

01 17 231839Z AUG 99 PP PP UUUU AA ZYUW

FROM  
 :CDRAMCOM REDSTONE ARSENAL AL//AMSAM-SF-A//  
 TO  
 :AIG 8881  
 :AIG 9004  
 :AIG 7515  
 :AIG 7471  
 :AIG 12124  
 :DCMC AFMO OZARK AL//DCMDE-AOA//  
 :CDRAMCOM REDSTONE ARSENAL AL//AMSAM-RA-FO//  
 :ASF42 81ST ARCOM DOBBINS AFB GA  
 :DEPT OF STATE AIR WING PATRICK AFB FL  
 :CDRCBDCOM ABERDEEN PROVING GROUND MD//AMSCB-OPA//  
 :USAATC ABERDEEN PROVING GROUND MD//STEAC-CO-P//  
 :RAYTHEON RANGE SYSTEMS ENGINEERING KWAJALEIN MH//PAT2//  
 :STEWS ARMY AIR HOLLOMAN AFB NM//STEWS-NRS-F//  
 :CDRDPG DUGWAY UT//STEDP-AVN//  
 :USDOCO LANDSOUTHEAST IZMIR TU//AV//  
 :WALLOPS FLIGHT FACILITY NASA WALLOPS ISLAND VA  
 : //CODE 831.2 AIRCRAFT QA//  
 INFO  
 :HQAFSPCCSS PETERSON AFB CO//LGM/SEF//  
 :CDRMDW WASHINGTON DC//ANLG-LS//  
 :SECDEF WASHINGTON DC//USDP-DSAA//  
 :SECSTATE WASHINGTON DC//NEA/INL//  
 :AFSOC HURLBURT FIELD FL//LGMW//  
 :HQ PACAFDPC HICKAM AFB HI//DO/LGM//  
 :HQAMC SCOTT AFB IL//LG/LGF/LGQ/DO/DOT/DOV/DOX/SEF//  
 :89AW ANDREWS AFB MD//LG//  
 :89OG ANDREWS AFB MD//CC/OGV//  
 :1HS ANDREWS AFB MD//CC/DO//  
 :NAVAVNDEPOT CHERRT PT NC//H1-ISST//  
 :CDR FT BRAGG NC//AFZA-GT-OM//  
 :CDR HQ 1ST COSCOM FT BRAGG NC//LOGOPS AVN SECT//  
 :PM SW FT MONMOUTH NJ//SFAE-IEWS-SG//  
 :FAA AERONAUTICALCEN OKLAHOMA CITY OK//AFS-620//  
 :DISC PHILADELPHIA PA//QEBB-JU//  
 :CDR LSE AVIATION IZMIR TU//LSE//  
 :HQ AETC RANDOLPH AFB TX//DO/DOFI/SEF//  
 :FAA SOUTHWEST RGN HQ FORT WORTH TX//ASW-100//  
 :CDRUSASMD C ARLINGTON VA//CSSD/ZA//

*Bob - F.*

*center fuel cell  
fuel xmitter  
probe wires*

*UH-1-99-  
ASAM-03*

XMT  
 :  
 ACCT  
 :  
 TEXT  
 :UNCLAS  
 SUBJECT - AVIATION SAFETY ACTION MESSAGE, MAINTENANCE MANDATORY, RCS  
 CSGLD-1860(R1), ALL UH-1H/V AIRCRAFT, ONE TIME INSPECTION OF FUEL  
 QUANTITY TRANSMITTER, (UH-1-99-ASAM-03) (TB 1-1520-210-20-45).

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 SHALL 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 -

A. AIRCRAFT IN USE - UPON RECEIPT OF THIS MESSAGE THE CONDITION STATUS SYMBOL OF THE CITED AIRCRAFT WILL BE CHANGED TO A RED HORIZONTAL DASH //-//. THE RED HORIZONTAL DASH //-// MAY BE CLEARED WHEN THE INSPECTION OF PARA 8 IS COMPLETED. THE AFFECTED AIRCRAFT SHALL BE INSPECTED AS SOON AS PRACTICAL BUT NO LATER THAN THE TASK/INSPECTION SUSPENSE DATE. FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS MESSAGE WITHIN THE TIME FRAME WILL CAUSE THE STATUS SYMBOL TO BE UPGRADED TO A RED //X//.

B. AIRCRAFT IN DEPOT MAINTENANCE - AIRCRAFT WILL NOT BE ISSUED UNTIL COMPLIANCE WITH THIS ASAM HAS BEEN COMPLETED.

C. AIRCRAFT UNDERGOING MAINTENANCE - AIRCRAFT WILL NOT BE RELEASED UNTIL COMPLIANCE WITH THIS ASAM HAS BEEN COMPLETED.

D. AIRCRAFT IN TRANSIT -

(1) SURFACE/AIR SHIPMENT - SAME AS PARA 1A.

(2) FERRY STATUS - SAME AS PARA 1A.

E. MAINTENANCE TRAINERS (CATEGORY A AND B) - N/A.

F. COMPONENT/PARTS IN STOCK AT ALL LEVELS (DEPOT AND OTHERS) INCLUDING WAR RESERVES - N/A

G. COMPONENTS/PARTS IN WORK (DEPOT LEVEL AND OTHERS) - N/A.

2. TASK/INSPECTION SUSPENSE DATE - WITHIN NEXT 50 FLIGHT HOURS/60 DAYS.

3. REPORTING COMPLIANCE SUSPENSE DATE - NO LATER THAN 14 SEP 99 IAW PARA 14A OF THIS MESSAGE.

4. SUMMARY OF PROBLEM -

A. ELECTRICAL LEADS FROM THE CENTER AFT FUEL CELL FUEL QUANTITY TRANSMITTER HAVE BEEN FOUND CHAFING AGAINST THE FUEL QUANTITY TRANSMITTER MOUNTING BRACKET. THE WIRE INSULATION WAS COMPLETELY CHAFED THROUGH AND ELECTRICAL ARCING WAS EVIDENT. CHAFING IN THIS AREA IS A KNOWN PROBLEM. ALTHOUGH INSTRUCTIONS ARE PROVIDED IN THE UH-1 MAINTENANCE MANUAL TO ROUTE WIRES CORRECTLY TO PRECLUDE CHAFING, CHAFING CONTINUES TO BE A PROBLEM.

NOTE

SOME AIRCRAFT ARE EQUIPPED WITH AN EXTERNAL FUEL SYSTEM (EFS) THAT MODIFIED THE ACCESS PANEL ON WHICH THE FUEL QUANTITY TRANSMITTER IS MOUNTED. THE EFS WAS INSTALLED ON SELECTED NATIONAL GUARD AIRCRAFT VIA AN AIRWORTHINESS RELEASE.

ALTHOUGH CHAFING HAS NOT BEEN REPORTED ON AIRCRAFT EQUIPPED WITH THE EFS, THE FUEL QUANTITY PROBE IS ORIENTED SIMILARLY AND THE POTENTIAL DOES EXIST FOR CHAFING. IN LIGHT OF THIS MOST RECENT REPORT, A METHOD HAS BEEN DEVELOPED TO PROTECT THESE LEADS FROM CHAFING.

B. FOR MANPOWER/DOWNTIME AND FUNDING IMPACTS SEE PARA 12.

C. THE PURPOSE OF THIS MESSAGE IS TO:

- (1) REQUIRE A ONE TIME INSPECTION FOR CHAFING FUEL QUANTITY TRANSMITTER LEADS.
  - (2) REQUIRE A PROTECTIVE SPIRAL WRAP BE INSTALLED TO PROTECT THE FUEL QUANTITY TRANSMITTER LEADS FROM FUTURE CHAFING.
5. END ITEMS TO BE INSPECTED - ALL UH-1H/V AIRCRAFT.
6. ASSEMBLY COMPONENTS TO BE INSPECTED -
- |                           |                |                  |
|---------------------------|----------------|------------------|
| NOMENCLATURE              | PART NO.       | NSN              |
| FUEL QUANTITY TRANSMITTER | 204-061-633-13 | 6680-00-758-2816 |
7. PARTS TO BE INSPECTED - N/A.
8. INSPECTION PROCEDURES -

NOTE

ITEMS PECULIAR TO THE EFS ARE NOT IDENTIFIED IN THE UH-1 MAINTENANCE MANUAL OR THE REPAIR PARTS AND SPECIAL TOOLS LIST. EFS PECULIAR ITEMS ARE IDENTIFIED AND REFERENCED IN "EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER" (TM 1-1560-311-23&P). THIS IS A COMMERCIAL PUBLICATION AND IS NOT SUPPORTED BY, NOR AVAILABLE THROUGH, NORMAL DEPARTMENT OF THE ARMY PUBLICATION DISTRIBUTION. THIS MANUAL WAS PROVIDED TO EACH EFS FIELDING LOCATION.

A. DEFUEL AIRCRAFT -

- (1) NON-EFS - IAW CHAPTER 1 OF TM 55-1520-210-23-1.
- (2) EFS - IAW EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER,

PARAGRAPH 5.4.

B. GAIN ACCESS TO AFT CENTER FUEL CELL ACCESS DOOR -

- (1) NON-EFS - TM 55-1520-210-23P-2, FIGURE 328, ITEM 84.
- (2) EFS - EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER,

FIGURE 20, ITEM 2).

C. DISCONNECT ELECTRICAL LEADS AND VENT LINE FROM CONNECTORS ON AFT CENTER FUEL CELL ACCESS DOOR.

D. NON-EFS ONLY -

(1) REMOVE ACCESS DOOR, TILTING AND TURNING AS NECESSARY TO ALLOW ATTACHED FUEL QUANTITY TRANSMITTER AND FLOAT SWITCHES TO PASS THROUGH ACCESS PORT.

- (2) COVER EXPOSED OPEN PORT.

E. EFS ONLY -

(1) DISCONNECT FRANGIBLE FITTINGS IAW EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER, FIGURE 19, ITEMS 2 AND 3, FROM AFT CENTER FUEL CELL ACCESS DOOR.

(2) DETACH ACCESS DOOR BY REMOVING FOUR RETAINERS, EIGHT BOLTS, WASHERS, SIXTEEN SCREWS AND WASHERS.

(3) PULL THE ACCESS DOOR OUT APPROXIMATELY 3 1/2 INCHES AND REMOVE BOLTS AND WASHERS (4 EACH) FROM UPPER AND LOWER FUEL QUANTITY TRANSMITTER SUPPORT BRACKETS. DISCONNECT ELECTRICAL LEADS AND CAREFULLY REMOVE ACCESS DOOR. REMOVE FUEL QUANTITY TRANSMITTER AND MOUNTING BRACKETS FROM FUEL CELL. COVER EXPOSED OPEN PORT.

NOTE

EXAMPLES OF CHAFING FUEL PROBE WIRES CAN BE FOUND BY ACCESSING THE UTILITY HELICOPTER WEB SITE AT URL [WWW.UHPO.REDSTONE.ARMY.MIL](http://WWW.UHPO.REDSTONE.ARMY.MIL). AFTER

ACCESSING SITE, GO TO SAFETY, THEN AVIATION SAFETY ACTION MESSAGES (ASAM). ACCESS TO THE WEB SITE IS CONTROLLED. PROCEDURES TO OBTAIN LOGON ID ARE ACCESSIBLE BY CLICKING THE REGISTER BUTTON.

F. INSPECT BOTH FUEL QUANTITY TRANSMITTER WIRE LEADS AND THE MOUNTING BRACKET P/N 5340-UH-1-6821, (TM 55-1520-210-23P-2, FIGURE 328, ITEM 99) FOR SIGNS OF CHAFING. BECAUSE FUEL QUANTITY TRANSMITTERS ARE SOMETIMES REPLACED, CHAFING MAY NOT BE EVIDENT ON WIRE LEADS BUT BRACKETS MAY SHOW SIGNS OF CHAFING FROM A PREVIOUS INSTALLATION.

G. IF WIRE LEADS EXHIBIT WORN OR CHAFED INSULATION, ACCOMPLISH THE CORRECTION OF PARAGRAPH 9A.

H. WIRE LEADS THAT DO NOT EXHIBIT WORN OR CHAFED INSULATION MUST STILL BE PROTECTED FROM FUTURE CHAFING BY ACCOMPLISHING THE CORRECTIONS OF PARAGRAPH 9B.

9. CORRECTION PROCEDURES -

A. IF WIRE LEADS EXHIBIT WORN OR CHAFED INSULATION, REPLACE FUEL QUANTITY TRANSMITTER, P/N 205-061-633-13, (TM 55-1520-210-23P-2, FIGURE 328, ITEM 107) WITH SERVICEABLE ONE FROM SUPPLY. ACCOMPLISH THE INSTALLATION OF PLASTIC SPIRAL WRAP TUBING PER PARAGRAPH 9B PRIOR TO INSTALLING THE FUEL QUANTITY TRANSMITTER ON THE AIRCRAFT.

B. FOR ALL NEW AND EXISTING FUEL QUANTITY TRANSMITTERS WITH WIRES NOT EXHIBITING WORN OR CHAFED INSULATION, INSTALL PLASTIC SPIRAL WRAP TUBING (IDENTIFIED IN PARAGRAPH 10C) AS FOLLOWS -

(1) ELECTRICAL CONNECTORS SHOULD BE DISCONNECTED AT THE ACCESS PANEL.

(2) INSTALL SPIRAL WRAP FOR THE ENTIRE FREE LENGTH OF BOTH WIRE LEADS. EACH WIRE IS TO BE WRAPPED INDIVIDUALLY. THE SPIRAL WRAP WILL HAVE A MORE SNUG FIT ON THE COAX WIRE LEAD.

(3) TO ALLOW FOR SOME FLEXIBILITY AND MOVEMENT OF THE SPIRAL WRAP, ASSURE THAT A SMALL GAP IS PRESENT BETWEEN THE WIRE CONNECTOR AND THE END OF THE TUBING.

#### NOTE

PICTURES DEPICTING PROPER WIRE ROUTING ARE LOCATED ON THE UTILITY HELICOPTER WEB SITE AT URL [WWW.UHPO.REDSTONE.ARMY.MIL](http://WWW.UHPO.REDSTONE.ARMY.MIL).

(4) ROUTE WIRE LEADS (SPIRAL WRAP INSTALLED) THROUGH THE LOOP CREATED BY THE ELECTRICAL TIE-DOWN STRAP, P/N MS3367-1-9, (TM 55-1520-210-23P-2, FIGURE 328, ITEM 98) ATTACHING THE FUEL QUANTITY TRANSMITTER TO THE UPPER MOUNTING BRACKET. THIS WILL PREVENT EXCESSIVE MOVEMENT OF THE WIRE CAUSED BY SLOSHING FUEL.

(5) NON-EFS ONLY - RE-ATTACH ELECTRICAL LEADS TO CONNECTORS ON ACCESS COVER AND REINSTALL ACCESS COVER PER INSTRUCTIONS OF PARAGRAPH 8-257, TM 55-1520-210-23-2.

(6) EFS ONLY - REINSTALL ACCESS COVER PER INSTRUCTIONS OF PARAGRAPH 9.27, EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER. MAKE SURE THAT ELECTRICAL LEADS FROM THE FUEL QUANTITY TRANSMITTER ARE REATTACHED TO THE CONNECTORS ON THE ACCESS COVER. THIS STEP HAS BEEN ERRONEOUSLY LEFT OUT OF PARAGRAPH 9.27 FOR INSTALLATION OF THE ACCESS COVER.

C. PRESSURE TEST FUEL CELL PER TM 55-1520-210-23-2, PARAGRAPH 10-19.

D. PERFORM FUEL QUANTITY SYSTEM TEST PER TM 55-1520-210-23-2, PARAGRAPH 8-249.

10. SUPPLY/PARTS AND DISPOSITION -

A. PARTS REQUIRED - ITEMS CITED IN PARAGRAPH 6 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) "XFY" (X-RAY-FOXTROT-YANKEE).

NOTE

PROJECT CODE "XFY" 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 -

NOTE

THE PLASTIC SPIRAL WRAP TUBING LISTED IS FUEL RESISTANT. NO SUBSTITUTIONS AUTHORIZED.

NOTE

THE PART NUMBER OF THE PLASTIC SPIRAL WRAP TUBING REQUISITIONED THROUGH NORMAL SUPPLY IS DIFFERENT THAN THE PART NUMBER USED BY THE MANUFACTURER. THEY ARE, HOWEVER, THE SAME ITEM. THE MANUFACTURER SUPPLIES THE SPIRAL WRAP TO ANOTHER COMPANY, WHICH IN TURN, SELLS IT UNDER ITS OWN PART NUMBER TO THE GOVERNMENT.

NOMENCLATURE	PART NO	NSN
PREFORMED PACKING	MS29513-270	5330-00-291-3272
PLASTIC SPIRAL WRAP TUBING	7148M86/P11	9330-01-288-4347

(1) PLASTIC SPIRAL WRAP TUBING MAY BE EITHER REQUISITIONED USING NORMAL SUPPLY PROCEDURES, OR PURCHASED DIRECTLY FROM THE MANUFACTURER. CURRENT STOCK LEVELS AT DLA WILL NOT SUPPORT THE QUANTITY REQUIRED PER THIS ASAM, HOWEVER, PROCUREMENT ACTIONS ARE UNDERWAY THAT WILL PROVIDE STOCK IN THE NEAR FUTURE. IF UNAVAILABLE THROUGH NORMAL SUPPLY PROCEDURES DIRECT PURCHASE MAY BE ACCOMPLISHED FROM THE MANUFACTURER BY CONTACTING M.M. NEWMAN CORPORATION, 24 TIOGA WAY, P.O. BOX 615, MARBLEHEAD, MA 01945, PHONE (800) 777-6309 OR (781) 631-7100. ASK FOR THE GOVERNMENT SALES REPRESENTATIVE AND PROVIDE THE FOLLOWING INFORMATION -

NOMENCLATURE	PART NO.	UNIT OF ISSUE
PLASTIC SPIRAL WRAP TUBING	HT 3/16T	100 FT ROLLS

(2) M.M. NEWMAN MANUFACTURES THIS TUBING IN SEVERAL COLORS. TO SPECIFY THE COLOR, SIMPLY ADD THE COLOR ON THE END OF THE PART NUMBER (I.E., HT 3/16T BLACK). BLACK IS THE PREFERRED COLOR AS IT IS THE COLOR IN THE GOVERNMENT INVENTORY. CLEAR (OR NATURAL) IS ACCEPTABLE IF BLACK IS UNAVAILABLE.

D. DISPOSITION - DISPOSE OF REMOVED PARTS/COMPONENTS USING NORMAL SUPPLY PROCEDURES. ALL TURN-IN DOCUMENTS MUST INCLUDE PROJECT CODE (CC 57-59) XFY.

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 - N/A.

12. APPLICATION -

A. CATEGORY OF MAINTENANCE - AVIM CONTRACTOR TEAM. AIRCRAFT DOWNTIME WILL BE CHARGED TO AVIM MAINTENANCE.

B. ESTIMATED TIME REQUIRED -

- (1) TOTAL OF 6 MAN-HOURS USING 1 PERSON.
- (2) TOTAL OF 6 HOURS DOWNTIME FOR ONE END ITEM.

C. ESTIMATED COST IMPACT TO THE FIELD -

NOTE

IF PURCHASED FROM THE MANUFACTURER, THE COST OF THE PLASTIC SPIRAL WRAP TUBING IS \$213.68 PER 100 FT ROLL, PLUS A MINIMAL SHIPPING FEE.

NOMENCLATURE	PART NO	NSN	QTY	COST
FUEL QUANTITY	204-061-633-13	6680-00-758-2816	1	\$332.44
TRANSMITTER				
PREFORMED PACKING	MS29513-270	5331-00-291-3272	1	1.68
PLASTIC SPIRAL WRAP TUBING	7148M86	9330-01-288-4347	5 FT	7.55

TOTAL COST PER AIRCRAFT = \$341.67

D. TB/MMOS TO BE APPLIED PRIOR TO OR CONCURRENTLY WITH THIS INSPECTION - N/A.

E. PUBLICATIONS WHICH REQUIRE CHANGE AS A RESULT OF THIS INSPECTION - TM 55-1520-210-23-2 AND EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER SHALL BE CHANGED TO REFLECT THIS MESSAGE. A COPY OF THIS MESSAGE SHALL BE INSERTED IN THE APPROPRIATE TM AS AUTHORITY TO IMPLEMENT THE CHANGE UNTIL THE PRINTED CHANGE IS RECEIVED.

13. REFERENCES -

- A. TM 55-1520-210-23-2
- B. TM 55-1520-210-23P-2
- C. EFS MAINTENANCE INSTRUCTION UH-1 HELICOPTER

14. RECORDING AND REPORTING REQUIREMENTS -

A. REPORTING COMPLIANCE DATE (AIRCRAFT) - UPON ENTERING REQUIREMENTS OF THIS MESSAGE ON DA FORM 2408-13-1 ON ALL SUBJECT MDS AIRCRAFT, FORWARD A PRIORITY MESSAGE, DATAFAX OR E-MAIL TO CDR, AMCOM, ATTN: AMSAM-SF-A (SOF COMPLIANCE OFFICER), REDSTONE ARSENAL, AL 35898-5000, IAW AR 95-1. DATAFAX NUMBER IS DSN 897-2111 OR (256) 313-2111. E-MAIL ADDRESS IS "SAFEADM@REDSTONE.ARMY.MIL". THE REPORT WILL CITE THIS MESSAGE NUMBER, DATE OF ENTRY IN DA FORM 2408-13-1, THE AIRCRAFT MISSION DESIGN SERIES AND SERIAL NUMBERS OF AIRCRAFT IN NUMERICAL ORDER.

B. TASK/INSPECTION REPORTING SUSPENSE DATE (AIRCRAFT) - NO SPECIAL REPORT OF THE RESULTS OF THIS INSPECTION IS REQUIRED.

C. REPORTING MESSAGE RECEIPT (SPARES) -

- (1) MATERIEL IN WHOLESALE DEPOT STORAGE - N/A.
- (2) MATERIEL IN RETAIL STORAGE - N/A.

D. TASK/INSPECTION REPORTING SUSPENSE DATE (SPARES).

- (1) MATERIEL IN WHOLESALE DEPOT STORAGE - N/A.
- (2) MATERIEL IN RETAIL STORAGE - N/A.

E. THE FOLLOWING FORMS ARE APPLICABLE AND ARE TO BE COMPLETED IAW DA PAM 738-751, 15 MAR 99 -

NOTE

ULLS-A USERS WILL USE APPLICABLE "E" FORMS.

- (1) DA FORM 2408-13, AIRCRAFT STATUS INFORMATION RECORD.
- (2) DA FORM 2408-13-1, AIRCRAFT INSPECTION AND MAINTENANCE