URGENT

TB 1-1520-238-20-107

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ONE TIME INSPECTION OF FUEL CELL RESTRAINT PANELS FOR ALL AH-64 AIRCRAFT

Headquarters, Department of the Army, Washington, D.C.

7 July 2000

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. URGENT.

a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB), make the following entry on DA Form 2408-13-1. Enter a red horizontal dash //–// status symbol with the following statement: "Inspect Fuel Cell Restraint Panels IAW TB 1-1520-238-20-107 within the next 10 flight hours no later than 10 July 2000." The red horizontal dash //–// may be cleared when the inspections of paragraphs 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than 10 July 2000. Failure to comply with the requirements of this TB within this 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 TB has been completed.

c. Aircraft Undergoing Maintenance. Aircraft will not be issued until compliance with this TB has been completed.

d. Aircraft in Transit. For aircraft away from home station, this TB authorizes a one time flight, with intermediate stops, to return to the nearest secured maintenance facility/home station.

(1) Surface/Air Shipment. Same as paragraph 1a.

(2) Ferry Status.

(a) Same as paragraph 1a.

(b) Those aircraft that have a DD 250 and are at Boeing will be inspected prior to ferry to final destination.

e. Maintenance Trainers (Categories A and B). Same as paragraph 1a (above).

This TB supersedes USAAMCOM Message 261840Z Jun 00 (AH–64–00–ASAM–11).

f. Component/Parts in Stock, Including War Reserves at All Levels (Depot and Others). Upon receipt of this TB, the materiel condition tags of all items in all condition codes listed in paragraphs 6 and 7 shall be annotated to read “TB 1-1520-238-20-107, One–Time Inspection of Fuel Cell Restraint Panels not complied with.”

(1) Wholesale Stock – Report receipt of this TB in accordance with paragraph 14c(1). Upon receipt of this TB, depot and materiel activity commanders will ensure all serviceable items (condition codes //A//, //B//, //C//, //D//, and //E//) listed in paragraph 6 and 7 are placed in condition code //J// and tagged with a suspended tag/label – Materiel, DD Form 1575/DD Form 1575-1. Do not remove original condition tags. Report compliance with this TB in accordance with 14d(1).

(2) Retail Stock – Report receipt of this TB in accordance with paragraph 14c(2). Upon receipt of this TB, commanders and others maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the inspection required by paragraph 8 and the correction procedures of paragraph 9 on discrepant materiel. Disposition of discrepant materiel will be in accordance with paragraph 10. Report compliance with this TB in accordance with paragraph 14d(2).

g. Component/Parts in Stock, Including War Reserves at All Levels (Depot and Others). Items listed in paragraph 7 that are in work will not be issued until compliance with this TB.

2. **Task/Inspection Suspense Date.** Complete the inspection in accordance with paragraph 8 within next 10 flight hours but no later than 10 July 2000.

3. **Reporting Compliance Suspense Date**. No later than 19 July 2000 per paragraph 14a of this TB.

4. **Summary of the Problem**.

a. Two Forward Fuel Cell Restraint Panels (P/N 7-31113127-3/-7) manufactured from “black polycarbonate” material have been found cracked and/or buckled in FMS aircraft. These black panels were installed in production of “A” model aircraft PV 833 and subsequent (90-0506 and subsequent) and some “D” model aircraft. A bulging, pressurized fuel cell may press a cracked panel against flight control components located immediately above one of the panels. Contact is not deemed sufficient to bind these flight controls, however, prudent removal of the discrepant panels eliminates any risk. Earlier panels were manufactured from Kevlar (painted yellow or green) and have exhibited no cracking. Both panel types are listed with identical part numbers in the RPTSL.

b. For manpower/downtime and funding impacts, see paragraph 12.

c. The purpose of this TB is to establish a one time inspection to determine whether discrepant “black polycarbonate” panels are installed and to establish a recurring inspection until the polycarbonate panels are replaced.

5. **End Items to Be Inspected**. All Army aircraft.

6. **Assembly Components to Be Inspected**. N/A.

7. **Parts to Be Inspected**.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Pan Assembly	7-31113127-3	1560-01-236-3098
Pan Assembly	7-31113127-7	1560-01-236-3099

8. **Inspection Procedures**.

NOTE

The following procedures are to be performed in accordance with TM 1-1520-238-23 and with the AH-64D Electronic Technical Manual (IETM), unless otherwise specified.

NOTE

Aircraft fuel cells will be full and pressurized prior to conducting this inspection.

a. Safe helicopter in accordance with TM 1-1520-238-23 (Task 1.57) or the IETM.

b. Remove the pilot's seat to gain access to the fuel cell inspection panel.

c. Remove the access door panel under pilot's seat (P/N 7-31113683-31) in the pilot's floor to gain visual access to the fuel cell restraint panels.

d. Using a flashlight and inspection mirror, while facing forward, look down and to the left and the right under the bellcrank (only a small portion of the panel is visible) to determined which type of fuel cell restraint panel is installed––"black polycarbonate" or yellow or green painted Kevlar.

e. If yellow or green painted Kevlar panels are installed in both panel locations, no further action is required; the inspection is complete.

f. If "black polycarbonate" panels are installed in one or both panel locations, refer to paragraph 9.

9. **Correction Procedures.**

a. If "black polycarbonate" panels are present and undamaged, reinstall the inspected panels. Enter a red horizontal dash //–// on the DA Form 2408-13-1 with the following statement: "Inspect black polycarbonate forward fuel cell restraint panels after every 50 flight hours, or every 90 days, whichever occurs first, IAW TB 1-1520-238-20-107." Enter second red horizontal dash //–// on the DA Form 2408-13-1 with the following statement: "Replace black polycarbonate forward fuel cell restraint panels with ones made of Kevlar at next phase inspection IAW TB 1-1520-238-20-107." Report aircraft serial number and hours to next phase inspection to the logistical point of contact in paragraph 16b.

b. If "black polycarbonate" panels are present and cracks, crazing, or deformation are visibly present, change the aircraft condition status symbol on the DA Form 2408-13 to a red //X//. Enter a red //X// on the DA Form 2408–13–1 with the following statement: "Forward fuel cell restraint panels damaged and must be replaced prior to next flight, in accordance with TB 1-1520-238-20-107". Report aircraft serial number and hours to next phase inspection to the logistical point of contact in paragraph 16b.

10. **Supply/Parts and Disposition**.

a. Parts Required. Items cited in paragraph 7 may be required to replace defective items.

b. Requisitioning Instructions. Contact the logistical point of contact in paragraph 16b for requisitioning instructions.

c. Bulk and Consumable Materials. N/A.

d. Disposition. Demilitarize/mutilate in accordance with TM 1-1520-328-23 any part/component which does not meet the inspection criteria.

e. Disposition of Hazardous Material. Dispose of in accordance with EPA directives as implemented by your servicing environmental coordinator (AR 200-1).

11. **Special Tools, Jigs, and Fixtures Required**. N/A.

12. **Application**.

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM.

b. Time Required.

(1) Total of 10 man-hours using 2 people for inspection.

(2) Total of 5 hours downtime for one end item.

(3) Total time – 24 man-hours to remove and replace fuel cell panels using 2 people.

c. Estimated Cost Impact of Stock Fund Items to the Field. N/A.

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. Interactive Electronic Technical Manual (IETM): TM 1–1520–Longbow/Apache IETM, CD No. 1, Version 3.1.2, Data 19 November 1998, CD Date 1 December 1998 or subsequent.

b. TM 1-1520-238-23, Aviation Unit and Intermediate Maintenance Manual for AH-64A Apache Attack Helicopter, 16 May 1994.

14. Recording and Reporting Requirements.

a. Upon entering requirements of this TB on DA Form 2408-13-1 for all subject MDS aircraft, forward a priority message, datafax, or e-mail to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, in accordance with AR 95-1. Datafax number is DSN 897-2111 or commercial (256) 313-2111. E-mail address is "SAFEADMS@REDSTONE.ARMY.MIL". The report will cite this TB number, the date of entry in DA Form 2408-13-1, the aircraft mission design series, and the serial numbers of aircraft in numerical order.

b. Task/Inspection Reporting Suspense Date (Aircraft) – Upon completion of inspection, units will forward a priority message to Commander, AMCOM, ATTN: SFAE-AV-AAH-LF, Redstone Arsenal, AL 35898-5000. Telephone number is DSN 897-4242 or commercial (256) 313-4242, datafax number is DSN 897-4343 or commercial (256) 313-4343, and e-mail address is Jim.Mason@peoavn.redstone.army.mil. The report will cite this TB number, aircraft and component hours, and results of the inspection. Inspection and reports will be completed no later than 7 days after the task/inspection suspense date.

c. Reporting Compliance Suspense Date (Spares) –

(1) Materiel in Wholesale Depot Storage – Report receipt of this TB by e-mail or datafax to the wholesale materiel (spares) point of contact listed in paragraph 16b no later than 3 July 2000. Provide local point of contact.

(2) Materiel in Retail Storage – Report receipt of this TB by e-mail or datafax to the logistical point of contact listed in paragraph 16b no later than 3 July 2000. Provide local point of contact.

d. Task/Inspection Reporting Suspense Date (Spares) –

(1) Materiel in Wholesale Depot Storage – Report compliance with this TB to the wholesale materiel point of contact (Spares) listed in paragraph 16c no later than 3 July 2000 (on DD Form 1225). Provide the cost of compliance with this TB, including an estimate of the Cost Reimbursable Funding required to move the serviceable items on hand (listed in paragraphs 6 and 7) to a work area, to unpack the materiel, to repack the materiel after inspection by AMCOM inspectors, and to return the materiel to storage as appropriate. Report, by original serviceable condition code, the quantity or materiel placed in condition code //J//. Report by e-mail or datafax. Provide local point of contact.

(2) Materiel in Retail Storage – Report compliance with this TB by e-mail or datafax to the Logistical point of contact listed in paragraph 16b no later than 10 July 2000. Report quantity inspected by condition code and the resulting condition code. Report by e-mail or datafax. Provide local point of contact.

e. The following forms are applicable and are to be completed in accordance with DA PAM 738-751, 15 March 1999.

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 2408-14, Uncorrected Fault Record.

(4) DA Form 2408-15, Historical Record for Aircraft.

(5) DD Form 1575/DD Form 1575-1, Suspended Tag/Label – Material (Color Brown). Annotate Remarks Block with "Suspended IAW TB 1–1520–238–20–107."

(6) DD Form 1577/DD Form 1577–1, Unserviceable (Condemned) Tag/Label – Material (Color Red). Annotate Remarks Block with "Suspended IAW Message AH-64-00-ASAM-11 and mutilated IAW TM 1-1500-328-23.

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

16. **Points of Contact**.

a. Technical point of contact for this TB is Larry Powitzky, AMSAM-RD-AR-E-I-P-A, DSN 897-4801 or commercial (256) 313-4801, datafax DSN 897-4923 or (256) 313-4923, e-mail lawrence.powitzky @redstone.army.mil.

b. Logistical points of contact for this TB –

(1) Steve Hayes, SFAE-AV-AAH-LF, DSN 897-4245 or commercial (256) 313-4345, datafax DSN 897-4343 or commercial (256) 313-4343, e-mail steve.hayes@peoavn.redstone.army.mil.

(2) Jim Mason, SFAE-AV-AAH-LF, DSN 897-4242 or commercial (256) 313-4242, datafax is DSN 897-4343 or commercial (256) 313-4343, e-mail jim.mason@peoavn.redstone.army.mil.

c. Forms and records point of contact for this TB is Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or commercial (256) 876-5564, datafax DSN 746-4904 or commercial (256) 876-4904, e-mail waldeck-ab@redstone.army.mil.

d. Safety points of contact for this TB –

(1) Primary – James Hanson, AMSAM-SF-A, DSN 897-2113 or commercial (256) 313-2113, datafax 897-2111, e-mail jim.hanson@redstone.army.mil.

(2) Alternate – Howard Chilton, AMSAM-SF–A, DSN 897-2068 or commercial (256) 313-2068,

datafax DSN 897-2111 or commercial (256) 313-2111, e-mail howard.chilton@redstone.army.mil.

e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact one of the following points of contact (Huntsville, AL, is GMT minus 6 hours) –

(1) CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681, e-mail joseph.wittstrom@redstone.army.mil

(2) Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0868 or commercial (256) 313-0868, datafax DSN 897-0411 or commercial (256) 313-0411, e-mail ronnie.sammons@redstone.army.mil.

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

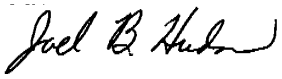
17. **Reporting Errors and Recommending Improvements.** You can improve this TB. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Mail a letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898–5230. You may also submit

your recommended changes by e-mail directly to ls-lp@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

Official:

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



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0018201

DISTRIBUTION:
To be distributed in accordance with Initial Distribution No. (IDN) 313918, requirements for TB 1-1520-238-20-107.

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: <mpmt%avma28@st−louis−emh7.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.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER	SIGN HERE

TEAR ALONG PERFORATED LINE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

THE METRIC SYSTEM AND EQUIVALENTS

'NEAR MEASURE

. Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
1 Kilometer = 1000 Meters = 0.621 Miles

'VEIGHTS

Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
1 Kilogram = 1000 Grams = 2.2 lb.
1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

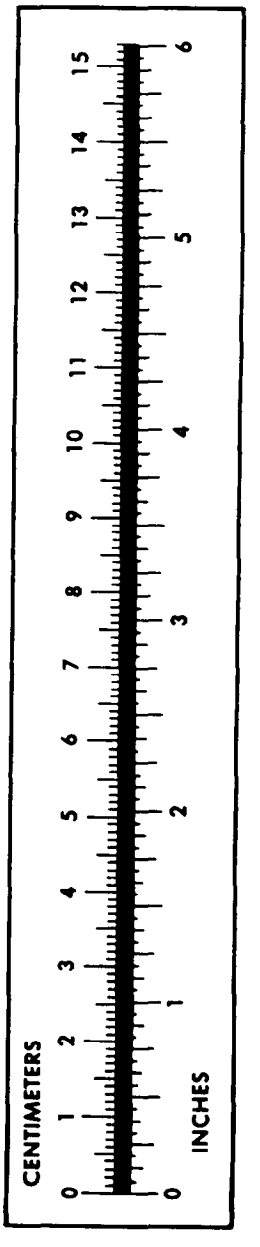
TEMPERATURE

5/9(°F - 32) = °C
212° Fahrenheit is evuivalent to 100° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
32° Fahrenheit is equivalent to 0° Celsius
9/5C° + 32 =°F

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
ıts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
lometers per Liter	Miles per Gallon	2.354
meters per Hour	Miles per Hour	0.621



PIN: 078243-000