# URGENT

### \*TB 1-1520-237-20-242

### DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

## SAFETY OF FLIGHT, TECHNICAL, RCS CSGLD-1860 (R1), ALL H-60 SERIES AIRCRAFT, INSPECTION OF APU FUEL LINE GROMMET

#### Headquarters, Department of the Army, Washington, D. C. 13 FEBRUARY 2002

**DISTRIBUTION STATEMENT A:** Approved for public release; distribution is unlimited.

#### 1. Priority Classification. URGENT

#### NOTE

IAW AR 95-1, para 6-6a/6-14a, MACOM Commanders may authorize temporary exception from message requirements. Exception may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.

a. Aircraft in Use. Upon receipt of this TB make the following entry on the DA Form 2408-13-1. Enter a Red Horizontal Dash//-//status symbol with the following statement: "Inspect APU Fuel Lines For Proper Grommet At APU Shroud Assembly, IAW TB 1-1520-237-20-242 prior to the next APU/Engine start, but not later than 07 February, 2002." Clear the Red Horizontal Dash //-// entry when the procedures IAW para 8 are completed. The affected aircraft shall be inspected as soon as practical, but NLT 07 February, 2002. Commanders who are unable to comply with the requirements of this TB within the time frame specified will upgrade the affected aircraft status symbol to a Red //X//.

- b. Aircraft in Maintenance.
  - (1) Aircraft in AVUM, AVIM or Depot Level Maintenance. Same as Paragraph 1.a..
  - (2) Aircraft at Contractor Facility DD 250 aircraft are exempt from inspection requirements of

this TB.

- c. Aircraft in Transit.
  - (1) Surface/Air Shipment Within 10 hours/14 days of arrival.
  - (2) Ferry Status Inspect at final destination.

\* This TB supersedes USAAMCOM Safety Of Flight (SOF) Message, 1242131 JAN 02, UH-60-02-04.

- d. Maintenance Trainers (Category A and B). Same as paragraph 1.a..
- e. Component/Parts in Stock at All Levels (Depot Level and Others), including War Reserves. N/A.
- f. Components/Parts in Work (Depot Level and Others). N/A.

2. Task/Inspection Suspense Date. Complete the inspection IAW paragraph 8 prior to next APU/Engine start, but NLT 07 February 2002 and report IAW para 14.a.(2) NLT 11 February 2002.

**3. TAMMS Reporting Compliance Suspense Date**. Report compliance IAW paragraph 14.a.(1) NLT 13 December 2001

#### 4. Summary of Problem.

a. During a post flight inspection, fuel was discovered beneath the APU. Further inspection revealed a chaffed and ruptured fuel line at the APU shroud assembly. The chaffing was caused by an unauthorized fabricated solid metal grommet securing the fuel lines to the shroud assembly. The reporting unit inspected the remainder of their fleet with two additional discrepant grommets being located. Corpus Christie Army Depot and some National Guard units have also found discrepant grommets in their fleets as well. The origin of the fabricated grommets is unknown at this time.

- b. Manpower/downtime and funding impacts See paragraph 12.
- c. The purpose of this TB is to remove all unauthorized APU shroud assembly grommets from the fleet.
- 5. End Items to be inspected. All H-60 series aircraft.
- 6. Assembly Components to be Inspected. N/A.
- 7. Parts to be Inspected. -

NOMENCLATURE	PART NUMBER	NSN
Grommet, Tube Pass	169037-1	5325-01-233-8307
Tube Bundle	163180-100	4710-01-192-4920
Tube Bundle	160374-100	2910-01-115-8074
Fuel Line	3883497-1	4710-01-363-8203
Seal, Non-metallic	3615184-1	5330-01-368-7474
Nut, Plain, Plate	3615185-1	5310-01-368-7405
Shield, Heat, Turb.	70303-03023-041	2835-01-119-7426
Shield, Heat, Turb.	70303-03023-042	2835-01-120-0213

8. **Inspection Procedures.** Conduct visual inspection of grommet at the APU shroud assembly. Grommet should be composed of silicon rubber/fiberglass compound. Metal grommets are not authorized.

#### NOTE

Supplemental information (photos/graphics) for this inspection can be viewed at: (use lower case) "www.redstone.army.mil/sof/suppl/u60s0204.pdf".

a. If an authorized grommet is installed, clear the red dash //-//entry from paragraph 1.a.. Compliance with this TB is complete.

b. If an unauthorized grommet is installed, clear the red dash//-//entry from paragraph 1.a. and make the following entry on the DA Form 2408-13-1. Enter a red//X//status symbol with the following statement: "Grommet at APU shroud assembly requires replacement IAW TB 1-1520-237-20-242". Replace grommet IAW paragraph 9.

c. If an unauthorized grommet is found, inspect fuel lines at shroud assembly for signs of chaffing. If chaffing is observed, make the following entry on the DA Form 2408-13-1. Enter a red // X // status symbol

with the following statement. "Fuel line chaffing at APU shroud assembly. Replace IAW TB 1-1520-237-20-242". Replace IAW paragraph 9..

#### 9. Correction Procedures.

a. If an unauthorized grommet is installed, remove grommet and replace with proper part IAW TM 1-1520-237-23-7, paragraph 15-4-4.1 or TM 1-1520-250-23-5, paragraph 15.3.3.

#### NOTE

If an unauthorized is installed, the firewall plate assembly (PN 169036-1) may be required during re-installation. If this part is required and cannot be obtained from supply, contact Technical POC for further instructions.

b. If fuel lines show signs of chaffing, remove damaged lines and replace with new lines IAW TM 55-2835-208-23 or TM 55-2835-209-23.

#### 10. Supply/Parts and Disposition.

a. Parts required - Items cited in paragraph 12.c. may be required to replace defective items.

b. Requisitioning instructions – Requisition replacement parts using normal supply procedures. All requisitions shall us project code (CC 57-59) "X1J" (X-RAY ONE JULIET).

#### NOTE

Project code "X1J is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

c. Bulk and Consumable Materials. N/A.

d. Disposition. Demilitarize/mutilate IAW TM 1-1500-328-23, any part/component which does not meet inspection criteria.

e. Disposition of Hazardous Material. N/A.

#### 11. Special Tools, and Fixtures Required. N/A.

#### 12. Application.

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM maintenance. Report aircraft non-mission capable maintenance (NMCM) while undergoing inspection and correction IAW this TB.

- b. Estimated Time Required.
  - (1) Time to Complete Inspection Total of 1 man-hours using 1 person.
  - (2) Time For Repair/Replacement -
    - (a) Total of 2 man-hours using 2 persons.
    - (b) Total of 1 hour downtime for one end item.
- c. Estimated cost impact to the field.

NOMENCLATURE	PART NO./NSN	QTY.	COST EA.	TOTAL
Grommet, Tube Pass	169037-1	1	\$152.77	\$152.77
	5325-01-233-8307			
Plate Assembly, Firewall	169036-1	1	\$200.77	\$200.77
	1560-01-234-2176			
Tube Bundle	163180-100	1	\$689.40	\$689.40
	4720-01-192-4920			
Tube Bundle	160374-100	1	\$368.82	\$368.82
	2910-01-115-8074			
Fuel Line	3883497-1	1	\$170.97	\$170.97
	4710-01-363-8203			

Nut, Plain Plate	3615185-1	1	\$38.80	\$38.80
	5210-01-368-7405			
Seal, Non-metallic Strip	3615692-1	1	\$14.16	\$14.16
	5330-01-368-7475			

#### NOTE

All parts above will not be required to be replaced on one end item. The first 4 parts are required for the Hamilton Sunstrand APU and the remaining 3 are for the Honeywell APU.

Total Cost per Aircraft (Depends on type of APU installed) = Hamilton Sunstrand APU - \$1411.76 Honevwell APU - 223.93

- 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. N/A.

#### 13. References.

- a. DA PAM 738-751, 15 March 1999.
- b. TM 1-1500-328-23
- c. TM 1-1520-237-23-7
- d. TM 1-1520-250-23-5.
- e. TM 1-1520-250-23P-2
- f. TM 1-1520-237-23P-4
- g. TM 55-2835-208-23
- h. TM 55-2835-208-23P
- i. TM 55-2835-209-23
- j. TM 1-2835-209-23P

#### 14. Recording and Reporting Requirements.

- a. Aircraft:
  - (1) TAMMS Reporting Compliance Suspense.

Upon entering requirements of this TB on DA Form 2408-13-1 for all affected aircraft, Commanders will forward a priority message, datafax or email to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1, NLT date specified in paragraph 3. Datafax number is DSN 897-2111 or commercial (256) 313-2111. Email address is "safeadm@redstone.army.mil". The report will cite this TB number , date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

(2) Task/Inspection Reporting Suspense.

Upon completion of inspection, Commanders will forward a priority message to the Logistical Point of Contact listed in paragraph 16.b.. The report will cite this TB number, date of the inspection, aircraft serial number, aircraft hours, and results of the inspection. Inspection and reports will be completed NLT date specified in paragraph 2.

- b. Wholesale Spare Parts/Assemblies. N/A.
- c. Retail Spare Parts/Assemblies. N/A.

d. The following forms are applicable and are to be completed in accordance with 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 Record.
- (3) DA Form 2408-15, Historical Record for Aircraft.

(4) DD Form 1577/DD Form 1577-1, Unserviceable (Condemned) Tag/Label – Materiel (color red). Annotate remarks block with "Condemned IAW TB 1-1520-237-20-242 and mutilated IAW TM 1-1500-328-23."

#### 15. Weight and Balance. N/A.

#### 16. Points of Contact.

a. Technical point of contact is Mr. Gary Trotter, AMSAM-RD-AE-I-D-U, DSN 897-2350 Ext 9693 or 9716, Commercial (256) 705-9693, alternate (256) 705-9716. Datafax is DSN 897-2350 Ext 9896 or or Commercial (256) 705-9896, email is "gary.trotter@rdec.redstone.army.mil".

b. Logistical point of contact is Mr. Joe Hoover, AMSAM-DSA-UH-L, DSN 645-7898 or (256) 955-7898, datafax is DSN 897-3778 or (256) 313-3778. Email is "joe.hoover@uh.redstone.army.mil"

c. Forms and records point of contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 897-5564, Datafax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@redstone.army.mil".

d. Safety points of contact are:

(1) Primary – Mr. Randall Rushing, (SAIC), AMSAM-SF-A, DSN 897-2092 or commercial (256) 313-2092, Datafax is DSN 897-2111 or (256) 313-2111. Email is "randall.rushing@redstone.army.mil".

(2) Alternate – Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636, datafax is DSN 897-2111 or (256) 313-2111. Email is "ron.price@redstone.army.mil".

e. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact:

(1) Primary: Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or (256) 313-6856. Datafax is DSN 897-6630 or (256) 313-6630. Email "ronnie.sammons@redstone.army.mil".

f. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or (256) 313-2066/7.

**17**. **Reporting of Errors and Recommended Improvements.** You can improve this TB. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Mail your letter or DA form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000. A reply will be furnished directly to you. You may also submit your recommended changes by email directly to 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual.

TB 1-1520-237-20-242

By Order of the Secretary of the Army:

Official:

ERIC K. SHINSEKI General, United States Army Chief of Staff

Joel B. Huln

JOEL B. HUDSON Administrative Assistant to the Secretary of the Army 0203104

#### **DISTRIBUTION:**

To be distributed in accordance with Initial Distribution Number (IDN) 314026 requirements for TB 1-1520-237-20-242.

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil> To: 2028@redstone.army.mil

Subject: DA Form 2028

- 1. From: Joe Smith
- 2. Unit: home
- 3. Address: 4300 Park
- 4. City: Hometown
- 5. **St:** MO
- 6. Zip: 77777
- 7. Date Sent: 19-OCT-93
- 8. Pub no: 55-2840-229-23
- 9. Pub Title: TM
- 10. Publication Date: 04-JUL-85
- 11. Change Number: 7
- 12. Submitter Rank: MSG
- 13. Submitter FName: Joe
- 14. Submitter MName: T
- 15. Submitter LName: Smith
- 16. Submitter Phone: 123-123-1234
- 17. Problem: 1
- 18. Page: 2
- 19. Paragraph: 3
- 20. Line: 4
- 21. NSN: 5
- 22. Reference: 6
- 23. Figure: 7
- 24. Table: 8
- 25. Item: 9
- 26. Total: 123
- 27. Text:

This is the text for the problem below line 27.