

PRIORITY

*UH-1 77-2  
heavy duty skid  
shoes*

*29 JAN 77 00 02Z*

PTTUZBXW RULNEAA7314 2282329-UUUU--RUMMDTA;  
ZNR UUUUU  
P R 282329Z JAN 77 ZBX  
FM ARNG-CAO EDGEWOOD MD/NGB-AYV-9//  
TO AIG 7401  
INFO RUEFHQA/CNGB WASH DC //NGB-ARL-1//  
P 281400Z JAN 77  
FM CDRAVSCOM STL MD //DRSAV-FEU//  
TO AIG 8881

*ARMY*

BT  
UNCLAS SECTION 1 OF 1  
NOTE THIS IS A MAINTENANCE ADVISORY MESSAGE AND HAS NOT BEEN REPEATED  
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 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. TM 55-1522-218-34P, DATED APR 74,  
B. TM 55-1522-221-34P, DATED AUG 75,  
C. TM 55-1522-221-28, DATED 31 MAY 75, CHG 5  
1. RECENT ENGINEERING ACTIONS ON THE H-1 LANDING GEAR ASSEMBLIES  
HAVE SHOWN THAT WITH THE INSTALLATION OF STANDARD ARMY ISSUE SKID

PAGE TWO RUMTFFA1578 UNCLAS  
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 AVSCOM 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 CROSSTUBES. THE AH-1 ASSEMBLY  
HAS RECENTLY COMPLETED A 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 LOCALLY 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, AVSCOM RECOGNIZES  
THE REQUIREMENTS OF CERTAIN UNITS TO PERFORM A FORMAL TRAINING

PAGE THREE RUMTFFA1578 UNCLAS

MISSION OR PILOT STANDARDIZATION TRAINING, EITHER OF WHICH RESULTS IN A HIGH USAGE/REPLACEMENT RATE OF THE STANDARD ISSUE SKID SHOE. 4. ACCORDINGLY, AVSCOM 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 COURSE OR THOSE AIRCRAFT SPECIFICALLY DEDICATED TO PILOT STANDARDIZATION 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 103, AND REF B, FIG 39, 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.

5. 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 100 HOUR INTERVAL (PHASE MAINTENANCE) IS REQUIRED ON THE CROSSTUBE ASSEMBLIES UNDER THE CROSSTUBE/FUSELAGE ATTACHMENT FITTINGS (ITEMS 43A AND 46A FIG 103, REF A FOR THE UH-1 AND ITEM 9 FIG 4-16, REF C FOR THE AH-1).

6. THE INSPECTION PROCEDURE FOR THE AH-1 WHICH CURRENTLY EXISTS

PAGE FOUR RUMTFFA1578 UNCLAS

7. CAN BE FOUND IN CHAPTER 4, REF C. THE UH-1 INSPECTION MAY BE ACCOMPLISHED UTILIZING EITHER PROCEDURE A OR PROCEDURE B AS DESCRIBED 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 PENETRANT METHOD.

7. 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 103, REF A) WHICH SECURE LANDING GEAR TO THE FUSELAGE.

C. JACK AIRFRAME AND REMOVE LANDING GEAR ASSEMBLY IN PROCEDURES PROVIDED IN APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS.

D. CONDUCT VISUAL INSPECTION OF CROSSTUBES FOR NICKS, SCRATCHES OR GOUGES OVER ENTIRE CROSSTUBE SURFACE; REFER TO APPLICABLE DS/3S MAINTENANCE MANUALS FOR ALLOWABLE DAMAGE CRITERIA.

E. SMOOTH UPPER HALF OF CROSSTUBE SURFACE QUARBOARD OF HE ATTACHMENT FITTING WITH 320 GRIT ALUMINUM OXIDE ABRASIVE CLOTH AND WIPE CLEAN.

PAGE FIVE RUMTFFA1578 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

PTTUZERH RULNEAA0315 0202329-0000--RUKMDTA:  
ZNR 00000  
P R 0202329Z JAN 77 ZEX  
FM ARNG-OAC HDGEWOOD MD/NGB-AVN-S// ARMY  
TO AIG 7401  
INFO RUEFHDA/CNGB WASH DC/NGB-ARC-A//  
P R 0201400Z JAN 77  
FM CDRAVSCOM STL MO //DRSAV-FEU//  
TO AIG 8881

BT

UNCLAS SECTION 11 OF 11

F. RECOAT SURFACE OF CROSSTUBE TO BE COVERED BY THE ATTACHMENT FITTINGS WITH SEALANT NSN 8320-00-793-9883 (MIL-S-8902).

G. REINSTALL ATTACHMENT FITTINGS UTILIZING THE FOLLOWING RIVETS:

(1) UH-1B/C/D/H/M PND AND UH-1B/C/H APT FITTINGS USE MS20601M6W7, NSN 5320-00-062-0641.

(2) UH-1D/H APT FITTINGS USE MS20601M4W8, NSN 5320-00-062-0644.

H. REINSTALL LANDING GEAR ASSEMBLY IAW PROCEDURES PROVIDED IN APPLICABLE ORGANIZATIONAL MAINTENANCE MANUALS.

I. ANY CROSSTUBE IDENTIFIED AS SHOWING CRACK INDICATIONS BY PROCEDURE A SHOULD BE SUBJECTED TO PROCEDURE B AS A VERIFICATION OPTION. ALL THOSE CROSSTUBES WHICH SHOW CRACK INDICATIONS

PAGE TWO RUKTFFA1579 UNCLAS  
EITHER BY PROCEDURE A AND B TOGETHER OR PROCEDURE B ALONE ARE TO BE SCRAPPED. ALL CROSSTUBES FOUND WITH NO CRACK INDICATIONS ARE TO BE RETURNED TO SERVICE.

10. INSTRUCTIONS CONTAINED IN THIS MESSAGE WILL BE ADDED TO THE EXISTING CROSSTUBE INSPECTION NOW CONTAINED IN APPLICABLE UH-1 ORGANIZATIONAL MAINTENANCE MANUALS. UNTIL RECEIPT OF THE FORMAL CHANGE, THE INSTRUCTIONS CONTAINED HEREIN SHOULD BE INSERTED IN THOSE MANUALS FOR REFERENCE PURPOSES. IF ADDITIONAL INFORMATION IS REQUIRED, POINT OF CONTACT AT AVSCOM IS MR. JOHN STEELE, AUTOVON 698-6916.

BT

#0318

30

INTEGRAL CONTACT BETWEEN THE TRANSDUCER AND THE CROSSTUBE;  
F. THE ULTRASONIC INSPECTION WILL BE CONDUCTED BY ANY  
CERTIFIED ULTRASONIC INSPECTOR IAW FIELD SERVICES ACTIVITY AH-1  
ULTRASONIC INSPECTION PROCEDURES AS PROVIDED TO FIELD SERVICE  
PERSONNEL BY AVSCOM.

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 MANUALS;

B. CONDUCT VISUAL INSPECTION FOR NICKS, SCRATCHES OR GOUGES  
OVER ENTIRE CROSSTUBE SURFACE; REFER TO DS/GS LEVEL MAINTENANCE

PAGE SIX RUNTFFA1578 UNCLAS  
FOR ALLOWABLE DAMAGE CRITERIA;

C. REMOVE RIVETS SECURING CROSSTUBE/FUSELAGE ATTACHMENT  
FITTINGS TO CROSSTUBES 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 6850-00-026-0981

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;

BT  
#2314

NNNN