

URGENT

TB 1-1520-238-20-116

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INITIAL AND RECURRING HYDRAULIC FLUID SAMPLING, ALL AH-64 SERIES AIRCRAFT

Headquarters, Department of the Army, Washington, D.C.
30 September 2002

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. Urgent.

NOTE

In accordance with AR 95-1, paragraph 6-6A, MACOM commanders may authorize temporary exceptions from TB requirements. Exceptions may occur only when combat operations or life or death matters are so urgent that during civil disasters or other emergencies they override the consequences of continued operations.

a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB), make the following entry on DA Form 2408-13-1 for cited aircraft. Enter a **red horizontal dash //--//** status symbol with the following statement: "Inspect in accordance with TB 1520-238-20-116 no later than 50 Flight hours. Clear the **red horizontal dash //--//** entry when the Inspection in paragraph 8 is completed. Affected aircraft shall be inspected as soon as practical but no later than 01 December 2002. Commanders who are unable to comply with these requirements within the specified time frame must upgrade the affected aircraft's status symbol to a **red //X//**."

b. Aircraft in Depot Maintenance. Aircraft will not be issued until they are in compliance with this TB.

c. Aircraft Undergoing Maintenance. Aircraft will not be released until they are in compliance with this TB.

d. Aircraft in Transit.

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

(2) Ferry Status. Same as paragraph 1.a.

This TB supersedes USAAMCOM Aviation Safety Message 251830, Jan 01 AH-64-01-ASAM-05.

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- e. Maintenance Trainers (Category A and B). Same as paragraph 1.a..
 - f. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves. Not applicable.
 - (1) Wholesale Stock. Not applicable.
 - (2) Retail Stock. Not applicable.
 - g. Components/Parts in Work (Depot Level and Others). Not applicable.
- 2. Task/Inspection Suspense Date.** Not applicable.
- a. For Aviation Ground Support Equipment (AGSE) complete the inspection within 30 days from receipt of TB 1-1520-238-20-116.
 - b. Refer to Paragraph 8 of this TB to complete the required inspection for all AH-64 series aircraft no later than 50 flight hours after receipt of this TB.

NOTE

The hydraulic test bench uses a built-in reservoir to introduce fluid into the primary and/or utility hydraulic system.

- c. For hydraulic ground support equipment and the hydraulic test bench, complete the inspection within 30 days from receipt of TB 1-1520-238-20-116.
- 3. Reporting Compliance Suspense Date.** Report compliance in accordance with paragraph 14.a. no later than 01 December 2002.

4. Summary.

- a. The Army Safety Action Team (ASAT) directs that hydraulic fluid be added immediately to all army aircraft not included in the AOAP.
- b. For manpower/downtime and funding impacts refer to paragraph 12 of this TB.
- c. The purposes of this technical bulletin (TB) are as follows:
 - (1) To require immediate hydraulic fluid sampling of all ground hydraulic power units (with reservoirs) used to support all AH-64 aircraft. Change sampling intervals for the AGPU to 30 days.
 - (2) To require initial hydraulic fluid sampling of both the utility and primary systems for all AH-64 series aircraft under the AOAP, and establish recurring hydraulic fluid sampling every 50 flight hours.
 - (3) Change current bleeding procedures in TM 1-1520-238-23, paragraph 1.35, and TM 1-1520-Longbow/Apache Interactive Electronic Technical Manual (IETM).

5. End Items To Be Inspected. All AH-64 aircraft and associated ground support hydraulic power units.

6. Assembly Components To Be Inspected. Not applicable.

7. Parts To Be Inspected. Not applicable.

8. Inspection Procedures.

- a. Refer to the following general instructions for taking hydraulic fluid samples of the aircraft and associated ground support equipment (AGSE):
 - (1) Collect samples using 3-ounce AOAP plastic bottle.
 - (2) Remove dirt and all other external contaminants from the sampling point and all hardware connections by rinsing with 15-ounce electron spray can, NSN 6850-01-371-8084 or equivalent environmentally acceptable solution. Wipe dry using lint-free cloth, NSN 830-01-125-0725.

NOTE

- Sampling points, hoses, and connections that have not been adequately cleaned prior to use may produce erroneous test results and an unnecessary rejection of a system under test.
- Prior to taking a sample, operate the system being tested (15 to 30 minutes) to obtain a representative system contamination level.

(3) Initiate flow of fluid being sampled using appropriate means; and allow initial quantity (approximately 3 ounces) to flow into waste receptacle to flush away contaminants in sampling line and contaminants produced by mechanical operations.

(4) Without interrupting fluid flow, place 3-ounce AOAP sample bottle under fluid stream and partially fill bottle (approximately 1/4-inch from bottom then stop flow.

(5) Cap bottle and shake contents vigorously, then remove cap and drain contents into waste receptacle.

(6) Repeat steps 3 through 5 to rinse bottle and proceed to step 7.

(7) Initiate the flow of fluid again and allow initial quantity to flow into waste receptacle.

(8) Without interrupting flow, place rinsed bottle under fluid stream and fill to top shoulder leaving about 1/2 -inch air space at top of bottle.

(9) Remove sample bottle from stream and terminate fluid flow.

(10) Visually check sample for evidence of water or particulate contamination and look for discolored, red, or milky color.

(a) If contaminants are not noted, proceed to step 8.a. (11) to continue sampling.

(b) If visible contamination is noted, again collect sample using steps 8.a.(3) through 8.a.(9).

(c) If contamination is not noted after re-sampling, proceed to step 8.a.(11).

(d) If visible contamination is noted, perform corrective actions in accordance with paragraph 9 before submitting sample.

(11) If sample appears uncontaminated, install cap and wipe off residual fluid from bottle surface.

(12) Label sample bottle and affix tag identifying system (primary or utility) or ASGE sampled.

NOTE

Data gathered from samples, after analysis by an AOAP laboratory, will determine the future inspections or corrective action required for restoring aircraft in service.

(13) Send samples to Unit AOAP Laboratory for analysis via shipping sack, NSN 8125-00-837-7754.

(14) After sample is properly submitted for analysis, **red horizontal dash//--//** may be cleared.

(15) Upon notification by AOAP Laboratory that second hydraulic sample is contaminated, aircraft flight status must be changed to **red //X//** and procedures found in paragraph 9 must be performed.

b. Auxiliary Ground Power Unit (AGPU) Sampling Procedures:

NOTE

- When sampling other types of ground hydraulic servicing equipment, the procedures in TB 1-1520-238-20-116 may be modified or tailored to fit specific equipment.
- The initial Auxiliary Ground Power Unit hydraulic fluid sampling is performed upon receipt of TB 1-1520-238-20-116. Recurring samples should be taken every seven days after the initial sample is obtained.

(1) Inspect AGPU reservoir vent dryer to ensure desiccant is minimum of 25 percent blue color; and if level is lower, replace with new desiccant, NSN 6650-00-680-2233.

(2) Inspect AGPU accessories to ensure that set of 30-foot pressure and return hoses, two sets of 10-foot pressure hoses, return and adapter hoses for AH-64 aircraft, and dual service manifold hoses are available and serviceable.

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(3) Ensure that all hydraulic hose connectors on AGPU hydraulic control panel; dual service manifold; and hoses are protected from contamination using a cap or plug.

(4) Remove dual service manifold from storage in AGPU and place on large drip pan or other clean surface at location about 30 feet away from AGPU hydraulic control panel.

NOTE

Inspect each hose coupling for observable contamination and wipe clean prior to making the connection. Connect the removed plugs to removed caps at each connection.

(5) Connect hoses to dual manifold in accordance with TM 55-1730-229-12, paragraph 2-7.

NOTE

Operation of the Auxilliary Ground Power Unit (AGPU) shall only done by trained, qualified operators. Refer to the instruction plate located on hydraulic control panel door for important setup and shutdown procedures for the AGPU hydraulic system.

(6) Perform hydraulic system self-filtering and purging operation in accordance with TM 55-1730-229-12, paragraph 3-0.

(7) Immediately following shut down, take sample from system drain connector on AGPU hydraulic control panel by opening reservoir drain valve. Refer to paragraph 8.a of TB 1-1520-238-20-116.

(8) Recurring 30-day samples may be taken from reservoir drain fitting without operating AGPU.

c. AH-64A and AH-64D Hydraulic Fluid Sampling Procedures.

NOTE

- The initial and recurring aircraft hydraulic fluid sampling is performed only after ensuring that the Auxilliary Ground Power Unit (AGPU) is not contaminated. Recurring hydraulic fluid samples shall be taken every 50 flight hours.
- Hydraulic samples shall be taken within 15 minutes following engine shutdown following flight or suitable 15 to 30 minute Auxilliary Power Unit (APU) run.
- Additional hydraulic fluid samples are required after removal of any major hydraulic component (such as the main hydraulic pump, servocylinder, or manifold). Replacing O-rings or opening quick-disconnects does not require a sample.

(1) Utility Hydraulic Fluid Sampling Procedures:

(a) Open door R325 and attach hydraulic sample tool (AH64HDC) to utility return coupling on Ground Service Equipment (GSE) panel.

(b) Open valve and collect sample in accordance with paragraph 8.a. of TB 1-1520-238-20-116.

(c) remove sampling tool and reinstall protective cap on coupling and clean up spilled hydraulic fluid.

(d) Inspect reservoir for proper fluid level and service as required using TM 1-1520-238-23, task 1.34, or TM 1-1520-Longbow/Apache (IETM).

(2) Primary Hydraulic Fluid Sampling Procedures:

(a) Attach sampling tool to primary hydraulic return connector on GSE panel. Position bucket under primary reservoir drain to catch possible overflow.

CAUTION

The Auxilliary Power Unit (AGPU) must not be placed under a main rotor blade because the extreme heat from the AGPU exhaust can lead to main rotor blade damage.

(b) Position AGPU parallel to right wing tip in accordance with TM 1-1520-238-23, paragraph 1.72, or TM 1-1520-Longbow/Apache (IETM).

(c) Attach AGPU pressure line to primary ground pressure coupling in accordance with TM 1-1520-238-23, paragraph 1.72, or TM 1-1520-Longbow/Apache (IETM).

(d) Attach AGPU air hose to aircraft in accordance with TM 1-1520-238-23, paragraph 1.71, or TM 1-1520-Longbow/Apache (IETM).

(e) Operate AGPU as described in TM 55-1730-229-12, paragraph 2-6 to supply air; set up AGPU hydraulic system to apply 1000 psi; and switch hydraulic output to ON.

(f) Open sampling tool valve to initiate hydraulic fluid flow, and collect sample per paragraph 8.a.

(g) Switch AGPU hydraulic output switch to OFF and decrease pressure to 500 psi.

(h) Switch hydraulic power and AGPU pneumatic power switches to OFF positions.

(i) Make sure that lines are depressurized, and then disconnect and stow air hoses and high-pressure hydraulic lines.

(j) Disconnect sampling tool and install protective caps on both aircraft hydraulic ports and AGPU hoses. Clean all spilled hydraulic fluid.

(k) Inspect reservoir for fluid level and service as required in accordance with TM 1-1520-238-23, paragraph 1.34, or TM 1-1520-Longbow/Apache (IETM).

9. Correction Procedures

a. Contaminated Tested AGPU Sample.

(1) Open access panel R325 to gain access to GSE panel.

(2) Locate AGPU with dual hydraulic manifold that has been properly sampled and cleared for operation in accordance with paragraph 8.a. Ensure that reservoir is full.

(3) Position AGPU parallel to right wing tip in accordance with TM 1-1520-238-23, paragraph 1.72 or TM 1-1520-Longbow/Apache (IETM).

(4) Connect AGPU to aircraft primary and utility GSE connectors in accordance with TM 55-1730-229-12, paragraph 2-7.d; TM 1-1520-238-23, paragraphs 1.72 and 1.73 or TM 1-1520-Longbow/Apache (IETM).

(5) Connect hose to drain connector on AGPU dual service manifold, drain port and place opposite end of hose in clean 10-gallon (minimum) container. Any AGPU adapter hose can be used as drain hose by removing quick disconnect couplings at both ends.

(6) Ensure bypass/flush drain valves are closed.

CAUTION

Refer to the pilot/copilot gunner station accessing safety precautions prior to entering pilot's station. Heed all cautions and obey any instructions as presented in the appropriate manual.

(7) Enter pilot/copilot gunner station.

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(8) Apply external power to aircraft in accordance with the TM 1-1520-238-23 series manuals and the AH-64D Interactive Electronic Technical Manual (IETM).

(9) Visually inspect the 7-311120609 pivot spacers in accordance with the TM 1-1520-238-23, paragraph 1.70 or TM 1-1520-Longbow/Apache (IETM).

(10) Recheck AGPU reservoir fill level gauge on hydraulic control panel to verify that reservoir is full. Add fluid, as required.

(11) Open AGPU dual hydraulic service manifold drain valve, and drain utility manifold reservoir (approximately one gallon).

(12) In pilot/copilot gunners station, set emergency hydraulics switch to ON, and on AH-64D, set MFD to ENG-SYS.

(13) Move pilot's cyclic in small circular motion to deplete hydraulic fluid from emergency system.

CAUTION

Large cyclic movements may activate the Automatic Roller Detent Decoupler (ARDDS) on the AH-64D or shear pins on the Shear Pin Activated Decoupler (SPAD) on the AH-64A.

(14) When utility accumulator is depleted, set emergency hydraulics switch to OFF (approximately one gallon hydraulic fluid flushed).

(15) Set reservoir lever to AGPU, and on AGPU hydraulic control panel, set return/bypass lever to OFF.

(16) Set hydraulic power switch to ON, and turn pressure relief valve to MAXIMUM (clockwise).

(17) Set AGPU hydraulic pressure by placing pressure switch to INCREASE position until pressure reaches 3300 psig, as shown on pressure gauge.

(18) Turn AGPU pressure relief valve counterclockwise until gauge pressure drops slightly; then tighten lock nut.

(19) Set AGPU pressure switch to DECREASE until pressure gauge reads 3000 psig.

(20) Set AGPU hydraulic output switch to ON.

NOTE

The Auxilliary Ground Power Unit (AGPU) fluid level will decrease to between 1/2 and 1/3 full on the reservoir level gauge. Do not allow the reservoir level to decrease below 1/3 full (5 to 7 gallons flushed).

CAUTION

To avoid extensive damage to the Auxilliary Ground Power Unit (AGPU) do not allow the AGPU reservoir to become empty.

(21) While monitoring AGPU fluid, cycle flight controls (cyclic, collective, and pedals) five cycles each in accordance with hydraulic system bleed procedures in TM 1-1520-238-23, paragraph 1.35.ab. or TM 1-1520-Longbow/Apache (IETM).

(22) Shut off AGPU dual manifold to drain port.

(23) Cycle flight controls two additional cycles.

(24) Flushing is now complete.

(25) If required, perform bleed in accordance with TM 1-1520-238-23, paragraph 1.35, or TM 1-1520-Longbow/Apache (IETM).

NOTE

The “Y” hoses in paragraph 1.35 (mentioned in substep 25) above will be replaced with the dual hydraulic manifold type. The “Y” hoses are an authorized substitute if the dual hydraulic manifold type is not available. To drain the aircraft employing “Y” hoses, disconnect the return line at the Auxillary Ground Power Unit (AGPU) and allow the hydraulic fluid to drain into a 10-gallon bucket.

(26) Switch AGPU hydraulic output to OFF and decrease hydraulic pressure to 500 psi, then switch hydraulic power to OFF.

(27) While monitoring utility manifold reservoir level, move RETURN/BYPASS to BYPASS position until proper reservoir level is reached, then switch back to OFF position.

(28) Shut down AGPU and disconnect and store hoses and manifold.

(29) Perform primary and utility hydraulic maintenance operational check (MOC) in accordance with TM 1-1520-238-T or TM 1-1520-Longbow/Apache (IETM).

10. Supply/Parts and Disposition.

NOTE

The AH-64 Program Management Office (PMO) will furnish the hydraulic sample tools (See Figure 1) through the Logistics Assistance Office (LAR). If a LAR cannot be reached, contact the logistics point of contact (Refer to paragraph 16.b in this TB).

a. AH-64 Series Parts Required. (See Figure 1).

Part Number and/or NSN	Nomenclature	Quantity
AH64HST (AH64HDC)	Hydraulic Sampling Tool	1 Ea.

b. Bulk and Consumable Materials.

Part Number and/or NSN	Nomenclature	Quantity
4330-01-220-3020	Filter Element, Fluid (HP, 3-micron)	1 Ea.
4330-01-220-3021	Filter Element, Fluid (LP, 10-micron)	1 Ea.
6650-00-680-2233	Dessicant, Activated	1 Ea.
8125-00-933-4414	Bottle, Oil Sample	120 Ea.
8105-00-837-7754	Sack, Shipping	1000 Ea.
9150-01-009-7709	Fluid, Hydraulic, MIL-H-83282	10-gallon drum

c. Disposition of Hazardous material. In accordance with Environmental protection Agency (EPA) directives as implemented by environmental coordinator (AR-200-1).

11. Special Tools and Fixtures. Required. (See Figure 1.)

a. Parts Required.

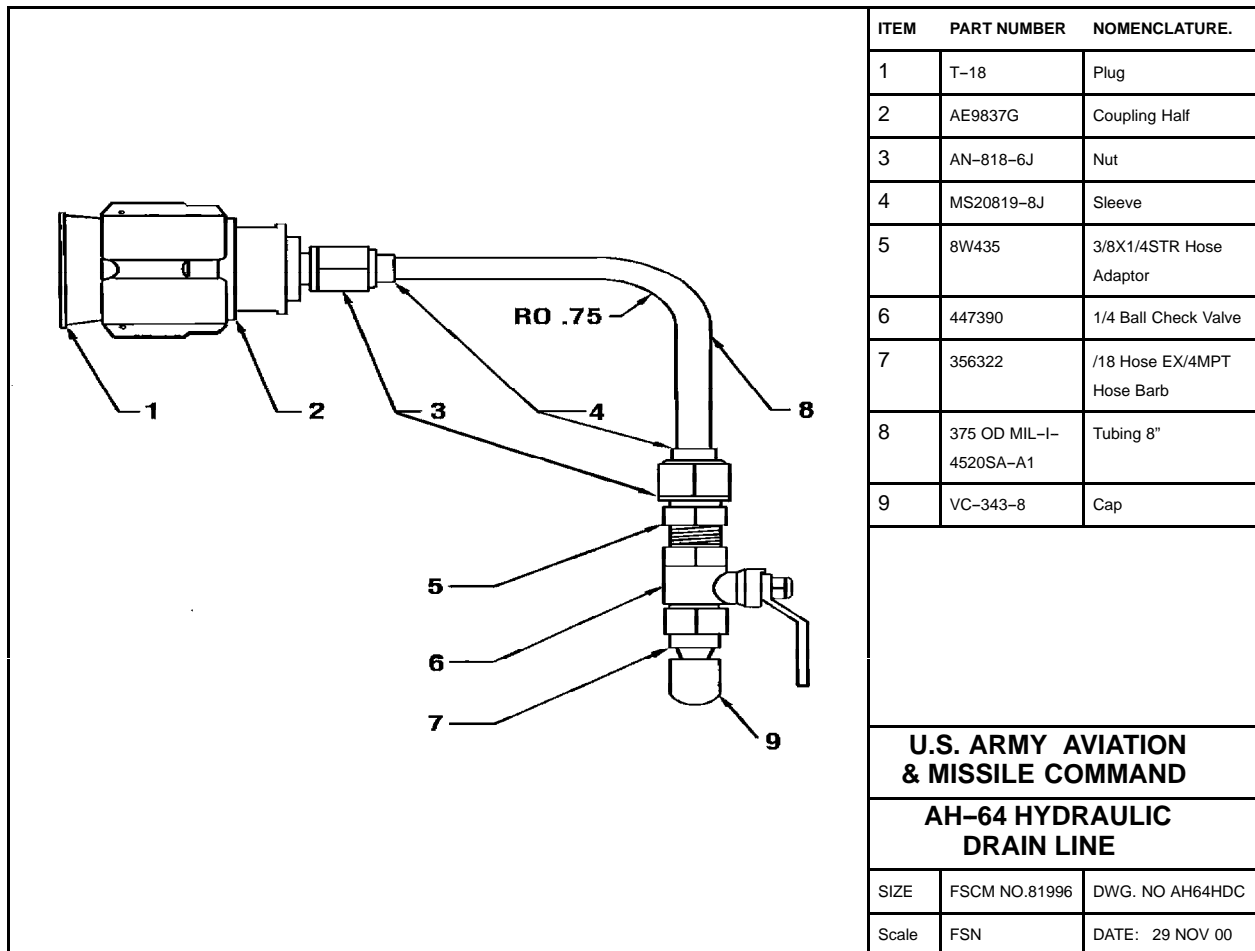


Figure 1. AH-64 Helicopter Hydraulic Drain Line

12. Application.

a. Category of Maintenance. AVUM. Aircraft down time will be charged to AVUM.

b. Estimated Time Required.

(1) To take aircraft sample.

(a) Total of 1.0 man-hour using 2 persons.

(b) Total of 0.5 Man-hour downtime per end item.

(2) Drain/Flush Aircraft

(a) Total of 3.0 man-hours using 3 persons.

(b) Total of 1.0 man-hour down time per end item.

c. Estimated Cost Impact to the Field. Not applicable.

d. TB/MWO to be Applied Prior to or Concurrently with This Inspection

e. Publications Which Require Change As a Result of This TB. The following publications shall be changed to reflect this TB. A copy of this TB shall be inserted in the appropriate publications as authority to implement the change until the published change is received.

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

(2) TM 1-1520-Longbow/Apache, Interactive Electronic Technical Manual (IETM) - CD No. 1, version 3.1.2, dated Jan 2002, CD date 1 Dec 2001 or subsequent.

(3) TM 55-1730-229-12 – Operator and AVUM, Towable Power Unit, Aviation Ground Unit. Multi Output GTED, Electrical, Hydraulic and Pneumatic

(4) TM 1-1500-204-23-2 – Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM) Manual for General Aircraft maintenance

(5) TM 1-1520-238-PM – Aviation Unit and Intermediate Phased Maintenance Inspection Checklist, 28 February 2002.

(6) TM 1-1520-238-23P – Aviation Unit and Intermediate Maintenance Repair Parts and Special Tools List for AH-64A Apache Attack Helicopter, 28 May 1996

13. References. -

a. Interactive Electronic Technical Manual (IETM) – TM 1-1520- Longbow/Apache IETM, CD No. 1, version 3.1.2, dated Jan 2002, CD date 1 Dec 2001 or subsequent.

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

c. TM 1-1520-238-PM – Aviation Unit and Intermediate Phased Maintenance Inspection Checklist, 28 February 2002 1992.

d. TM 1-1520-238-23P – Aviation Unit and Intermediate Maintenance Repair Parts and Special Tools List for AH-64A Apache Attack Helicopter, 28 May 1996

e. DA Pam 738-751, TAMMS-A – The Army Maintenance Management System – Aircraft

f. TM 55-1730-229-12 – Operator and AVUM: Towable Power Unit, Aviation ground Unit, Multi-Output GTED, Electrical, Hydraulic and Pneumatic

g. TM 1-1500-204-23-2 – Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM) Manual for General Aircraft Maintenance

14. Recording and Reporting Requirements.

a. Records and Reports.

The following forms are applicable and are to be completed in accordance with DA Pam 738-751, TAMMS-A:

NOTE

ULLS-A users will use applicable “E” Forms.

(1) DA Form 2407. Maintenance Request.

(2) DA Form 2408-13, Aircraft Inspection and Maintenance Record.

(3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

(4) DA Form 2408-13-2, Related Maintenance Actions Record.

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

15. Weight and Balance. Not applicable.

16. Points of Contact.

a. Technical Points of Contact for this TB are as follows:

(1) AH-64 Primary Point of Contact (POC): Daniel Rice, AMSAM-RD-AE-PA, DSN 897-7350 or 897-9853, Commercial (256) 705-9853, Datafax (256) 705-9918, e-mail: “jerome.smith@redstone.army.mil”.

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(2) Alternate POC: Stewart Block, AMSAM-RD-AE-P-S, Commercial, (256) 319-5213, Datafax (256) 705-9922, e-mail: "jerome.smith@redstone.army.mil".

b. Auxilliary Ground Power Unit POC: Jerome Smith, AMSAM-RD-AE-I-C-G, Commercial (256) 705-9858, datafax (256) 705-9918, email: "jerome.smith@redstone.army.mil".

c. Logistical Points of Contact for this TB are as follows:

(1) Primary POC: Wayne Fusselman, SFAE-AV-AAH-LF, DSN 897-4043, Commercial (256) 313-4043, Datafax DSN 897-4343 or Commercial (256) 313-4343, e-mail: "wayne.fusselman@peoavn.redstone.army.mil".

(2) Alternate POC: Mike Sharp, SFAE-AV-AAH-LF, DSN 897-4044, Commercial (256) 313-4044, Datafax DSN 897-4343 or Commercial (256) 313-4343, e-mail: "mike.sharp@peoavn@redstone.army.mil".

d. Forms and Records POC: Ann Waldeck, AMSAM-MMC-RE-FF, DSN (256) 746-4904, Commercial (256) 876-4904, e-mail: "ann.waldeck@redstone.army.mil".

e. Safety POC:

(1) Primary POC: Harry E. Turmbull (SAIC), AMSAM-SF-A, DSN 897-2095, Commercial (256) 313-2068, Datafax DSN 897-2111 or Commercial (256) 313-2111, e-mail: "harry.trumbull@redstone.army.mil".

(2) Alternate POC: Howard Chilton, AMSAM-SF-A, DSN 897-2068, Commercial (256) 313-2068, Datafax DSN 897-2068 or Commercial (256) 313-2111, e-mail: "howard.chilton@redstone.army.mil".

f. Foreign Military Sales (FMS) POC: (Huntsville, AL time is Central Time minus 6 hours.)

(1) Ronnie W. Sammons, AMSAM-SA-AS-Ut, DSN 897-0408, Commercial (256) 313-0408, Datafax DSN 897-0411 or Commercial (256) 313-0411, e-mail: "ronnie.sammons@redstone.army.mil".

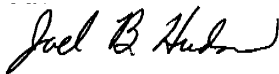
(2) After Hours Contact: AMCOM Command Operations Center (COC), DSN 897-2066 or DSN 897-2067, Commercial (256) 313-2066 or 3-3-2067.

17. Reporting of 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 your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the following address: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. You may also submit your recommended changes by e-mail directly to "2028@redstone.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:

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

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0225521

DISTRIBUTION:

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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).