

Headquarters
U.S. Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
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*Fort Knox Reg 750-1

Maintenance of Supplies and Equipment

PROCEDURES FOR OBTAINING SUPPORT MAINTENANCE SERVICES

Summary. This regulation establishes external policies and procedures for the Directorate of Base Operations Support, Equipment Maintenance Division.

Applicability. This regulation is applicable to all on-post Table of Organization and Equipment/Table of Distribution and Allowance(s) (TOE/TDA) organizations/activities and off-post organizations and activities satellited on the installation for Direct Support (DS)/General Support (GS) Maintenance.

Suggested improvements. The proponent of this regulation is the Directorate of Base Operations Support (DBOS). Users are invited to send suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to CDR, USAARMC and Fort Knox, ATTN: ATZK-OSM, Fort Knox, Kentucky 40121-5000.

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*This regulation supersedes USAARMC Reg 750-1, 18 April 1990

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Chapter 1
General

1-1. References. See appendix A.

1-2. Policies.

a. Maintenance is a command responsibility.

b. Maintenance operations will be performed by the lowest category of maintenance activity with the capacity, capability, and authority to perform the work.

c. Each maintenance action will be rigorously assessed on a continuous basis by commanders and support managers to determine the most expeditious and economical means of repair. Operational Readiness Float (ORF) exchanges will be executed to the maximum practical extent. Repair part requirements will be examined in every case for possible satisfaction at the cannibalization point. Other sources which should be considered are controlled exchange (AR 750-1, para 4-43 and 4-44), fabrication (AR 750-1, para 4-7, c(12)), and local procurement.

1-3. Concepts.

a. The Fort Knox support maintenance mission is under the technical control of the Directorate of Base Operations Support (DBOS) and the Installation Maintenance Officer (IMO).

b. The DBOS Equipment Maintenance Division's primary goals are to maintain mission-capable equipment through proper organizational maintenance procedures, reduce down-time at the support levels, and provide training opportunities for supported units.

1-4. Objectives.

a. To identify maintenance activities with assigned missions.

b. To establish standard external operational procedures for all maintenance activities.

c. To assist all current and future customers in obtaining support maintenance services.

d. To assist all customers in developing and maintaining an effective and efficient maintenance program.

1-5. Responsibilities. A list of customer support shops and activities is attached at appendix B.

Chapter 2

Maintenance Services and Requests

2-1. General. This chapter establishes the general guidelines for requesting maintenance services from any maintenance activity on Fort Knox.

2-2. Support Assignments.

a. All organizations at Fort Knox receive their Direct Support (DS) and General Support (GS) level maintenance from the DBOS Equipment Maintenance Division.

b. Units normally not supported by DBOS Equipment Maintenance Division should contact the IMO for instructions (phone 624-2145) on obtaining support.

2-3. Accountability (Submission of Work Requests).

a. All equipment and materials accepted by support maintenance activities will be accompanied by an Unit Level Logistics System (ULLS) diskette or a DA Form 2407 (Maintenance Request), and equipment records, as applicable, prepared and maintained in accordance with DA Pam 738-750. Commercial type equipment to be repaired by DBOS Equipment Maintenance Division must contain the statement "This is the property of the U.S. Government" in block 25 of the maintenance request and signed by Property Book Officer or representative. The organization will be provided a signed receipt copy of DA Form 2407 for each item accepted for repair by a Support Maintenance Activity.

b. Each unit will designate three responsible individuals to sign the DA Form 2407 requesting maintenance support and to receipt for items when repair is completed. DA Form 1687 (Signature Card) in three copies, listing names of the individuals designated, will be submitted to the Production Control Section, DBOS Equipment Maintenance Division, Bldg. No. 2778. These cards will be updated annually, or more frequently, as personnel changes occur. The signature card will be automatically purged from the file by DBOS Equipment Maintenance Division 1 year from issue date.

c. Service tickets provided by vendors for contract work performed will be forwarded to DBOS Equipment Maintenance Division immediately after service is performed. It is important that a responsible person be designated on the signature card to handle these transactions. For more information, contact the Production Control Clerk, DBOS Equipment Maintenance Division, phone 624-6230.

2-4. Evacuation of Equipment for Repair or Turn-In. Unserviceable equipment which is beyond the maintenance authority, capability, or capacity of the owning unit/user will be evacuated immediately to support maintenance.

a. All organizational maintenance faults (deficiencies and shortcomings) will be corrected before any equipment is evacuated to support maintenance. The following exceptions are permitted:

(1) The specific instances where the organizational fault would normally be corrected during the performance of the required support maintenance.

(2) The owning unit does not have the capacity or capability to correct the fault and a statement to that effect is signed by the battalion commander. The statement should be specific.

(3) NOTE: The term "corrected" is defined as:

(a) Repair has been accomplished.

(b) Required repair parts are not immediately available but are on valid requisitions. Owning units that receive parts from the supply system for equipment that has been evacuated to support maintenance for repair will contact the Production Control Section/Shop Office to determine if parts are needed. The above exceptions do not relieve organizations from responsibility for their level of maintenance. The objective is for the organizations and DBOS Equipment Maintenance Division to work together to ensure equipment is operational. The DBOS Equipment Maintenance Division may require the customer units to replace/furnish parts, to provide labor to assist with the maintenance, cleaning, lubrication, etc., or on-the-job-training (OJT) in cases where organizational maintenance could not be accomplished because of untrained personnel.

b. Vehicles will have all Basic Issue Items (BII) removed before evacuation. Fire extinguishers, main armament, and installed fire control equipment will remain on the equipment.

c. Serviceable and unserviceable repairable equipment evacuated for repair or turn-in will be preserved and protected as directed by AR 750-1, para 4-43. Unit personnel will be required to have protective materiel when picking up above type items. Known salvage items and materiel will not require cleaning or preservation but must be protected from further damage. When serviceable/unserviceable items have damage due to unprotected transportation or other damage that is obviously not fair wear and tear, the receiving support activity will not accept the

item unless it is accompanied by a statement signed by the unit commander indicating action is being taken under AR 735-5.

2-5. Technical Inspection (TI) for Turn-in. Equipment requiring inspection before turn-in, per Fort Knox Reg 700-1, will be submitted only to the DBOS Equipment Maintenance Division on DA Form 2407, specifying "TI for turn-in" in block 25. Applicable Technical Manuals (TM), Technical Bulletins (TB), and other written guidance will be followed. In those cases where large quantities of an item are involved or the equipment must be installed to be operated, arrangements for on-site inspection may be made by contacting the following teams:

- | | |
|---------------------------------------|----------|
| a. Field Contact (Track Construction) | 624-7975 |
| b. Wheel Vehicle Inspection | 624-5533 |
| c. Electric/Commo | 624-3334 |
| d. Armament | 624-7876 |
| e. Small Arms | 624-6522 |

2-6. Equipment Involved in Accidents.

a. Accidents will be reported immediately to the DBOS Equipment Maintenance Division, phone 624-5533, and the equipment involved will be held until inspected by personnel from DBOS Equipment Maintenance Division. During other than normal duty hours, units will notify the Installation Staff Duty Officer. Personnel will ensure that all equipment involved in the accident remains undisturbed, under guard, until cleared by a maintenance representative. All evidence will be preserved in as near the original state as possible pending investigation.

b. Accidents Involving Combat Vehicles.

(1) Accidents, fires, or malfunctions (wrecks, tube explosions, recoil malfunctions, etc.) involving track-laying vehicles will be reported immediately to the DBOS Equipment Maintenance Division, Bldg. No. 2770. The vehicle will be evacuated directly to Bldg. No. 2770 when released by the DBOS Equipment Maintenance Division inspector. During other than normal duty hours, units will notify the Installation Staff Duty Officer. The vehicle will be evacuated directly to DBOS Equipment Maintenance Division, Bldg. No. 2770, at the start of the next working day.

NOTE: Vehicle fires must be reported to the Post Fire Marshal immediately. Copy of fire investigation will be sent to DBOS Equipment Maintenance Division by owning unit.

(2) Accidents involving gun tube ramming will be reported to the DBOS Equipment Maintenance Division immediately. Vehicle will be evacuated to DS/GS maintenance repair facility when released by the inspector. Upon receipt, the gun mount and components will be disassembled and inspected for possible damage to components (recoil spring, piston, sleeve, seat, inertia valve, retaining ring, trunnion bearing, etc.). This action is necessary to ensure the gun is safe to fire. DS/GS repair facility will make necessary repairs and return vehicle to owning unit.

(3) Commanders will ensure that accidents are investigated and a surveying officer is appointed when necessary. Vehicle will be secured, and no parts or components will be removed or exchanged until released by the surveying officer or unit commander concerned.

c. To prevent damage to equipment components, under no circumstances will equipment with internal combustion engines be operated/started after being submerged. Upon recovery of submerged equipment and as soon as practical, equipment should be thoroughly cleaned and DBOS Equipment Maintenance Division notified to determine equipment disposition.

2-7. Estimated and Actual Cost of Damages:

a. When requested by the commanding, investigating, or surveying officer, estimated cost of damage (ECOD), actual cost of damage (ACOD), or estimated cost of loss will be furnished by the supporting maintenance unit. For customers and items supported by the DBOS Equipment Maintenance Division, technical assistance will be rendered to determine the apparent cause of mechanical failure. Request for this service will be submitted by informal memorandum to DBOS Equipment Maintenance Division stating type of certificate or assistance required, listing the serial number of the equipment, date manufactured, nomenclature of equipment, and point of contact (POC).

b. Customer units may obtain an ECOD by annotating "Estimated Cost of Damage Requested" in block 25, DA Form 2407, when an item is being surveyed. Repairs will not be made without the surveying officer's release.

c. When the item is no longer required for investigation or surveying purposes, the officer conducting the investigation or survey will provide support maintenance with a release statement. An example follows: "Damage to truck, 2 1/2 ton, serial number M12345, is being investigated per AR 735-5, Unit Supply Update, but vehicle is no longer required for investigation and is released for repair." (Includes signature block of the responsible or investigating officer.) Special attention must be given to the above requirement to ensure that repair action is not delayed.

d. Equipment delivered for repair which is involved in an investigation or surveying action, but an ECOD is not required, will be accompanied by a statement to that effect in block 25 of DA Form 2407.

e. If requested by investigating or surveying officer, the supporting maintenance unit will provide actual cost of repairs. Request must be made before repair completion.

2-8. Load Testing of Lifting Devices. Requirements for periodic safety inspections and load testing are prescribed in TB 43-0142. Load testing of lifting devices is not required except when equipment has undergone a major repair or modification, or when new and the manufacturer indicates that equipment has not been previously tested. Periodic inspection is required as indicated in the appendices of TB 43-0142. Installed lifting devices are the responsibility of the Facility Operations and Maintenance Division.

Chapter 3
Support Maintenance

3-1. Purpose. This chapter deals specifically with DS and GS maintenance services. In conjunction with chapter 2, it specifies policies and procedures to be followed by both customer and support maintenance. The DS services provided by DBOS Equipment Maintenance Division are covered in chapter 4.

3-2. Policies.

- a. As a general rule, organizational maintenance is the responsibility of the owning unit.
- b. Customer units will make every effort to submit equipment acceptable to DS in a timely manner.

3-3. Work Order Procedures. Customers will adhere to procedures listed below. The procedures apply to all customers.

- a. Prepare equipment for initial inspection. This includes cleaning, an inspection by organizational personnel, repair of known organizational faults, and the most specific diagnosis of the support level fault that is possible.

- b. Request for initial inspection/repair is accomplished by presenting an ULLS diskette or a DA Form 2407 completed per DA Pam 738-750. When the mechanic arrives to perform the initial inspection/repair of combat vehicles, vehicle records must be made available to maintenance personnel. This is to include daily DA Forms 2404.

- c. Initial inspections on combat vehicles are to be performed by personnel of the DBOS Equipment Maintenance Division and can be obtained by calling 624-7975. Inspections will be performed on site.

- d. Initial inspections on tactical wheel vehicles will be performed by Wheel Vehicle personnel at Bldg. No. 2770 by calling 624-5533, unless other arrangements are made with the IMO.

- e. Customer units are to prepare an ULLS diskette or a DA Form 2407 requesting repair. (NOTE: This may be the same DA Form 2407 that requested initial inspection if the item can be accepted for repair immediately.) Those units reporting per AR 220-1, Unit Status Reporting, will identify Equipment Readiness Code (ERC) A, items in block 25 with an "A" in red on the number 1 and 4 copies.

(1) When organizational faults have been satisfied (see para 2-4), present the DA Form 2407, applicable vehicle records, and the vehicle to the DS/GS maintenance shop for repair.

(2) A verification inspection will be conducted by DBOS Equipment Maintenance Division personnel before acceptance of the job order.

3-4. Special Instructions.

a. The DS personnel will not be required to perform organizational level repairs unless circumstances dictate and it has been agreed upon by the Installation Maintenance Officer.

b. Organizational faults which must be repaired before support level repair will be expressly limited to those affecting the support level repair. Also, faults which create an immediate safety hazard to anyone involved in the repair operation, including unit personnel which deliver and pick up the vehicle, or faults which would cause further damage to the item before completion of the support repairs, will be repaired.

c. Support personnel do not direct the accomplishment of investigations or surveys, except as stated in para 2-6. Support personnel are responsible for making recommendations and may request a release from the unit if doubt exists concerning fair wear and tear. See para 2-7 for instructions on ECOD and ACOD.

d. Customers will provide required securing device(s) for vehicles placed on job order. Vehicles equipped with laser range finders must be secured at all times.

e. Customer units will comply with DS instructions concerning all items/components required to stay with or be removed from the vehicle on job order. The general rule is to remove property book item and sensitive items requiring security. Repair parts are not to be removed solely for convenience of the DBOS Equipment Maintenance Division. There will be no stripping of equipment.

f. Units will be notified immediately when job is ready for pickup. Failure to pickup completed job within 24 hours will result in notification through the chain of command.

3-5. Contact Team and "Job Only" Repairs.

a. Customer units may request only a specific repair be accomplished. Normally, these repairs are done on site and require a contact team. If the contact team is unable to do the requested repair on site, the vehicle will be evacuated to the support shop for repair. These jobs are referred to as "job only."

b. In case the vehicle must be sent to support for repair, an acceptance inspection must be made by a qualified mechanic or inspector to assure vehicle is safe to operate, clean, and complete. Any missing items must be noted "missing" on the acceptance inspection.

c. Requests for these services should be directed to the following teams:

(1) Armament, 624-7876.

(2) Field Contact, 624-7975.

(3) Wheel Vehicle, 624-4688.

d. All contact requests are subject to acceptance by the DBOS Equipment Maintenance Division when approved by the Battalion/Regimental Maintenance Officer with signature in block 25 of DA Form 2407.

e. The DBOS Equipment Maintenance Division strives for quick turnaround on these requests. When they cannot be satisfied within 48 hours, the unit will be notified.

f. Customer units are encouraged to request contact teams, but there are a limited number of repairmen available for this type of job. Contact jobs should not be used to defer other maintenance requirements.

3-6. Scheduled Maintenance. See chapter 7.

3-7. Operational Readiness Float. See chapter 9.

3-8. Army Oil Analysis Program. See chapter 10.

3-9. Jobs Evacuated to the Installation Maintenance Activity.

a. Work requests for both combat or tactical vehicles which come directly from the units to DBOS Equipment Maintenance Division will follow the same sequence as outlined in para 3-3. However, organizational level repairs will not normally be deferred and DBOS Equipment Maintenance Division personnel will perform the verification inspection before acceptance.

b. Customer units unable to satisfy all organizational requirements stated in para 3-3a can have the battalion commander sign a statement in block 25 of DA Form 2407 stating the problem. The IMO, or a representative, will decide which organizational deficiencies will be repaired by DBOS Equipment Maintenance Division or returned to the organization (RTO) for repair later.

Chapter 4

Maintenance Division Repair Services

4-1. General. Equipment and material repair services provided by the DBOS Equipment Maintenance Division are identified in the following paragraphs.

4-2. Aircraft. Aviation Intermediate Maintenance (AVIM) is provided for all types of DA aircraft, related systems, and aircraft components by Aircraft Maintenance (Contractor), Bldg. No. 5222. The following special procedures apply:

a. The Aircraft Maintenance Branch (Contractor) will provide support and services on an inspect, repair, only as necessary (IROAN) basis, unless the units request a thorough, 100 percent inspection, at which time the total aircraft and records will be inspected.

b. When requesting equipment repairs and/or services, the unit must contact the Aircraft Production Control Section to verify space availability and/or scheduling. Requests (DA Form 2407) for time change components will be submitted 90 days or 100 flying hours before the actual estimated time the component change will be due. Processing of maintenance requests will be per DA Pam 738-750. When submitting aircraft or components on work request, the owning unit representative will:

(1) Remove loose equipment not required for flight before delivering aircraft to the maintenance facility.

(2) Ensure all components are properly tagged per DA Pam 738-751 and that all records and documents specified in DA Pam 738-750 are delivered with the equipment.

(3) Present DA Form 2407, to include any previously submitted deferred Maintenance Requests, to Production Control Section for edit and processing. Production Control Section will designate a Quality Control Representative to conduct an initial review and a joint inventory before departure of the unit representative. Results will be recorded on an inventory work sheet and signed by each unit representative.

c. The owning unit is responsible for performing a "Chart A" (DD Form 365A, Record of Weight and Balance) inventory before delivering aircraft to the support maintenance facility for weighing.

d. Tasks designated AVIM in the Maintenance Allocation Chart (MAC) will be accomplished before tasks identified as Aviation Unit Maintenance (AUM), unless directed otherwise by the Contracting Officer or the Contracting Officer's Representative (COR).

e. Customer units are responsible for providing current DA Forms 1687 (signature cards) for personnel authorized to submit maintenance requests to Aircraft Maintenance (Contractor). Only the unit commander, chief of the activity, or a designated representative will authenticate priority 01 through 08 requests.

f. Production Control Section will notify the owning unit by telephone as soon as all maintenance is complete and equipment is ready for pickup. The unit representative will:

(1) Furnish towing equipment unless the aircraft is to be flight delivered or prior arrangements have been made with Aircraft Maintenance (Contractor).

(2) Perform, at their discretion, a safety of flight inspection, Maintenance Operational Check (MOC), or test flight before accepting the aircraft. Any support maintenance or safety of flight discrepancy found at this time will be corrected as soon as possible. Failure to inspect and/or test fly repaired aircraft before acceptance will necessitate the submission of a separate maintenance request for any defects subsequently detected.

(3) When notified to transfer a specific aircraft, the owning organization will perform the required inspections as specified in TM 1-1500-328-23. All records, including DA Form 1352 (Army Aircraft Inventory, Status and Flying Time), will be updated and prepared per AR 700-138, and DA Pam 738-751. After completion of required inspections, the aircraft and records will be delivered to the Aircraft Maintenance Division (Contractor), for complete inventory of equipment as listed on DA Form 2408-17 (Aircraft Inventory Record). No authorized shortages will be permitted. When inventory of equipment has been satisfied, the unit property officer will prepare a DA Form 2765-1 (Request for Issue or Turn-In) and forward to the Installation Supply Officer, DBOS Supply Division.

4-3. Electronics and Communications. Tactical communication equipment, radios, audiovisual, cryptographic, teletype, radar, radiac, photographic equipment, projectors, interoffice communications systems, breathing apparatus, and testing and measuring instruments requiring repair will be turned in to the Electronic/Communication Equipment Repair Section (Elec Commo), Bldg. No. 2783, on DA Form 2407. On-site maintenance of the installed audiovisual equipment in Gaffey and Skidgel Halls is provided by the Elec/Commo Section. Avionics will be repaired by Aircraft Maintenance Branch (Contractor) in Bldg. No. 5222.

4-4. Fire Control and Instruments. Optical, mechanical, and electronic components of fire control systems requiring repair will be turned in to the Fire Control Section, Bldg. No. 2783, on DA Form 2407. On-site and on-vehicle repairs may be arranged telephonically with the Fire Control Section.

4-5. Machine and Welding. Units requiring machining, welding or refurbishing of repair parts, pumps, cylinders and rams, and repair of water valves and pumps will submit the requirement on DA Form 2407 to the Machine Shop Unit, Bldg. No. 98. Requests for fabrication normally will be accepted only after approval by the Installation Maintenance Officer and must be accompanied by a sample or drawing. Fabrication is reimbursable work. The Machine Shop will provide an estimate on the cost for fabrication based on drawings or model. The IMO, or a designated representative, can, on a case-by-case basis, make exceptions to this requirement.

4-6. Weapons. Pistols, rifles (machine guns), mounts, mortars, rocket launchers, and accessory equipment requiring repair will be turned in to Small Arms Shop, Bldg. No. 2783 on DA Form 2407.

4-7. Pickup of Equipment After Repair. Units will be notified when equipment is ready for pickup. Upon receipt of notification, a representative from the unit will report to directed pickup point with the receipt copy of DA Form 2407. Equipment will be receipted for within 1 working day after notification. In those cases where the receipt copy of DA Form 2407 has been lost or misplaced, the following statement, signed by the Unit Commander or Property Book Officer, must be presented: "The receipt copy for maintenance request preprinted number XXXXXX. Equipment Maintenance Division No. XXXXXX was lost or misplaced and if found will be destroyed." Equipment will be released only to those personnel designated on DA Form 1687.

Chapter 5

Maintenance Related Services

5-1. General. The DBOS Equipment Maintenance Division provides or coordinates a variety of services other than shop repair of equipment. The services provided and how to obtain these services are described in paragraphs below.

5-2. Technical Inspection Classification of Army Materiel. Customer units requesting Technical Inspection (TI) classification of Army Materiel with Recoverability Code (RC) "A" through "L" will submit a DA Form 2407 filled out per DA Pam 738-750 requesting TI and Classification. Materiel with RC "O" and "Z" is inspected and classified by the owning unit/organization except track and roadwheels, which will be inspected and classified only by inspectors approved and certified by the DBOS Equipment Maintenance Division IMO. Upon completion of inspection, the No. 4 copy of the DA Form 2407 will be stamped, properly coded, signed by two inspectors, and returned to the requesting unit/organization.

5-3. Certification of Inspectors to Conduct Technical Inspections (TI) and Classify Army Materiel. Customer units will submit an informal memorandum to the DBOS Equipment Maintenance Division IMO, Bldg. No. 2778, requesting certification of personnel to inspect and classify Army materiel with name, rank/grade, and type of equipment each inspector will inspect (i.e., automotive, turret, communications, etc.). Upon certification, a classification stamp will be furnished to requesting unit. An approved copy of personnel will also be furnished to requesting unit, DBOS Supply Division Installation Property Book Officer, and Defense Reutilization and Marketing Office Knox.

5-4. Cannibalization Point.

a. The Cannibalization Point is located immediately south of Bldg. No. 2770, in a fenced area. Access authorization to Cannibalization Point will be obtained from Wheel Vehicle Repair Team in Bldg. No. 2770. There must be at least two individuals to enter the Cannibalization Point to obtain any parts due to safety requirements.

b. The following procedures will be used by customers when obtaining repair parts from the Cannibalization Point:

(1) The customer unit representative (i.e., Army National Guard (ARNG), Army Reserve, Department of Army Civilian (DAC)) will be required to furnish the Cannibalization Point with one copy of the DA Form 1687, signed by the unit commander, before requesting admittance to the Cannibalization Point.

(2) Customer units will request all items required from the Cannibalization Point using a DA Form 2765-1. The form will contain complete nomenclature, TM reference, NSN when possible, manufacturer's part number when the NSN is not available, and any other available description data that will help identify the items being recovered. Organization document number and Department of Defense Activity Address Code (DODAAC) will be included per AR 710-2.

(3) Customer units will first attempt to satisfy demands for items source coded salvage, manufacture, or local purchase from the Cannibalization Point before taking other acquisition action. Only when not available from the Cannibalization Point will these items be requisitioned through normal supply channels.

(4) When an item is issued, the registration number of the vehicle it was removed from will be written on the DA Form 2765-1. The No. 1 and No. 2 copies will then be surrendered to the Cannibalization Point control clerk who will forward copy No. 1 to the Production Control Clerk; copy No. 2 will be placed in the appropriate vehicle file folder. Spot checks may be made of personnel leaving the Cannibalization Point to ensure all parts are being accounted for. All transactions will be conducted in the Cannibalization Point Office. In the case of unidentifiable items, the Supply Officer will govern accountability.

(5) If an item is not available, the DA Form 2765-1 will be marked "Not available" and returned to the customer.

(6) Major assemblies will only be issued to DS/GS maintenance activities in exchange for an unserviceable like item.

(7) Repair parts, components, and assemblies will be issued only to customers authorized to remove and install the requested item.

5-5. Calibration.

a. Test, Measuring, and Diagnostic Equipment (TMDE) requiring repair and/or certification of accuracy, as required by DA TM and/or TB, will be turned in to the U.S. Army TMDE Support Operation, Bldg. No. 1049, on AMXTM Form 34a (Request for Calibration).

b. The TMDE Calibration Master List will be provided to the supported unit/activity by the 20th day of each calendar month. This listing provides each unit/activity a master list by model number of items belonging to the unit which require calibration and/or repair per TB 43-180. Data on this listing must be verified against actual data recorded on the DA Label 80 (Calibrated Instrument Label) and data plate of each piece of equipment. Incorrect data on the listing will be

updated by recording the correct data immediately above the entry. The TMDE Master List will be authenticated by the unit coordinator. One copy of the list will be returned to the Installation TMDE Coordinator, Bldg. No. 1049, phone 624-5315, NLT the 5th day of the subsequent month. Unit will retain one copy of the updated listing until a new listing is received.

c. Commanders responsible for TMDE will designate, in writing, one individual as Unit Calibration Coordinator. The commander will provide name, telephone number of that individual, and the unit identification code (UIC) of the unit/activity for which responsible, along with a DA Form 1687, to the U.S. Army TMDE Support Operation. Commanders of units/activities owning TMDE that is not presently in the Calibration Recall System will identify, by physical inventory if necessary, all such equipment and report it to the Installation TMDE Coordinator.

d. Unit/Activity commanders will ensure that all TMDE is withdrawn from service at the time calibration is due, and turned in immediately to the U.S. Army Support Operation, Bldg. No. 1049. Equipment overdue for calibration will not be used.

e. The mailing address for calibration support is: U.S. Army TMDE Support Operation, ATTN: AMXTM-CE-LX-KN (Bldg. No. 1049), Fort Knox, KY 40121-5000, telephone number: COMM 624-5732/5315 or DSN 464-5732/5315.

Chapter 6

Vehicle Painting Policy and Procedures

6-1. General. Repainting of equipment for the sole purpose of achieving uniformity or for cosmetic purposes is prohibited by AR 750-1. Complete painting of combat, combat support, tactical wheeled vehicles, construction equipment, aircraft, and essential ground equipment will not be accomplished below the GS level of maintenance. Painting of equipment for special events must be approved by the IMO.

6-2. Painting at Unit Level. Painting at unit level using a brush or roller is limited to spot painting. Units are authorized one quart of each color Chemical Agent Resistant Coating (CARC) for spot painting. CARC may be used to spot paint over alkyd paint; however, alkyd paint will not be applied over CARC. Commercial Utility Cargo Vehicles (CUCV) are painted with high solids thermosetting acrylic enamel. CARC matches this enamel in color and can be applied directly over existing paint without surface preparation except cleaning. CARC is the only paint authorized for spot painting or repainting CUCV.

6-3. Painting of Equipment. Units requesting complete painting of equipment will submit request on DA Form 2407 to the Automotive Field Contact Section, Bldg. No. 2778, phone 624-7975 for combat and engineer equipment. Wheel vehicles will be inspected by Wheel Vehicle Inspection Section, Bldg. No. 2770, phone 624-5533.

- a. DBOS Equipment Maintenance Division personnel will inspect equipment to ensure it meets painting criteria as per AR 750-1, TM 43-0139, and TB 43-0242.
- b. Equipment accepted for painting will be assigned a work order number and will be either evacuated or placed on deferred maintenance. Production Control will schedule deferred maintenance painting and contact units when to evacuate their equipment.

Chapter 7

Scheduled Maintenance

7-1. General. Scheduling maintenance is an organizational function. The information contained in chapters 3 and 4 provides direction in obtaining any support maintenance assistance required. This section provides guidance on special procedures applicable to specific equipment.

7-2. Commercial Design Material Handling Equipment (MHE). Scheduled services and repair of commercial material handling equipment will be performed by the Material Handling Unit, DBOS Equipment Maintenance Division. Users of the MHE must maintain DD Form 314 as prescribed in DA Pam 738-750. When scheduled services are due or repairs required, the organization will deliver MHE, DA Form 2407, and DD Form 314 to the DBOS Equipment Maintenance Division, Bldg. No. 2770, for service and any needed repairs. Deviations from the above will be coordinated with the Production Control Section.

Chapter 8

Army Material Command Logistics Assistance Office

8-1. Purpose. LAO-Knox is chartered under the provisions of AR 700-4, Logistics Assistance Program (LAP) to provide logistics assistance support to Fort Knox, Kentucky and all Army Reserve Components in Kentucky, Ohio, Indiana, Michigan, Wisconsin, and Illinois.

8-2. Location. The LAO-Knox office is located in Bldg. No. 6570, Chamberlain Street, Fort Knox, Kentucky.

8-3. Responsibilities and Functions.

a. The LAO is a separate AMC worldwide Logistics Assistance Program (LAP) activity reporting to HQ, AMC. LAP will assist commanders with logistical problems that are beyond their resource capability to resolve. LAP assistance is provided to commanders in analyzing readiness, identifying problems, determining the responsibility for resolutions and, when appropriate, assisting with resolutions.

b. Identifies and reports logistic functions which have an adverse impact on readiness. This includes supply, maintenance, personnel, training, organization, systems and doctrine.

c. Provides commanders with a single point of contact for logistics assistance.

d. The assistance program provides a means for logistics support activity managers to identify materiel and logistics system problems in the field.

8-4. Method of Requesting Support. If your unit needs assistance, contact the LAO staff member. If the problem cannot be resolved by the LAO-Knox staff, action will be taken to get the problem to the right person or direct the right person to the unit's location. LAO will fully coordinate all visits to ARNG and U.S. Army Reserve (USAR) units with appropriate staffs. Normally, LAO will request an appointment with an agency by message and follow up with a phone call. When the unit tells LAO in advance that it is experiencing difficulties with maintenance or supply, the necessary arrangements will be made to bring along the expertise needed to resolve the problems.

8-5. AMC LAO-Knox. You may contact the AMC LAO-Knox Office at DSN 464-1291 or COMMERCIAL (502) 624-1291; FAX DSN 464-8326 or COMMERCIAL (502) 624-8326.

Chapter 9
Maintenance Float

9-1. General. An Operational Readiness Float (ORF) is maintained by the DBOS Equipment Maintenance Division per AR 750-1 and AR 710-2. Selected tactical vehicles, electronic and communications equipment, and avionics are available for exchange. A list of available items will be distributed to brigade commanders, IMO, DBOS, and MRC.

9-2. Use of ORF Assets.

a. As a matter of policy, an ORF exchange will be accomplished whenever there is a serviceable item available in the float and the NMC equipment will be nonavailable or 30 days or more. ORF exchanges required sooner may be issued upon approval of the IMO.

b. Customer units may decline to execute a float transaction. However, once requested, this declination will be in writing and signed by the battalion commander or a designated representative.

9-3. Procedures.

- a. Exchange equipment must be for like items (same line item number (LIN)).
- b. Equipment must be economically repairable.
- c. Equipment will be inspected by DBOS Equipment Maintenance Division personnel to ensure that item meets acceptance criteria.
- d. Equipment exchanged will be a property book transfer per AR 710-2 and must have the following documents prepared by the unit S-4:

- (1) DA Form 2407.
- (2) DA Form 2408-4.
- (3) DA Form 2408-9.
- (4) DD Form 1348-1A (Issue Release/Receipt Document).
- (5) DA Form 2765-1.

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e. The DBOS Equipment Maintenance Division will record each demand for ORF, as required by AR 750-1, para 4-391, for each ORF item that exceeds the normal turnaround time, whether satisfied or not.

f. Equipment meeting the above criteria can be exchanged by contacting the Maintenance Float Coordinator, DBOS Equipment Maintenance Division, phone 624-3308.

Chapter 10
Army Oil Analysis Program (AOAP)

10-1. General.

a. Participation in the AOAP is mandatory for all units owning equipment listed in DA Pam 738-750 and TB 43-0106. The AOAP is mandatory at all levels of maintenance operations for specified material, including overhaul for QA purposes. AOAP is an effective maintenance diagnostic tool and not a maintenance substitute. This directive provides procedures and instructions to be followed by all customers serviced by USAARMC and Fort Knox AOAP. It must not be interpreted to mean that AOAP minimizes, in any way, the need to employ good maintenance practices and strong maintenance discipline. The AOAP Laboratory is located in Bldg. No. 2770, Fort Knox, KY 40121-5000, DSN 464-6245/6537, Commercial (502) 624-6537.

b. The success and effectiveness of the AOAP is dependent upon the testing and analysis of reliable oil samples. A reliable oil sample is one which is truly representative of the circulated oil in the component being evaluated.

c. The AOAP Cycle:

(1) Unit/Activity.

(a) Pull oil sample and note on DA Form 2408-20.

(b) Accurately fill out the DD Form 2026/DA Form 5991-E (Oil Analysis Request) fill in label on the oil sample bottle, then hand-carry oil sample and DD Form 2026 to the AOAP Laboratory.

(2) AOAP Laboratory.

(a) Receive and analyze sample. If normal, stamp DD Form 2026/DA Form 5991-E, "Processed: Results Normal" and return to unit.

(b) Receive and analyze sample. If abnormal, stamp DD Form 2026/DA Form 5991-E, "Processed: Results Abnormal," inspect/repair, resample, change oil filter, etc. Notify immediately by telephone. Issue DA Form 3254-R (Oil Analysis Recommendation and Feedback) on maintenance recommendations. Return DA Form 3254-R and DD Form 2026/DA Form 5991-E to unit.

(3) Unit/Activity.

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(a) For normal results, DD Form 2408-20 is completed and DD Form 2026/DA Form 5991-E filed directly behind the DD Form 314.

(b) If results are abnormal, resample is taken and submitted to the laboratory, oil/filters are changed and resample submitted to laboratory, or DA Form 2407 is initiated and sent to DS along with DA Form 2408-20, DA Form 3254-R, and component.

(4) DS/GS Activity.

(a) Inspect and repair component. Change oil, replace/service oil filter. Send hot oil sample and completed DD Form 2026/DA Form 5991-E to AOAP laboratory after repair. Send completed DA Form 3254-R (with detailed explanation of repairs) to the AOAP Laboratory when component has been returned to a serviceable condition.

(b) Send a copy of DA Form 2407 and DA Form 2408-20 back with component to the unit.

10-2. Applicability.

a. This directive is applicable to all Active Army, Army Reserve, National Guard and other DOD activities/units (as directed by AMC, Logistics Support Activity) in the following states:

(1) Kentucky (east of a line from Owensboro to Bowling Green).

(2) Indiana.

(3) Ohio.

(4) Michigan.

(5) West Virginia.

b. The following equipment/components are currently in AOAP. (DA Pam 738-750 and TB 43-0106 list selected components. Other components may be added and announced by message. Be alert for changes.) Aircraft - all oil wetted components/engines.

(1) Aircraft - all oil wetted components.

(2) Combat Vehicles - engines, transmissions, and hydraulic systems.

(3) Tactical wheeled vehicles - HMMWV, 2 1/2 ton and above - diesel, multi-fuel engines, automatic transmissions, and hydraulic systems.

(4) Support equipment - Generators 15 KW and above, power units, compressors, pumps, diesel and gas turbine engines.

(5) Construction equipment - diesel engine, automatic transmissions, and hydraulic systems.

(6) MHE, 4,000 pounds and larger - diesel engines, automatic transmissions, and hydraulic systems.

(7) Locomotives - diesel engines.

(8) Watercraft - diesel engines and transmissions.

10-3. Objectives/Goals.

a. Improve equipment potential failures, reliability and readiness by early detection of potential failures.

b. Lower support costs by reducing the number of catastrophic failures and curtailing excessive component wear.

c. Enhance flight safety by providing an improved method of detecting impending component failures before actual failure.

d. Extend life cycle of major assemblies and components by diagnostic evaluation of used oil.

e. Provide a 24-hour or less response time for all samples taken from Army aircraft and a 72-hour response time for ground samples.

f. Reduce resources usage by conserving petroleum products by adhering to the On-Condition Oil Change (OCOC) policy (nonaeronautical equipment only).

10-4. Responsibilities.

a. Supported units: Commanders (activity directors) will designate, in writing, the unit maintenance officer as the AOAP monitor. Monitors are required at every level down to

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company/detachment. Copies of this appointment document indicating the individual's full rank, name, complete mailing address, DSN and commercial telephone numbers will be furnished to the AOAP, higher command Headquarters, and the Installation AOAP Monitor.

b. Commander/activity director has primary responsibility for ensuring:

- (1) Personnel in the units comply with AOAP policies and procedures.
- (2) Personnel training is conducted for equipment operators, maintenance personnel, and AOAP monitors.
- (3) Oil samples are submitted per sample interval established in DA Pam 738-750, chapter 4.
- (4) Prompt action is taken on laboratory recommendations. Instructions from the laboratory are followed explicitly in terms of resampling and repair of components.
- (5) Defective equipment is removed from service until appropriate corrective action has been completed.
- (6) The provisions of AR 735-5 are implemented when equipment damage occurs as a result of noncompliance with laboratory recommendations.
- (7) SOP is established for unit/activity. A copy of the SOP is furnished to the Installation AOAP Monitor.
- (8) DA Forms 2408-20 are initiated for each component requiring sampling and analysis results are recorded per DA Pam 738-750. Units/activities supported by the USAARMC and Fort Knox AOAP Laboratory will continue to use DA Form 2408-20 in place of the AOAP Laboratory Component History Report.
- (9) Maintenance feedback (interim and final) is supplied to the laboratory as required. DA Forms 3254-R are sent to the laboratory and DS unit when the unit/activity cannot perform the maintenance.
- (10) The unit/activity monitor is forwarding samples with a properly prepared DD Form 2026/DA Form 5991-E.
- (11) The sample is taken to the laboratory by courier on same day

(12) The AOAP Laboratory and Installation Monitor are notified of deployment. The unit/activity will be given instructions for oil analysis support.

(13) Oil changes conform with warranty requirements.

c. Brigade/Battalion/Activity AOAP Monitors will ensure:

(1) Unit has direct contact with the laboratory.

(2) Instructions and recommendations requested by the laboratory are complied with promptly.

(3) The Installation AOAP Monitor is provided with the primary and alternate AOAP monitor's name, organization, and telephone number.

(4) Equipment users and maintenance personnel are properly instructed in the techniques of drawing oil samples from equipment components and preparation of DD Forms 2026.

(5) Routine and special sampling requirements are accomplished per applicable regulations, this regulation, and instructions received from the Laboratory.

(6) The DD Form 2026/DA Form 5991-E contains complete, accurate information and accompanies every sample submitted (see figures 10-1 and 10-2).

(7) The completed DD Form 2026 from the last sample submitted is filed immediately behind the DD Form 314.

(8) All data concerning samples taken and results reported by the laboratory are entered on DA Form 2408-20 per DA Pam 738-750. Units/activities supported by the USAARMC AOAP Laboratory will continue to use DA Form 2408-20, in place of the AOAP Laboratory Component History Report.

(9) Comply with interim and final feedback requirements.

(10) Resample requests issued by the laboratory are responded to within 3 working days. NOTE: When the laboratory recommends "Re-sample after ** hours of normal operation," the 3-day response time will not apply.

(11) The supporting laboratory is provided the end item model and component serial number of all equipment scheduled for deployment as soon as notice of deployment is received.

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Obtain component history information from the laboratory before deployment and return the histories to the supporting laboratory on return.

(12) The Installation AOAP Monitor is notified of any difficulties experienced or any anticipated problems with the oil sampling program.

(13) The Installation AOAP Monitor is notified of any changes to the density of equipment or serial number changes.

(14) The accuracy of data shown on the installation management reports by verifying monthly, to assure it agrees with the equipment records in the unit. Errors contained in the report will be reported to the Installation AOAP Monitor.

(15) Sufficient sampling supplies and blank forms are on hand to support the unit program.

d. Installation/Geographical Oil Analysis Monitor will:

(1) Coordinate with unit commanders and individual unit monitors to assist in compliance with AOAP requirements.

(2) Monitor installation and unit participation to ensure enrolled equipment is being sampled as prescribed by governing regulations and applicable technical publications.

(3) Develop and prepare installation memorandums of instruction and SOPs.

(4) Ensure AOAP monitors are trained in preparing and maintaining required forms and records and oil samples are scheduled and properly taken at prescribed intervals.

(5) Ensure timely distribution of installation management reports to all units/activities monthly.

(6) Determine if laboratory recommendations are acted upon without delay. Routine and special sampling requirements are accomplished as prescribed, and maintenance feedback is reported promptly.

(7) The Installation AOAP Monitor will act as the Contracting Officer's Representative (COR) for the contractor-operated laboratory.

e. AOAP Laboratory will:

(1) Receive, process, analyze, and evaluate samples received, using component history, and evaluation criteria per TM 38-301-1 and supplemental guidance provided by the Program Director, AOAP.

(2) Make immediate telephonic notification to the unit AOAP Monitor in cases where abnormal results of sampling are discovered. Notification will contain recommendations for immediate action and will be followed by DA Form 3254-R when analysis indicates abnormal wear (see figures 10-3 and 10-4).

(3) Notify using samples regardless of findings, equipment, units (telephonically) with results of special

(4) Return all DD Forms 2026 to the Installation/Geographical or unit monitors at the end of each week. Each processed DD Form 2026 will have date sample received at laboratory, date processed, laboratory recommendation, and all incomplete/incorrect data entries circled in red (see figure 10-5). The form will be mailed to off-post units. On-post units will pick up forms from a designated unit box at the laboratory.

(5) Advise when to change oil and filters on nonaeronautical equipment.

(6) Request a resample to verify suspected abnormal condition.

(7) Furnish units with component histories upon deployment or rotation of units.

(8) Ensure timely distribution of installation management reports to all Installation/Geographical AOAP monitors.

(9) Meet other provisions of contract.

f. Each DS and GS maintenance activity will:

(3) Attach AOAP labels provided by the laboratory to components that have been recommended for removal, to permit evaluation/repair. If repair cannot be made at the DS/GS levels, labels will be placed on two sides of the component and the exterior of each shipping container. DA Form 3254-R and DA Form 2408-20 will be placed in a plastic bag and attached to the component before sealing the component container.

(4) Check and install oil sample valves during overhaul/repair of components as needed.

10-5. Enrollment/Deletions Transfer of Equipment in AOAP.

a. When an operating unit enters the AOAP for the first time or enters a new type of equipment or component, the following procedures apply:

(1) Complete DD Form 2026. Make sure all data is accurate and legible. The data provided will be used to build a history in the Standard Data System.

(2) Send DD Form 2026/DA Form 5991-E and the oil sample to the AOAP Laboratory.
NOTE: A component history file cannot be added without an oil sample.

b. To drop a component from the AOAP, return a corrected copy of "Components Enrolled Printout" marked "Delete" as appropriate or submit a memorandum requesting the item be deleted.

10-6. Feedback data:

a. Laboratory recommendations will be annotated on DA Form 3254-R (Oil Analysis Recommendation and Feedback) for components when the oil sample analysis indicates abnormal wear. The form will be used only when a maintenance action is recommended and not to request resamples or recommend oil changes. The DA Form 3254-R will be forwarded to the using unit.

b. After personnel in the using unit have performed the laboratory recommended inspection and maintenance action, they will complete the lower portion of DA Form 3254-R (blocks 14-17). Block 14 will be used to explain any diagnostics performed, discrepancies found, and actions taken to return the component to a serviceable condition (see figure 10-6). Also, include in this block the Quality Deficiency Report (QDR)/EIR number and Work Order Number. The DA Form 3254-R will be returned to the laboratory within 5 working days after maintenance is accomplished.

c. If a component is evacuated for repair, a copy of DA Form 3254-R will accompany it along with the DA Form 2408-20 and DA Form 2407. The support maintenance or overhaul facility will record the maintenance accomplished in block 14 on the DA Form 3254-R and return it to the laboratory within 5 working days after maintenance is accomplished.

d. Corrective action for all recommended maintenance actions will be accomplished as soon as possible, but will not exceed 10 working days. If all repairs cannot be completed within 10 working days, an interim feedback report using the DA Form 3254-R will be submitted to the laboratory on the 10th day (see figure 10-7). The unit or maintenance facility will provide

subsequent DA Forms 3254-R with updated status of repair actions monthly until all repair actions are completed, the component oil is returned to normal and final feedback is submitted.

10-7. On-Condition Oil Change (OCOC) Program. This program eliminates the wasteful requirement of changing component oil and oil filter(s) based on hours/miles, calendar days. Oil and oil filters will not be changed unless recommended by the laboratory and, when recommended, the oil will be changed and the filter(s) will be changed/serviced simultaneously. When a unit is deployed and oil analysis service is not readily available, the unit maintenance officer may authorize an oil and filter change when oil contamination is evident. On these occasions, a sample of the contaminated oil will be saved and shipped to the laboratory as soon as possible, with appropriate comments included in the remarks block of DD Form 2026/DA Form 5991-E. This OCOC policy does not change nor modify procedures and guidance for seasonal oil changes contained in current TMs and Lubrication Orders (LOs). Aircraft are exempt from the OCOC program.

10-8. Safety. All personnel engaged in taking oil samples from equipment must be adequately trained and made aware of the dangers involved. The extraction of oil from a hot component can result in spray or spillage of hot oil on the skin, causing serious burns. Also, taking samples from an operating component exposes the sampler to hot metal surfaces and moving parts such as belts and fan blades. Special care must be exercised to prevent entanglement of clothing or direct contact of the body with these moving components. Eye and hearing protection devices will always be worn by personnel taking oil samples.

WARNING

Do not use mouth suction to fill the sampling tube. Many fluids are highly toxic and may cause paralysis and/or death.

10-9. AOAP Sampling Valves. Oil Sample valves will be installed on all vehicles/equipment enrolled in AOAP as specified by the material proponent. Intermediate GS and depot activities will install sample valves during overhaul/repair of assemblies as needed. Use of a sampling valve saves time, makes it easier to draw the sample, and provides a truer sample of a vehicle's oil for laboratory analysis. TB 43-0001-62-1 lists the parts and instructions for installing sampling valves on combat, tactical, and special purpose vehicles. Kits in this manual requiring special drilling and tapping must be installed initially at DS maintenance. This applies only to initial installation. The kits themselves have been largely source coded for removal and replacement at organizational maintenance. The recommended level of maintenance authorized for initial installation of each kit is provided in each applicable vehicle paragraph.

10-10. Training.

a. Each licensed equipment operator will be given a Z-hour AOAP training class. Completion of the training will be annotated in Section III of the individual DA Form 348 (Equipment Operator's Qualification Record, see figure 10-8) and the operator will be issued a DD Form 1902 (Certificate of Qualification, see figure 10-9). Individual training and certification can be accomplished by a trained unit monitor, or other qualified personnel from activities outside/within the unit.

b. Unit AOAP monitors will be trained under an approved program established by the Installation/Geographical monitor. Unit AOAP monitors must remain familiar with general AOAP policy and procedures, obtain sampling supplies, know how to properly take samples from all equipment assigned to their unit, and possess the ability to train equipment operators within the unit. Training will be annotated in Section III of the individual DA Form 348 (Equipment Operator's Qualification Record); the AOAP Monitor will be issued a DD Form 1902.

c. Training and assistance is available from DBOS Equipment Maintenance Division by calling 624-7796.

10-11. Special Instructions.

a. During wartime, AOAP will be provided per procedures stated in AR 750-1.

b. DD Form 2026/DA Form 5991-E must be filled out completely and legibly, and distinguish changes in the letter "O" and zero, etc. Special care must be given to ensuring that repairs or replacements are noted in the remarks block.

c. The DA Form 3254-R must accompany a replacement component to the maintenance facility which repairs the item.

d. Upon receipt of a DA Form 3254-R issued by the AOAP Laboratory, the unit commander will place the equipment in a "NMC" maintenance status per AR 750-1, until the maintenance action is completed. To ensure safety of flight, an aircraft may be placed in a "NMC" status before formal receipt of a DA Form 3254-R.

e. If a second sample is requested and the end item is required immediately for operation, units should request an RX item.

f. Normal hours of operation are 0730 to 1600, Monday through Friday. For emergency aircraft oil analysis testing required during other than normal duty hours, to include weekends and holidays, contact the USAARMC Staff Duty Officer or phone (502) 349-0020.

g. On-post units will deliver samples to the laboratory. Off-post units will mail samples by the most expeditious means available. Regardless of shipping method, used oil samples will be dispatched to the laboratory on the same day they are taken before 1500.

h. Components enrolled in AOAP will not be sampled while vehicle/component is on job order to DS/GS Maintenance. A sample will be submitted during the first operation of the equipment upon return to service. Unit/Activity Maintenance Officers will determine if components can be sampled during Organizational Level Maintenance. Under no circumstances will a component be sampled when a deficiency exists that will seriously damage the component if it is operated.

i. Comply with warranty provisions per DA Pam 738-750.

j. Only equipment/components listed in DA Pam 738-750, tables 4-1 through 4-8, and TB 43-0106, or other equipment components authorized by TRADOC will be sampled. Memorandums of authorization may be issued from major command level to laboratories prescribing unique requirements. To be valid, such memorandums must be from the command that owns and supports the laboratory. Requests for enrollment of equipment not listed in DA Pam 738-750 or TB 43-0106 will be sent through the Commander, USAARMC and Fort Knox, ATTN: ATZK-OSM, Fort Knox, KY 40121-5000 to the Commander, U.S. Army Training and Doctrine Command, ATTN: ATPL-MM, Fort Monroe, VA 23651, for approval.

k. Vehicles and/or components used in the school environment as static training aids, to include power plants on stands, are exempt from AOAP. Normal sampling intervals will apply when equipment is removed from the school environment.

10-12. Reports.

a. The DD Form 2026/DA Form 5991-E are the standard forms used for oil sample information and will accompany all oil samples submitted to the laboratory for analysis. The forms are used to enroll and delete equipment from AOAP and to report usage data. (NOTE: Miles, kilometers, or hours will be listed in the lower right corner of the remarks block on each DD Form 2026 submitted to the AOAP laboratory.)

b. DA Form 3254-R (Oil Analysis Recommendation and Feedback).

(1) The DA Form 3254-R is the standard form issued by the AOAP Laboratory to notify unit/activity of abnormal wear metal analysis and recommended actions.

(2) The DA Form 3254-R will be used by unit/activity or maintenance facility to report interim and final feedback to the AOAP Laboratory.

c. ATZK-OS Form 4392 (AOAP Sample Data). Local form used for internal AOAP laboratory management and written notification of problem areas to unit/activity AOAP monitors.

d. Oil Analysis Standard Interservice System (OASIS) Management Reports.

(1) Components Enrolled in AOAP. This report, provided the unit/activity monitor monthly, is a complete listing of end item components that are enrolled in the AOAP. It shows the sampling schedule for equipment. The list also shows what serial numbered components are on which end items and alerts the unit that laboratory records should be updated. Usage data is obtained from this report.

(2) Workload Summary Report. This monthly laboratory workload summary provides Installation/Geographical AOAP Monitors and maintenance managers with a report of unit level oil sampling activity. It reflects the number of samples analyzed and the oil changes being recommended for each unit. It also provides a breakout that shows how many re-samples were required out of the total number of samples submitted. If maintenance actions were recommended, this is also shown. The report also shows whether end item usage is being reported.

(3) Resample and Type Recommendation Report. This monthly report lists all components by end item which have samples with abnormal findings.

(4) AOAP Summary by Equipment Type for Samples Received. This monthly report lists equipment components by type, as well as the results of laboratory oil analysis. It helps the unit to identify and track the type components with the highest number of problems. This provides a means of anticipating increases in maintenance requirements. It also alerts maintenance managers at installations and major command level to equipment components that may have operating or engineering deficiencies.

(5) Oil Analysis Monthly Activity Report for Samples Analyzed. This monthly report lists samples analyzed for the month by component serial number and the findings of each sample.

(6) Automated reports generated will be provided to the Installation/Geographical AOAP Monitor (i.e. Installation, State National Guard, and applicable Major Reserve Commands) who will make distribution to subordinate using units on a monthly basis. Subordinate using units are to review the reports and take necessary action to ensure compliance with regulatory requirements of the AOAP. Reports will be edited and updated by annotating (directly on the Components Enrolled in AOAP printout) any incorrect or incomplete information as follows:

- (a) Using a yellow highlighter, line through all incorrect/incomplete information.
- (b) Write in correct data to the immediate right of error.
- (c) List reason for change at the end of each line (vehicle turned in, component changed, etc.).
- (d) Return corrected reports to the laboratory by the 20th of each month.

10-13. Figures/Examples. Figures 10-1 through 10-9 illustrate the elements of information to be reported and the required formats.

OIL ANALYSIS REQUEST						
TO	OIL ANALYSIS LABORATORY					
F R O M	MAJOR COMMAND		TRADOC			
	OPERATING ACTIVITY (Include ZIP Code/APO/UIC) DODAAC					
	D Troop, 1/16th Cavalry			W1DXA6		
	Fort Knox, KY 40121			4-4047		
EQUIPMENT MODEL Engine AGT 1500						
EQUIPMENT SER. NO A1111						
END ITEM MODEL/HULL NO M1A1 (D-34)						
END ITEM SERIAL ITEM 7302						
DATE SAMPLE TAKEN (Day, Mo., Yr) 13 Sep 00				LOCAL TIME SAMPLE TAKEN		
HOURS/MILES SINCE OVERHAUL 100 (Hours only)						
HOURS/MILES SINCE OIL CHANGE 10 (Hours only)						
REASON FOR SAMPLE <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> LAB REQUEST <input type="checkbox"/> TEST CELL <input type="checkbox"/> OTHER (SPECIFY)						
OIL ADDED SINCE LAST SAMPE (Oz, Pts, Qts, Gals)						
ACTION TAKEN NA to Army units						
DISCREPANT ITEM NA to Army units						
HOW MALFUNCTIONED NA to Army units						
HOW FOUND <input type="checkbox"/> LAB REQUEST <input type="checkbox"/> AIR OR GROUND CREW						
HOW TAKEN		SAMPLE TEMPERATURE		TYPE OIL		37-38
<input checked="" type="checkbox"/> DRAIN	<input type="checkbox"/> TUBE	<input checked="" type="checkbox"/> HOT	<input type="checkbox"/> COLD	15W40		
ENGINE POSITION: NAME: EMP NO:			REMARKS/MISC: PHONE: SIGNATURE:			
FOR LABORATORY USE ONLY						
SAMPLE RESPONSE TIME						39-40
FE 41-43	AG 44-46	AL 47-49	CR 50-52	CU 53-55	MG 56-58	NA 59-61
NI 62-64	PB 65-67	SI 68-70	SN 71-73	TI 74-76	B 74-76	MO
ZN	LAB RECOMMENDATION:					77-78
SAMPLE NUMBER(S)				FILE MAINT	DATA SEQ	
				79	80	

DD FORM 2026, MAR 1999

PREVIOUS EDITIONS MAY BE USED.

NOTE: This form is a Department of Defense form. Note entries not applicable to the Army.

Figure 10-1. Sample Format for DD Form 2026

INDEX NUMBER 2435
 SAMPLE NUMBER 4797

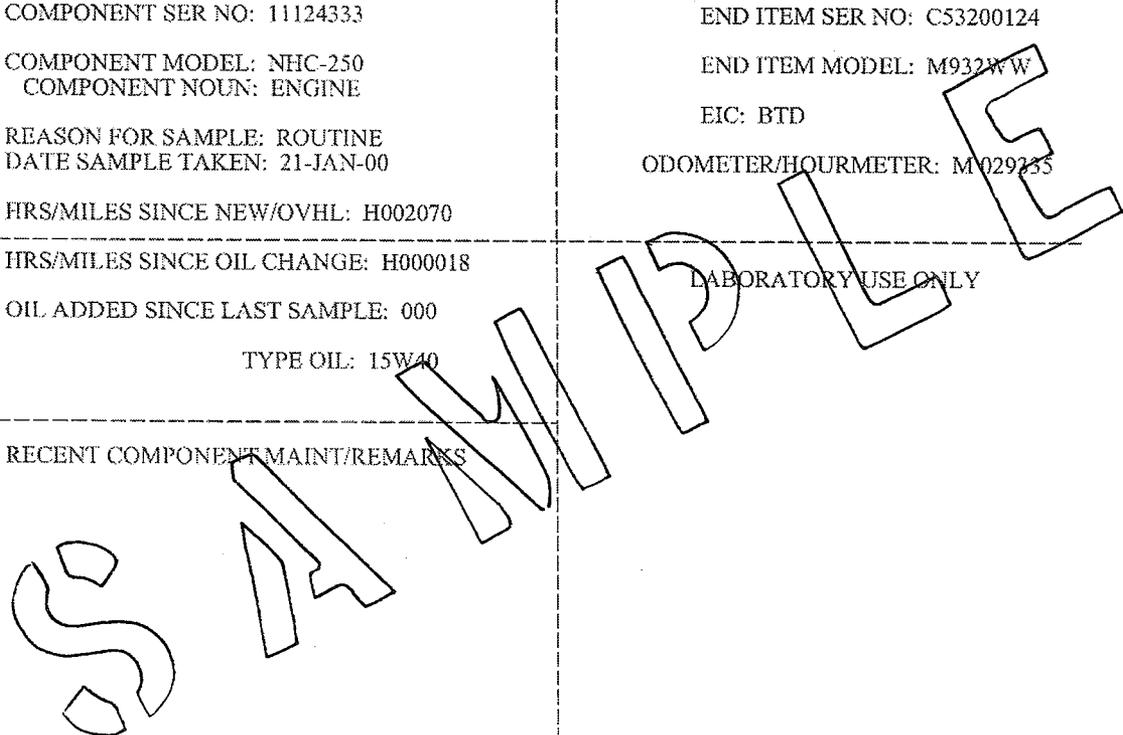
DATE: 21-JAN-00		OIL ANALYSIS REQUEST		DA FORM 5991-E	
ORGANIZATION: COMMANDER HHT TRP 4/16 CAV BLDG 2974 FORT KNOX KY 40121		UIC: WIDXD6		MAJOR COMMAND: TRADOC BUMPER NO: HHT1188	
COMPONENT SER NO: 11124333		END ITEM SER NO: C53200124			
COMPONENT MODEL: NHC-250 COMPONENT NOUN: ENGINE		END ITEM MODEL: M932WW			
REASON FOR SAMPLE: ROUTINE DATE SAMPLE TAKEN: 21-JAN-00		EIC: BTD			
HRS/MILES SINCE NEW/OVHL: H002070		ODOMETER/HOURMETER: M029235			
HRS/MILES SINCE OIL CHANGE: H000018		LABORATORY USE ONLY			
OIL ADDED SINCE LAST SAMPLE: 000 TYPE OIL: 15W40					
RECENT COMPONENT MAINT/REMARKS					
AOAP RELATED:					
ODR=					
EIR=					
WORK ORDER NO=					
SAMPLE NO:			ASSIGNED LAB: FORT KNOX, KY		
SAMPLE INDEX NO:			RECOMMENDATION NO:		
UNIT/POC SGT SANDERS 4-5659			EVALUATOR:		DATE:
UNIT PHONE NO: (502) 624-5659					

Figure 10-2. Sample Format of Unit Level Logistics System (ULLS) Oil Analysis Request

OIL ANALYSIS RECOMMENDATION AND FEEDBACK <small>For use of this form, see TR 43-0106 and TR 43-0210. The procuring agency is DARCOM.</small>		REQUIREMENT CONTROL SYMBOL CSGLD-1818																						
1. TO: FIELD (Include ZIP Code and Telephone Number) Commander OMS 2 HHC 1 149TH IN ATTN: MAINT OFFICER PO BOX 820 BARBOURVILLE KY 409-0820 KYNG	3. LAB RECOMMENDATION 00-025																							
	4. END ITEM MODEL M35A2																							
	5. END ITEM SERIAL NUMBER 053911313																							
2. FROM: LABORATORY (Include ZIP Code) Commander USAARMC & Fort Knox Oil Analysis Laboratory ATTN: ATZK-OSM-QO Fort Knox, KY 40121-5000	6. COMPONENT TYPE LDT4681																							
	7. COMPONENT SERIAL NUMBER 4835785																							
	8. COMPONENT TIME (Hours/Miles) 1622 Hours																							
9. RECOMMENDATION AND REASON FOR ACTION:																								
<table border="0"> <tr> <td>TEST FAILED:</td> <td>RECOMMENDATION(S)</td> <td>REMARKS:</td> </tr> <tr> <td><input type="checkbox"/> Spectrometric</td> <td><input checked="" type="checkbox"/> Do Not Operate.</td> <td rowspan="10" style="vertical-align: top;"> </td> </tr> <tr> <td><input checked="" type="checkbox"/> Physical Property</td> <td><input checked="" type="checkbox"/> Do Not Change Oil Until Property Corrected</td> </tr> <tr> <td>LAB FINDING(S)</td> <td><input type="checkbox"/> Inspect/Repair Air Induction System.</td> </tr> <tr> <td><input type="checkbox"/> Abnormal Wearmetal</td> <td><input type="checkbox"/> Inspect/Adjust Brake/Steering System.</td> </tr> <tr> <td><input type="checkbox"/> Excess Sand/Dirt</td> <td><input type="checkbox"/> Contact DS for Assistance/Disposition.</td> </tr> <tr> <td><input checked="" type="checkbox"/> Excess Fuel</td> <td><input checked="" type="checkbox"/> Inspect/Repair Fuel System.</td> </tr> <tr> <td><input type="checkbox"/> Excess Coolant</td> <td><input type="checkbox"/> Inspect/Repair Cooling System.</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td><input checked="" type="checkbox"/> When Problem Found & Corrected, Change Oil, Change/Service Filters, Operate Veh, Resample.</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Teardown Analysis Recommended.</td> </tr> </table>			TEST FAILED:	RECOMMENDATION(S)	REMARKS:	<input type="checkbox"/> Spectrometric	<input checked="" type="checkbox"/> Do Not Operate.		<input checked="" type="checkbox"/> Physical Property	<input checked="" type="checkbox"/> Do Not Change Oil Until Property Corrected	LAB FINDING(S)	<input type="checkbox"/> Inspect/Repair Air Induction System.	<input type="checkbox"/> Abnormal Wearmetal	<input type="checkbox"/> Inspect/Adjust Brake/Steering System.	<input type="checkbox"/> Excess Sand/Dirt	<input type="checkbox"/> Contact DS for Assistance/Disposition.	<input checked="" type="checkbox"/> Excess Fuel	<input checked="" type="checkbox"/> Inspect/Repair Fuel System.	<input type="checkbox"/> Excess Coolant	<input type="checkbox"/> Inspect/Repair Cooling System.	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> When Problem Found & Corrected, Change Oil, Change/Service Filters, Operate Veh, Resample.		<input type="checkbox"/> Teardown Analysis Recommended.
TEST FAILED:	RECOMMENDATION(S)	REMARKS:																						
<input type="checkbox"/> Spectrometric	<input checked="" type="checkbox"/> Do Not Operate.																							
<input checked="" type="checkbox"/> Physical Property	<input checked="" type="checkbox"/> Do Not Change Oil Until Property Corrected																							
LAB FINDING(S)	<input type="checkbox"/> Inspect/Repair Air Induction System.																							
<input type="checkbox"/> Abnormal Wearmetal	<input type="checkbox"/> Inspect/Adjust Brake/Steering System.																							
<input type="checkbox"/> Excess Sand/Dirt	<input type="checkbox"/> Contact DS for Assistance/Disposition.																							
<input checked="" type="checkbox"/> Excess Fuel	<input checked="" type="checkbox"/> Inspect/Repair Fuel System.																							
<input type="checkbox"/> Excess Coolant	<input type="checkbox"/> Inspect/Repair Cooling System.																							
<input type="checkbox"/> Other	<input checked="" type="checkbox"/> When Problem Found & Corrected, Change Oil, Change/Service Filters, Operate Veh, Resample.																							
	<input type="checkbox"/> Teardown Analysis Recommended.																							
10. SIGNATURE AND TITLE OF INITIATOR DIANA AMMONS, Lab Chief, Fort Knox, KY			11. DATE (Day Month Year) 04 DECEMBER 2000																					
12. NOTE FOR ARMY AVIATION ONLY: Quality Deficiency Report (QDR), SF 368 will be submitted when maintenance is performed due to impending or incipient failure indicated by oil analysis. Failure Code 916.		13. QDR NUMBER																						
14. FEEDBACK (Maintenance Performed/Action Taken)																								
<input type="checkbox"/> Repaired Air Induction System. Parts Repaired/Replaced: _____ <input type="checkbox"/> Repaired Brake/Steering System. Adjustments Made: _____ <input type="checkbox"/> Repaired Fuel System. Parts Repaired/Replaced: _____ <input type="checkbox"/> Repaired Cooling System. Parts Repaired/Replaced: _____ <input type="checkbox"/> Changed Oil. Serviced/Replaced Oil Filter(s). Submitted Resample: _____ <input type="checkbox"/> Evacuated to DS/GS/Depot. Job Order # _____ New Component Serial # _____ <input type="checkbox"/> Teardown Performed. 2407 Attached. Major Findings/Comments: _____ Remarks: _____																								
15. FROM: FIELD/DEPOT MAINTENANCE PERSONNEL <input type="checkbox"/> ORG <input type="checkbox"/> DS <input type="checkbox"/> GS Signature and Title of Maintenance Supervisor/Monitor		16. DATE (Day Month Year)																						
17. TO: LABORATORY USAARMC & Fort Knox AOAP Laboratory Pass Network Inc. PO Box 256 Fort Knox, Kentucky 40121-5000		NOTE FOR ARMY AVIATION ONLY: Copy of this form with SF 368 (QDR) attached will be sent to Commander, CC-ALP ATTN: BRSTS-MER, Stop 55 CORPUS CHRISTI, TX 78419																						

DD FORM 3254-R
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Figure 10-3. Sample Format of Recommendation for Maintenance

Follow directions of checked item(s). See DA Form 3254-R

- Inspect air intake system for loose, damaged, or missing components. Inspect all air intake screen and hoses for proper installation, cuts, or holes. Check serviceability of turbocharger flange gaskets and air cleaner elbow gaskets. Ensure that elbow and flange mounting nuts and bolts are torqued properly. Check air filter(s) for holes, unserviceable seals, or warpage. Replace all defective components.
- Inspect/adjust low and reverse bands IAW TM. Inspect/adjust and service parking brake IAW TM. Normal band adjustment would result in three full threads showing beyond the locking nut. If band adjustment is not IAW TM tolerances, recommend teardown analysis. Contact DSU for disposition.
- Inspect fuel crossover lines for proper torque and/or evidence of leaking. If no leak found, inspect fuel pump, injectors, and preheater system.
- Inspect cooling system for evidence of leaking. Possible sources include head gasket, oil cooler, 'O' rings, and cracked head(s) due to overheating.
- Affix two AOAP labels to the component and two AOAP labels to the container. Forward a copy of DA Form 3254-R with component.

WHEN YOU CHANGE AN ENGINE OR TRANSMISSION AS A RESULT OF AOAP, OR PERFORM MAINTENANCE AS A RESULT OF AOAP, YOU MUST RETURN A COMPLETED COPY OF DA FORM 3254-R TO THE AOAP LABORATORY WITHIN FIVE WORKING DAYS. IF FEEDBACK IS NOT RECEIVED AT THE LABORATORY, THE ITEM WILL APPEAR AS DELINQUENT ON THE MONTHLY SAMPLE DELINQUENCY AND FEEDBACK REPORT.

Figure 10-3 (continued). Reverse of Page

**MAINTENANCE RECOMMENDATION
DO NOT OPERATE
IMMEDIATE ACTION REQUIRED**

COMPONENT SERIAL # _____ CONTROL # _____

1. Attached DA Form 3254-R, Oil Analysis Recommendation and Feedback, requires immediate action. Repairs should be performed at the lowest possible level of maintenance.
2. Maintenance actions are not complete until the component is restored to a serviceable condition and the final feedback data is furnished. Bi-weekly interim feedback is required until final feedback can be submitted.

DISPOSITION OF ATTACHED COPIES

1. UNIT:

- a. After repairs are completed and the oil analysis results are normal, complete one "Return to Lab" copy and forward it to the Installation AOAP Monitor, Building 2770, Telephone 624-6537. Retain the unit file copy.
- b. If the component is not repairable at organizational level, complete one "Return to Lab" copy and forward to the Installation AOAP Monitor. Retain the unit file copy and send the remaining copies with the component to DS.

2. DS:

- a. If repairable at DS level, complete one "Return to Lab" copy and forward to the Installation AOAP Monitor. Retain a file copy.
- b. If the component is not repairable at DS, complete one "Return to Lab" copy (include the new component serial #) and forward it to the Installation AOAP Monitor. Retain a file copy and send the remaining copies with the component.
- c. Affix two AOAP labels to the component and two labels to the container.

3. GS:

- a. If repairable at GS level, complete the "Return to Lab" copy and forward it to the Installation AOAP Monitor. Retain a file copy.
- B. If not repairable, complete the "Return to Lab" copy and forward it to the Installation AOAP Monitor. Retain a file copy.
- C. One copy and the DA Form 2408-20 will be placed in a plastic covering and attached to the component when evacuated to the depot.

**DO NOT REMOVE COVER SHEET UNTIL
MAINTENANCE ACTION COMPLETED**

Figure 10-4. Sample Cover Sheet for DA Form 3254-R

OIL ANALYSIS REQUEST						
TO	OIL ANALYSIS LABORATORY					
F R O M	MAJOR COMMAND		TRADOC			
	OPERATING ACTIVITY (Include ZIP Code/APO/UIC) DODAAC					
	HHC-3d Bn-81st Armor			W11AC1		
	Fort Knox, KY 40121			624-4312		
EQUIPMENT MODEL Engine AGT 1500						
EQUIPMENT SER. NO 52256						
END ITEM MODEL/HULL NO M1A1 (A-12)						
END ITEM SERIAL ITEM 1892A						
DATE SAMPLE TAKEN (Day, Mo., Yr) 13 Sep 00				LOCAL TIME SAMPLE TAKEN		
HOURS/MILES SINCE OVERHAUL 389 (Hours only)						
HOURS/MILES SINCE OIL CHANGE 20 (Hours only)						
REASON FOR SAMPLE <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> LAB REQUEST <input type="checkbox"/> TEST CELL <input type="checkbox"/> OTHER (SPECIFY)						
OIL ADDED SINCE LAST SAMPE (Oz, Pts, Qts, Gals)						
ACTION TAKEN NA to Army units						
DISCREPANT ITEM NA to Army units						
HOW MALFUNCTIONED NA to Army units						
HOW FOUND <input type="checkbox"/> LAB REQUEST <input checked="" type="checkbox"/> AIR OR GROUND CREW						
HOW TAKEN		SAMPLE TEMPERATURE			TYPE OIL	
<input checked="" type="checkbox"/> DRAIN <input type="checkbox"/> TUBE		<input checked="" type="checkbox"/> HOT <input type="checkbox"/> COLD			15W40	
ENGINE POSITION: NAME: EMP NO:				REMARKS/MISC: PHONE: SIGNATURE:		
FOR LABORATORY USE ONLY						
SAMPLE RESPONSE TIME						39-40
FE 41-43	AG 44-46	AL 47-49	CR 50-52	CU 53-55	MG 56-58	NA 59-61
NI 62-64	PB 65-67	SI 68-70	SN 71-73	TI 74-76	B 74-76	MO
ZN	LAB RECOMMENDATION:					77-78
SAMPLE NUMBER(S)				FILE MAINT	DATA SEQ	

DD FORM 2026, MAR 1999

PREVIOUS EDITIONS MAY BE USED.

NOTE: When laboratory results are normal, form will be stamped: "PROCESSED: RESULTS NORMAL" and no laboratory recommendation will be made.

Figure 10-5. Sample Format of an Abnormal Oil Sample

OIL ANALYSIS RECOMMENDATION AND FEEDBACK		REQUIREMENT CONTROL SYMBOL																														
For use of this form, see TB 43-9106 and TB 43-9210. The proponent agency is DARCOCM.		CSGLD-1818																														
1. TO: FIELD (Include ZIP Code and Telephone Number) Commander OMS 4 ATS DET 3 HQ STARC ATTN: MAINT OFFICER 240 ARMY ROAD KINGSWOOD WV26537 WVNG	3. LAB RECOMMENDATION	00-095																														
	4. END ITEM MODEL	M51A2																														
	5. END ITEM SERIAL NUMBER	952312798																														
2. FROM: LABORATORY (Include ZIP Code) Commander USAARMC & Fort Knox Oil Analysis Laboratory ATTN: ATZK-OSM-QO Fort Knox, KY 40121-5000 Telephone: Comm (502) 624-6537/6245 DSN 464-6537/6245	6. COMPONENT TYPE	LDS 465 1A																														
	7. COMPONENT SERIAL NUMBER	4832754																														
	8. COMPONENT TIME (Hours/Miles)	2030 Hours																														
9. RECOMMENDATION AND REASON FOR ACTION:																																
<table border="0"> <tr> <td><u>TEST FAILED:</u></td> <td><u>RECOMMENDATION(S)</u></td> <td><u>REMARKS:</u></td> </tr> <tr> <td><input type="checkbox"/> Spectrometric</td> <td><input checked="" type="checkbox"/> Do Not Operate.</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Physical Property</td> <td><input checked="" type="checkbox"/> Do Not Change Oil Until Properly Corrected</td> <td></td> </tr> <tr> <td><u>LAB FINDING(S)</u></td> <td><input type="checkbox"/> Inspect/Repair Air Induction System.</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Abnormal Wearmetal.</td> <td><input type="checkbox"/> Inspect/Adjust Brake/Steering System.</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Excess Sand/Dirt</td> <td><input type="checkbox"/> Contact DS for Assistance/Disposition.</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Excess Fuel</td> <td><input checked="" type="checkbox"/> Inspect/Repair Fuel System.</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Excess Coolant</td> <td><input type="checkbox"/> Inspect/Repair Cooling System.</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td><input checked="" type="checkbox"/> When Problems Found & Corrected, Change Oil, Change Service Filters, Operate Veh, Resample.</td> <td></td> </tr> <tr> <td></td> <td><input type="checkbox"/> Teardown Analysis Recommended.</td> <td></td> </tr> </table>			<u>TEST FAILED:</u>	<u>RECOMMENDATION(S)</u>	<u>REMARKS:</u>	<input type="checkbox"/> Spectrometric	<input checked="" type="checkbox"/> Do Not Operate.		<input checked="" type="checkbox"/> Physical Property	<input checked="" type="checkbox"/> Do Not Change Oil Until Properly Corrected		<u>LAB FINDING(S)</u>	<input type="checkbox"/> Inspect/Repair Air Induction System.		<input type="checkbox"/> Abnormal Wearmetal.	<input type="checkbox"/> Inspect/Adjust Brake/Steering System.		<input type="checkbox"/> Excess Sand/Dirt	<input type="checkbox"/> Contact DS for Assistance/Disposition.		<input checked="" type="checkbox"/> Excess Fuel	<input checked="" type="checkbox"/> Inspect/Repair Fuel System.		<input type="checkbox"/> Excess Coolant	<input type="checkbox"/> Inspect/Repair Cooling System.		<input type="checkbox"/> Other	<input checked="" type="checkbox"/> When Problems Found & Corrected, Change Oil, Change Service Filters, Operate Veh, Resample.			<input type="checkbox"/> Teardown Analysis Recommended.	
<u>TEST FAILED:</u>	<u>RECOMMENDATION(S)</u>	<u>REMARKS:</u>																														
<input type="checkbox"/> Spectrometric	<input checked="" type="checkbox"/> Do Not Operate.																															
<input checked="" type="checkbox"/> Physical Property	<input checked="" type="checkbox"/> Do Not Change Oil Until Properly Corrected																															
<u>LAB FINDING(S)</u>	<input type="checkbox"/> Inspect/Repair Air Induction System.																															
<input type="checkbox"/> Abnormal Wearmetal.	<input type="checkbox"/> Inspect/Adjust Brake/Steering System.																															
<input type="checkbox"/> Excess Sand/Dirt	<input type="checkbox"/> Contact DS for Assistance/Disposition.																															
<input checked="" type="checkbox"/> Excess Fuel	<input checked="" type="checkbox"/> Inspect/Repair Fuel System.																															
<input type="checkbox"/> Excess Coolant	<input type="checkbox"/> Inspect/Repair Cooling System.																															
<input type="checkbox"/> Other	<input checked="" type="checkbox"/> When Problems Found & Corrected, Change Oil, Change Service Filters, Operate Veh, Resample.																															
	<input type="checkbox"/> Teardown Analysis Recommended.																															
10. SIGNATURE AND TITLE OF INITIATOR DIANA AMMONS, Lab Chief, Fort Knox, KY		11. DATE (Day Month Year) 04 DECEMBER 2000																														
12. NOTE FOR ARMY AVIATION ONLY: Quality Deficiency Report (QDR), SF 368 will be submitted when maintenance is performed due to impending or incipient failure indicated by oil analysis. Failure Code 916.		13. QDR NUMBER																														
14. FEEDBACK (Maintenance Performed/Action Taken)																																
<input type="checkbox"/> Repaired Air Induction System. Parts Repaired/Replaced: _____ <input type="checkbox"/> Repaired Brake/Steering System. Adjustments Made: _____ <input checked="" type="checkbox"/> Repaired Fuel System. Parts Repaired/Replaced: <u>Injector Pump</u> <input type="checkbox"/> Repaired Cooling System. Parts Repaired/Replaced: _____ <input checked="" type="checkbox"/> Changed Oil. Serviced/Replaced Oil Filter(s). Submitted Resample: <u>3 July 96</u> <input type="checkbox"/> Evacuated to DS/GS/Depot. Job Order # _____ New Component Serial # _____ <input type="checkbox"/> Teardown Performed. 2407 Attached. Major Findings/Comments: _____ <u>Final Feedback</u> Remarks: <u>Resample 31 Jul 96 Results Normal</u>																																
15. FROM: FIELD/DEPOT MAINTENANCE PERSONNEL <input checked="" type="checkbox"/> ORG <input type="checkbox"/> DS <input type="checkbox"/> GS. Signature and Title of Maintenance Supervisor/Monitor		16. DATE (Day Month Year) 12 Aug 00																														
17. TO: LABORATORY USAARMC & Fort Knox AOAP Laboratory Pass Network Inc. PO Box 256 Fort Knox, Kentucky 40121-5000		NOTE FOR ARMY AVIATION ONLY: Copy of this form with SF 368 (QDR) attached will be sent to Commander, CCAD ATTN: DRSTS-MER, Stop 55 CORPUS CHRISTI, TX 78419																														

DD FORM 3254-R
NOV 80

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Figure 10-6. Sample Format for DA Form 3254-R

SAMPLE NUMBER 429

OIL ANALYSIS RECOMMENDATION AND FEEDBACK		REQUIREMENT CONTROL SYMBOL								
<small>For use of this form, see TR 43-0106 and TR 43-0210. The responsible agency is DABCOM.</small>		CSGLD-1818								
1. TO: FIELD (Include ZIP Code and Telephone Number) Commander AASF WV ATTN: AIRCRAFT MAINT OFFICER PO BOX 4036 PARKERSBURG, WV 26104 WVNG	<i>Final</i>	3. LAB RECOMMENDATION 00-045								
		4. END ITEM MODEL OH58A								
2. FROM: LABORATORY (Include ZIP Code) Commander USAARMC & Fort Knox Oil Analysis Laboratory ATTN: ATZK-OSM-AOAP Fort Knox, KY 40121-5000 Telephone: Comm (502) 624-6537/6245 DSN 464-6537/6245		5. END ITEM SERIAL NUMBER 7221351								
		6. COMPONENT TYPE TR Gear Box								
		7. COMPONENT SERIAL NUMBER A-918								
		8. COMPONENT TIME (Hours/Miles) 1049 Hours								
9. RECOMMENDATION AND REASON FOR ACTION: DO NOT FLY OR OPERATE SPECTROMETRIC OIL ANALYSIS INDICATES CONTINUED HIGH CONCENTRATIONS OF CHROMIUM (CR) WEARMETAL. SUGGEST REMOVAL OF COMPONENT FROM SERVICE FOR REPAIR. ** DEEP OIL INTACT ** ALL UNITS COMPLY WITH SL A-8-92										
10. SIGNATURE AND TITLE OF INITIATOR DIANA AMMONS, Lab Chief, Fort Knox, KY		11. DATE (Day Month Year) 06 February 2000								
12. NOTE FOR ARMY AVIATION ONLY: Quality Deficiency Report (QDR), SF 368 will be submitted when maintenance is performed due to impending or incipient failure indicated by oil analysis. Failure Code 916.		13. QDR NUMBER								
14. FEEDBACK (Maintenance Performed/Action Taken) <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>2410</td><td>655272</td></tr> <tr><td>PQH</td><td>NA</td></tr> <tr><td>USN</td><td>1019</td></tr> <tr><td>USO</td><td>NA</td></tr> </table> <div style="text-align: center; margin-top: 20px;"> CORPUS CHRISTI ARMY USA CORPUS CHRISTI, TEXAS 78413-6049 (SIGNATURE) XXXXXXXXXXXXXXXXXXXX SEE ATTACHED REPORT </div>			2410	655272	PQH	NA	USN	1019	USO	NA
2410	655272									
PQH	NA									
USN	1019									
USO	NA									
15. FROM: FIELD/DEPOT MAINTENANCE PERSONNEL		16. DATE (Day Month Year)								
17. TO: LABORATORY		NOTE FOR ARMY AVIATION ONLY: Copy of this form with SF 368 (QDR) attached will be sent to Commander, CCAD ATTN: DRSTS-MER, Stop 55 CORPUS CHRISTI, TX 78419								

DD FORM 3254-R
NOV 80

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Figure 10-7. Sample Format for DA Form 3254-R

NAME (Last, first, initial) AND SERVICE NUMBER				PERMIT (Initial)		
				NUMBER		DATE ISSUED
				TYPE		LIMITATIONS (Physical or operational)
SEX	DATE OF BIRTH	COLOR HAIR	COLOR EYES	HEIGHT	WEIGHT	POSITION TITLE (If Civilian)
SECTION I - OFFICIAL QUALIFICATIONS						
TYPE OF EQUIPMENT	SIZE	SPECIAL QUALIFICATION ¹	DATE QUALIFIED	QUALIFIED AT	NAME OF EXAMINER	
SECTION II - BACKGROUND AND EXPERIENCE						
TYPE OF EQUIPMENT	SIZE	TYPE OF DRIVING OR OPERATION ²	ADDITIONAL DRIVER'S LICENSES (State or agency)	NUMBER OF OTHER DRIVER'S LICENSES	SATISFACTORY EXPERIENCE VERIFIED BY	
¹ Special equipment, special operations or conditions			² City, rural, long haul, etc.			
SECTION III - PERFORMANCE RECORD (List chronologically as "credits" - awards, training, retaining, testing, retesting, roadeos, permit renewal, relicensing, etc. and as "debits" - accidents, arrests, violations, warnings, revocations, suspensions, etc.)						
DATE	CREDITS	DEBITS	TYPE OR NATURE	ACTION TAKEN		
18 Jan 00	2 Hours		Training, AOAP	Satisfactorily completed training in the Army Oil Analysis Program IAW TB 43-0211. (SIGNATURE OF OIL ANALYSIS MONITOR)		
EQUIPMENT OPERATOR'S QUALIFICATION RECORD (EXCEPT AIRCRAFT) (AR 58-1, AR 600-55 and AR 385-55)						

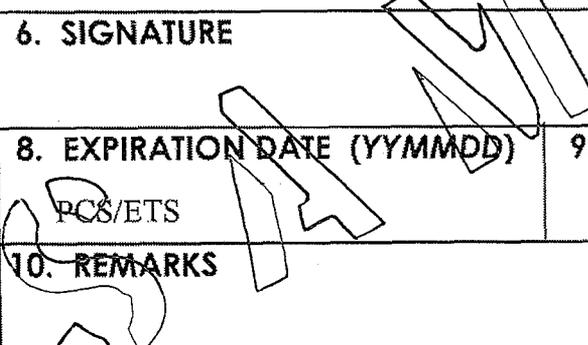
DA FORM 348
1 Oct 64

REPLACES DA FORM 348, 1 AUG 60, WHICH WILL BE USED,
AND DD FORM 1360 WHICH IS OBSOLETE FOR ARMY USE.

(Extract from personnel file to maintain at operating level.)

Figure 10-8. Sample Equipment Operator's Qualification Record

CERTIFICATION OF QUALIFICATION

1. NAME (Last, First, Middle Initial) DOE, John	2. ORGANIZATION B Co., 3/16 Cavalry Regt
3. TITLE AOAP Monitor/Sampler	4. SPEC/STANDARD AR 750-1
5. NAME OF CERTIFIER (Last, First, Middle Initial) BROWN, Ronald A.	
6. SIGNATURE 	7. DATE (YYMMDD) 000213
8. EXPIRATION DATE (YYMMDD) PCS/ETS	9. CARD NO. N/A
10. REMARKS	

DD Form 1902, MAY 91

Previous edition may be used

Figure 10-9. Sample Certificate of Qualification

Fort Knox Reg 750-1 (1 Feb 01)

FOR THE COMMANDER:



OFFICIAL:
REGINALD R. BERRY
Colonel, AR
Garrison Commander

ROBERT L. BROOKS
Director, Information Management

DISTRIBUTION:
A

CF:
DCG, USAARMC

Appendix A

References

AR 220-1, 1 September 1997, Unit Status Reporting

AR 700-132, 5 December 1990, Joint Oil Analysis Program (JOAP)

AR 700-138, 16 September 1997, Army Logistics Readiness and Sustainability

AR 700-4, 30 June 1995, Logistics Assistance

AR 710-2, 31 October 1997, Inventory Management Supply Policy Below the Wholesale Level

AR 735-5, 31 January 1998, Policies and Procedures for Property Accountability

AR 750-1, 1 August 1994, Army Materiel Maintenance Policy and Retail Maintenance Operations

AR 750-43, 28 November 1997, Army Test Measurement, and Diagnostic Equipment Program

DA Pam 710-2-1, 31 December 1997, Using Unit Supply System (Manual Procedures)

DA Pam 710-2-2, 30 September 1998, Supply Support Activity Supply System: Manual Procedures

DA Pam 738-750, 1 August 1994, Functional User's Manual for The Army Maintenance Management System (TAMMS)

DA Pam 738-751, 15 March 1999, Functional User's Manual for the Army Maintenance Management System – Aviation (TAMMS-A)

Fort Knox Reg 700-1, 27 March 2000, Installation Supply Support

TB 43-0001-62-1, 1 April 1999, Equipment Improvement Report and Maintenance Digest for Tank, Automotive, Armament and Chemical Equipment

TB 43-0106, 10 April 1987, Aeronautical Equipment Army Oil Analysis Program (AOAP)

TB 43-0142, 28 February 1997, Safety Inspection and Testing of Lifting Devices

Fort Knox Reg 750-1 (1 Feb 01)

TB 43-0209, 31 October 1990, Color, Marking, and Camouflage Painting of Military Vehicles, Construction Equipment, and Materials Handling Equipment

TB 43-0211, 4 June 1998, Army Oil Analysis Program Guide for Leaders and Users

TB 43-0242, 1 January 1991, Chemical Agent Resistant Coating (CARC) Spot Painting

TB 43-180, 1 February 2000, Calibrations and Repair Requirements for the Maintenance of Army Materiel

TM 1-1500-328-23, 30 July 1999, Aeronautical Equipment Maintenance Management Policies and Procedures

TM 38-301-1, 15 March 1999, Joint Oil Analysis Program Laboratory Manual for Volume I, Introduction, Theory Benefits, Customer Sampling Procedures, Programs and Reports)

TM 43-0139, 27 July 1988, Painting Instructions for Army Materiel

Appendix B***Equipment Maintenance Division Work Centers***

<u>SHOP/ACTIVITY</u>	<u>LOCATION</u>	<u>PHONE</u>
Aircraft & Avionics (GOCO)	Bldg. No. 5222, Pilot Street	624-6117
Cannibalization Point	Bldg. No. 2770, Frazier Road	624-5327
Chief, Vehicle Repair Branch	Bldg. No. 2778, Frazier Road	624-7796
Chief, DBOS Equip Maint Div	Bldg. No. 2778, Frazier Road	624-7875
Combat Veh Eng & Hvy Equip	Bldg. No. 2770, Frazier Road	624-2223
Component Repair Branch	Bldg. No. 2778, Frazier Road	624-4244
Assembly Repair Branch	Bldg. No. 2778, Frazier Road	624-7216
Reparables Exchange	Bldg. No. 2781, Frazier Road	624-6044
Electronics and Communication	Bldg. No. 2783, Frazier Road	624-3334
Optical/Instrument	Bldg. No. 2783, Frazier Road	624-8432
Machine Welding Shop	Bldg. No. 98, Eleventh Avenue	624-5248
Maintenance Float	Bldg. No. 2778, Frazier Road	624-3308
Production Control Section		
(Comp Repair)	Bldg. No. 2778, Frazier Road	624-6230
(Electronic)	Bldg. No. 2783, Frazier Road	624-2023
(Combat Vehicle)	Bldg. No. 2770, Frazier Road	624-4927
Aircraft	Bldg. No. 5222, Pilot Street	624-2055
Electronics/Communication	Bldg. No. 2783, Frazier Road	624-4744
Wheel Vehicle	Bldg. No. 2770, Frazier Road	624-5533
AOAP (GOCO)	Bldg. No. 2770, Frazier Road	624-6537
<u>Other Maintenance Support Activities</u>		
Calibration & Repair Center	Bldg. No. 1049, 192d Tank Bn St	624-5315