#### **URGENT**

#### DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

# ONE-TIME INSPECTION OF SHEAR PIN ACTIVATED DECOUPLER (SPAD) PIN, MS9462-05(6), ON AH-64 HELICOPTERS

# Headquarters, Department of the Army, Washington, D. C. 15 December 1996

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

#### NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

## 1. Priority Classification. Urgent

- a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB) the condition status symbol of the cited aircraft will be changed to a **red** "-" The **red** "-" will be cleared when the inspection of paragraph 8 below is completed. Failure to comply with the requirements of this TB will cause the status symbol to be upgraded to a **red** "x".
  - b. Aircraft in Depot Maintenance. Perform inspection prior to release of aircraft.
  - c. Aircraft Undergoing Maintenance. Perform inspection prior to release of aircraft.
  - d. Aircraft in Transit.
    - (1) Surface/Air Shipment. Same as la.
    - (2) Ferry Status. Same as la.
  - e. Maintenance Trainers (Category A and B). N/A.
  - f. Component/Parts in Stock. N/A.
- 2. Task/Inspection Suspense Date. Next 250-hour phase inspection.
- 3. Reporting Compliance Suspense Date. N/A.

### 4. Summary of the Problem.

- a. MDHS has identified a lot of suspect copilot collective SPAD assembly in which a longer pin (MS9462-06) was installed where pin MS9462-05 is required. The longer pin (MS9462-06) may interfere with the function of the SPAD assembly. The longer pin does not interfere during normal movement of the control system.
- b. The purpose of this TB is to inspect AH-64A aircraft affected and to replace the MS9462-06 pin, if installed, with the MS9462-05 pin.

<sup>\*</sup>This TB supersedes TB 1-1520-238-20-82 dated 14 October 1996.

**5. End Items to be inspected**. AH-64A Aircraft

S/N 90-0489 through 92-0500 (PV-816 through PV-827) S/N 90-0502 through 90-0516 (PV-829 through PV-843) S/N 90-0518 through 90-0522 (PV-845 through PV-849) S/N 90-0112 (PV-850)

 S/N 90-0112
 (PV-850)

 S/N 90-0113
 (PV-851)

 S/N 92-0498
 (PV-855)

 S/N 92-0499
 (PV-856)

#### 6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Support Assembly,	7-311513001-7	1560-01-269-2726
Collective Stick,		
Copilot/Gunner (CPG)		

#### 7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Pin, Straight, Headed	MS9462-05	5315-00-548-4809
Pin, Straight, Headed	MS9462-06	5315-01-190-4186
Washer, Flat	AN960KD4	5310-01-168-0882
Washer, Flat	AN960C4L	5310-00-595-6425

#### 8. Inspection Procedures.(Per reference 13.a, except as noted).

#### **NOTE**

#### MS9462-05 pin is 0.453-inch long, and MS9462-06 pin is 0.516-inch long.

- a. Remove CPG door (paragraph 2.54).
- b. Remove CPG seat (paragraph 2.161).
- c. Remove CPG collective stick cover (paragraph 11.44).
- d. CPG Collective SPAD Inspection.
  - (1) Remove lower bolt from CPG collective control position LVDT (paragraph 11.202.3.a (3)).
- (2) Measure the MS9462-05 or -06 pins (reference 13.b, figure 599, item 7). Use outside caliper (NSN 5260-00-229-3049 or equivalent).
  - (a) If a MS9462-06 pin (length = 0.516 inch) is installed, replace in accordance with paragraph 9 below.
  - (b) If a MS9462-05 pin (length = 0.453 inch) is installed, proceed to paragraph 9.m below.

#### 9. Correction Procedures. (Per reference 13.a, except as noted).

- a. Remove CPG collective shear pin (paragraph 11.43).
- b. Remove CPG collective stick (paragraph 11.20).
- c. Remove CPG collective stick cylinder (paragraph 11.40).
- d. Remove CPG collective LVDT (paragraph 11.204).
- e. Remove CPG collective stick support assembly (paragraph 11.41).

f. Remove incorrect pins (MS9462-06) and washers (AN960KD4) (paragraph 11.42.3.e and f, items 21 and 27).

#### **NOTE**

Ensure washers, AN960C4L (0.016 inch thick) are installed.

- g. Install correct pins (MS9462-05) and washers (AN960C4L).
- h. Install CPG collective stick support assembly (paragraph 11.41).
- i. Install CPG collective LVDT (paragraph 11.204).
- j. Install CPG collective stick cylinder (paragraph 11.40).
- k. Install CPG collective stick (paragraph 11.20).
- I. Install CPG collective shear pin (paragraph 11.43).
- m. Install CPG collective stick cover (paragraph 11.44).
- n. Install CPG seat (paragraph 2.161).
- o. Install CPG door (paragraph 2.54).

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

- a. Parts Required. Reference paragraph 7.
- b. Requisition Instructions. Normal supply procedures.
- c. Bulk and Consumable. N/A.
- d. Disposition. N/A.
- e. Disposition of Hazardous Material. N/A.

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

#### 12. Application.

- a. Category of Maintenance Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM).
- b. Time Required.
  - (1) Total of 50 man-hours using one person.
  - (2) Total of 40 hours downtime for one end item.

#### 13. References.

- a. TM 1-1520-238-23, 16 May 94.
- b. TM 1-1520-238-23P, 28 May 96.

#### 14. Recording and Reporting Requirements.

- a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this TB on DA Form 2408-13-1 on all subject MDHS aircraft, forward a priority message, datafax or E-Mail to technical point of contact in paragraph 16.a.
  - b. Task/Inspection Reporting Suspense Date (Aircraft). N/A.
  - c. Reporting compliance suspense date (Spares). N/A.
  - d. Task/Inspection Reporting Suspense Date (Spares). N/A.
  - e. TB Effectivity Date. TB is effective until 15 December 1998.
  - f. The following forms are applicable and are to be completed in accordance with DA PAM 738-751,15 June 1992:
    - (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.

# 15. Weight and Balance. N/A.

#### 16. Points of Contact.

- a. Technical point of contact for this TB is Mr. Daniel Rice, AMSAT-R-EIA, DSN 693-9870 or commercial (314)263-9870; datafax DSN 693-1622. E-mail address is: riced@avrdec.army.mil.
- b. Logistical point of contact for this TB is Mr. Jim Mason, SFAE-AV-AAH-LF, DSN 693-1947 or commercial (314)263-1947 or Mr. John Patton, SFAE-AV-AAH-LF DSN 693-0876 or commercial 314/263-0876.
- c. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or commercial (314)260-2318.
- d. Material Management point of contact (Spares) for this message is Mr. Tulles Samples, AMSATI-SAAA, DSN 693-5969. Datafax is DSN 693-5936 or Commercial 314/263-5936.
- e. Safety point of contact for this TB is Mr. Howard Chilton, AMSAT-R-X, DSN 693-1587 or commercial (314)263-1587.
- f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact Mr. Ron Van Rees, AMSAT-D-S, DSN 693-7844/3216 or commercial (314) 263-7844/3216; DSN 693-2917. St. Louis is GMT-6.
- g. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/7 or commercial (314)263-2066/7.
- 17. Reporting of Errors and Recommending Improvements. You can help 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 Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you. You may also submit your recommended changes by E-mail directly to <mpmt/oavma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual.

By Order of the Secretary of the Army:

Official:

JOEL B. HUDSON Acting Administrative Assistant to the Secretary of the Army 02818

DENNIS J. REIMER General, United States Army Chief of Staff

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# THE METRIC SYSTEM AND EQUIVALENTS

#### Linear Measure

1 centimeter = 10 millimeters = .39 inch 1 decimeter = 10 centimeters = 3.94 inches 1 meter = 10 decimeters = 39.37 inches 1 dekameter = 10 meters = 32.8 feet 1 hectometer = 10 dekameters = 328.08 feet 1 kilometer = 10 hectometers = 3.2808.8 feet

#### Weights

1 centigram = 10 milligrams = .15 gram 1 decigram = 10 centigrams = 1.54 grains 1 gram = 10 decigram = .035 ounce 1 dekagram = 10 grams = .35 ounce 1 hectogram = 10 dekagrams = 3.52 ounces 1 kilogram = 10 hectograms = 2.2 pounds 1 quintal = 100 kilograms = 220.46 pounds 1 metric ton = 10 quintals = 1.1 short tons

#### **Cubic Measure**

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu in. 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

#### Square measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. in.
1 sq. decimeter = 100 sq. centimeters = 15.5 inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 feet
1 sq. dekameter (are) = 100 sq. meters = 1.076.4 sq. ft.
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 hectometers = .386 sq. miles

#### Liquid Measure

1 dekaliter = 10 liters = 2.64 gallons 1 hectoliter = 10 dekaliters = 26.42 gallons 1 kiloliter = 10 hectoliters = 264.18 gallons 1 liter = 10 deciliters = 33.81 fl. ounces 1 centiliter = 10 milliliters = .34 fl. ounce 1 deciliter = 10 centiliters = 3 38 fl. ounces 1 metric ton = 10 quintals = 1.1 short tons

#### **Approximate Conversion Factors**

To change	То	Multiply by	To change	То	Multiply by
ınches	centimeters	2.540	ounce inches	newton-meters	.0070062
feet	meters	.305	centimeters	ınches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
sq. inches	sq. centimeters	6.451	kılometers	miles	.621
sq. feet	sq. meters	.093	sq. centimeters	sq. inches	.155
sq. yards	sq. meters	.836	sq. meters	sq. yards	10.764
sq. miles	sq. kılometers	2.590	sq. kilometers	sq. miles	1.196
acres	sq. hectometers	.405	sq. hectometers	acres	2.471
cubic feet	cubic meters	.028	cubic meters	cubic feet	35.315
cubic yards	cubic meters	.765	milliliters	fluid ounces	.034
fluid ounces	milliliters	29.573	liters	pints	2.113
pints	liters	.472	liters	quarts	1.057
quarts	liters	.946	grams	ounces	.035
gallons	liters	3.785	kılograms	pounds	2.205
ounces	grams	28.349	metric tons	short tons	1.102
pounds	kilograms	.454	pound-feet	newton-meters	1.356
short tons	metric tons	.907	•		
pound inches	newton-meters	.11296			

# Temperature (Exact)

PIN: 075022-000