALLY DEDICATED TO PILOT STANDARD-
IZATION TRAINING, I.E., THOSE AIRCRAFT WHICH ARE ALWAYS USED WHEN
PILOT STANDARDIZATION IS REQUIRED. THE STANDARD ISSUE SKID SHOE AS
PROVIDED FOR IN REF A, FIG 125, AND REF B, FIG 307, SHOULD BE
INSTALLED ON ALL REMAINING UH-1/AH-1 AIRCRAFT RESPECTIVELY WHICH
REQUIRE SHOES UNTIL THE NEW LIGHTWEIGHT, HEAVY-DUTY SKID SHOES ARE
AVAILABLE.

FOR THOSE AIRCRAFT WHICH UNDER PARA 4 ABOVE, WILL UTILIZE NON-
STANDARD/LOCALLY MANUFACTURED, HEAVY-DUTY SKID SHOES, A RECURRING
SPECIAL INSPECTION AT 50 HOUR INTERVALS BEGINNING AT THE NEXT 2ND
INTERMEDIATE OR NEXT 120 HOUR INTERVAL (PHASE MAINTENANCE) IS
REQUIRED ON THE CROSSTUBE ASSEMBLIES UNDER THE CROSSTUBE/FUSELAGE
ATTACHMENT FITTINGS (ITEMS 43A AND 44A, FIG 137). REF A FOR THE UH-1
AND ITEM 9 FIG 4-15, REF C FOR THE AH-1.;

THE INSPECTION PROCEDURE FOR THE AH-1 WHICH CURRENTLY EXISTS

FOUR RUVTFFA1578 UNCLAS

BE FOUND IN CHAPTER 4, REF C; THE UH-1 INSPECTION MAY BE
ACCOMPLISHED UTILIZING EITHER PROCEDURE A OR PROCEDURE B AS
PUBLICIZED IN THE FOLLOWING PARAGRAPHS; PROCEDURE A PROVIDES FOR A
NON-Destructive INSPECTION BY THE ULTRASONIC SHEAR WAVE METHOD
WHEREAS, PROCEDURE B PROVIDES FOR A NON-Destructive INSPECTION BY
THE VISIBLE LIQUID DYE PENTRANT METHOD;

PROCEDURE A SHOULD BE CONDUCTED AS FOLLOWS CLN
A. MAKE AIRCRAFT SAFE FOR JACKING PROCEDURES AS DEFINED IN
APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS;
B. LOOSEN AND REMOVE FORWARD AND AFT CAP ASSEMBLIES (ITEM
1 AND 2, FIG 137, REF A) WHICH SECURE LANDING GEAR TO THE FUSELAGE;
C. JACK AIRFRAME AND REMOVE LANDING GEAR ASSEMBLY (A4)
PROCEDURES PROVIDED IN APPLICABLE ORGANIZATIONAL MAINTENANCE
MANUALS;
D. CONDUCT VISUAL INSPECTION OF CROSSTUBES FOR NICKS;
SCRATCHES OR GOUSES OVER ENTIRE CROSSTUBE SURFACE; REFER TO
APPLICABLE ORGMA MAINTENANCE MANUALS FOR ALLOWABLE DAMAGE CRITERIA;
E. SMOOTH UPPER HALF OF CROSSTUBE SURFACE QUARDA THE
ATTACHMENT FITTING WITH 320 GRS ALUMINUM OXIDE ABRASIVE CLOTH
AND WIPE CLEAN;

FIVE RUVTFFA1578 UNCLAS

NOTE: CLN IT IS NOT ABSOLUTELY NECESSARY TO REMOVE ALL PAINT ON
SURFACE OF CROSSTUBES FOR THE ULTRASONIC INSPECTION; HOWEVER, IT
IS NECESSARY TO REMOVE ANY SCRATCHES OR ROUGH SPOTS TO ALLOW
PRIORITY

29 Jan 77 00 32z

Pittsburgh, PA 15235 2292329 8888 8888
PR 2323297 JAN 77 ZEX
FM ARNG-OAC HENDERSON MD/ANG-AVN-S// ARMY
TO AIO 7441
INFO RUEPHGOS/NGB WASH DC/NGB-ARC-A//
PR 2634562 JAN 77
FM CDRAVSCOM STL MO //DRSAV-FEU//
TO AIO 8881
ST

UNCLASSIFIED

SECTION II OF II

F. RECOAT SURFACE OF CROSSSTUB TO BE COVERED BY THE ATTACHMENT FITTINGS WITH SEALANT NSN 5330-00-733-5003 (MIL-S-5962).

G. REINSTALL ATTACHMENT FITTINGS UTILIZING THE FOLLOWING RIVETS:

(1) UH-18C/M C/D/H M/P/W AND UH-18C/M AFT FITTINGS USE MS20301K647 NSN 5320-00-062-6644;

(2) UH-10/H AFT FITTINGS USE MS20301K645 NSN 5320-00-062-6641;

H. REINSTALL LANDING GEAR ASSEMBLY L/W PROCEDURES PROVIDED IN APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS.

I. ANY CROSSSTUB IDENTIFIED AS SHOWING CRACK INDICATIONS BY PROCEDURE A SHOULD BE SUBMITTED TO PROCEDURE B AS A VERIFICATION.

SECTION III

ALL THOSE CROSSSTUBS WHICH SHOW CRACK INDICATIONS SHOWN ON PAGE TWO, RUWFFA1579, UNCLASSIFIED EIGHTY CROSSSTUBS TOGETHER OR BY PROCEDURE B ALONE ARE TO BE SCRAPPED. ALL CROSSSTUBS FOUND WITH NO CRACK INDICATIONS ARE TO BE RETURNED TO SERVICE.

12. INSTRUCTIONS CONTAINED IN THIS MESSAGE WILL BE ADDED TO THE EXISTING CROSSSTUB INSPECTION NOW CONTAINED IN APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS UNTIL RECEIPT OF THE FORMAL CHANGE, THE INSTRUCTIONS CONTAINED HEREFORIN SHOULD BE INSERTED IN THOSE MANUALS FOR REFERENCE PURPOSES. IF ADDITIONAL INFORMATION IS REQUIRED, POINT OF CONTACT IS MR. JOHN STEELE, AUTOVON 696-4916.

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#2315
INTEGRAL CONTACT BETWEEN THE TRANSDUCER AND THE CROSSTUBE.

F. THE ULTRASONIC INSPECTION WILL BE CONDUCTED BY ANY

C. CERTIFIED ULTRASONIC INSPECTOR IAW FIELD SERVICES ACTIVITY AH-1

ULTRASONIC INSPECTION PROCEDURES AS PROVIDED TO FIELD SERVICE

PERSONNEL BY AVSOCI.

G. PRIME AND REPAINT ALL INSPECTED SURFACES NECESSARY TO

RESTORE TO ORIGINAL CONDITION FOR CORROSION PREVENTION.

H. REINSTALL LANDING GEAR ASSEMBLY IAW PROCEDURES PROVIDED IN

APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS.

I. PROCEDURE B SHOULD BE CONDUCTED AS FOLLOWS

NOTE CLN THIS INSPECTION IS TO BE CONDUCTED BY ORGANIZATIONAL

MAINTENANCE WITH ASSISTANCE FROM DIRECT SUPPORT MAINTENANCE AS

REQUIRED TO GAIN ACCESS TO INSPECTION AREA.

A. JACK AIRFRAME AND REMOVE LANDING GEAR ASSEMBLY IAW

PROCEDURES PROVIDED IN APPLICABLE ORGANIZATIONAL MAINTENANCE MÄNÜLS.

B. CONDUCT VISUAL INSPECTION FOR NICKS, SCRATCHES, OR GOUGES

OVER ENTIRE CROSSTUBE SURFACE. REFER TO DR/GS LEVEL MAINTENANCE

PAGE SIX RUWTFFA1378 UNOLAS

FOR ALLOWABLE DAMAGE CRITERIA.

C. REMOVE RIVETS SECURING CROSSTUBE/FUSELAGE ATTACHMENT

FITTINGS TO GROSSTUBES AND REMOVE FITTINGS. SAVE FITTINGS FOR REUSE.

D. PREPARE THE SURFACES FOR AND CONDUCT A VISIBLE LIQUID DYE

PENETRANT INSPECTION FOLLOWING PROCEDURES AS DESCRIBED IN

TM 55-1500-204-25/1 UTILIZING PENETRANT KIT NSN 4830-00-026-7981

ON THE SURFACES OF THE CROSSTUBES PREVIOUSLY COVERED BY THE

ATTACHMENT FITTINGS.

E. WASH AND REMOVE ALL EXCESS PENETRANT AND DEVELOPER FROM

THE CROSSTUBE SURFACES.

ET

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