FROM
: CDROMCOM REDSTONE ARSENAL AL//AMSAM-SF-A//
: TO
: AIG 8881
: AIG 9004
: AIG 7515
: AIG 7471
: AIG 12124
: DCMC APMO OZARK AL//DCMD-AOA//
: CDROMCOM REDSTONE ARSENAL AL//AMSAM-RA-FR//
: ASP42 81ST ARCOM DOBBINS AFB GA
: DEPT OF STATE AIR WING PATRICK AFB FL
: CDRCBDCOM ABERDEEN PROVING GROUND MD//AMSCL-OPA//
: USAATC ABERDEEN PROVING GROUND MD/STECAC-CO-P-
: RAYTHEON RANGE SYSTEMS ENGINEERING KWAJALEIN MH//PAT2//
: STEWS ARMY AIR HOLLOMAN AFB NM//STEWS-NRS-E//
: CDRDPC DUGWAY UT//STEDP-AVN//
: USDOCS LANDSOUTH EAST IZMIR TUR//AV//
: WALLEPS FLIGHT FACILITY NASA WALLEPS ISLAND VA
: //CODE 831.2 AIRCRAFT QA//
: INFO
: HQAFSPCCESS PETERSON AFB CO//LMG/SEF//
: CDRLDW WASHINGTON DC//ANLG-LS//
: SECDEF WASHINGTON DC//USDP-DSSA//
: SECSTATE WASHINGTON DC//NEA/INL//
: APSOC HURLBURT FIELD FL//LGMH//
: HQ PACAF/DPC HICKAM AFB HI//DO/LGM//
: HQAMC SCOTT AFB IL//LG/LGF/LQQ/DO/DOT/DO/DRO/SEF//
: 89AH ANDREWS AFB MD//LG//
: 890G ANDREWS AFB MD//CC/OGV//
: 1HS ANDREWS AFB MD//CC/DO//
: NAVAVNDEPOT CHERRT PT NC//H1-1SST//
: CDR FT BRAGG NC//AFZA-GT-OM//
: CDR HQ 1ST COSCOM FT BRAGG NC//LOGOPS AVN SECT//
: PM SW FT MONTMOUTH NJ//SFAS-IEWS-SE//
: FAA AERONAUTICALcen OKLAHOMA CITY OK//AFS-620//
: DISC PHILADELPHIA PA//QEBB-JU//
: CDR LSE AVIATION IZMIR TUR//LSE//
: HQ AETC RANDOLPH AFB TX//DO/DOFI/SEF//
: FAA SOUTHWEST RGN HQ FORT WORTH TX//ASW-100//
: CDROSAMDC ARLINGTON VA//CSSD/ZA//

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 1-1560-311-23P). 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.AMY.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

(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

(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) "XYF" (X-RAY-FOXTROT-YANK).

   NOTE
   PROJECT CODE "XYF" 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 TIHOA 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) "XYF.

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 7148M86  9330-01-288-4347 5 FT  7.55

   TOTAL COST PER AIRCRAFT = $341.67

D. TB/MWOS 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 SUSPENSE 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