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Maintenance of Supplies and Equipment
GENERAL MAINTENANCE INFORMATION

Further supplementation by subordinate commanders is
prohibited unless specifically approved by HQ, USAFACFS

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CHAPTER 1

GENERAL MATERIEL MAINTENANCE MANAGEMENT

1-1. PURPOSE. This regulation establishes uniform directives in the basic concepts, objectives, and procedures in obtaining Direct Support/General Support (DS/GS) maintenance/repair, checks/services and/or logistical assistance to Army equipment supported by Fort Sill. It applies to TOE/TDA support maintenance activities and to Fort Sill supported units/activities encompassing both FORSCOM and TRADOC vehicles and materiel. Directives are applicable to complete ground equipment, aircraft, and missile systems, except where DA Pam 738-751, AR 750-1, and/or AR 700-13 contain other specific instructions.

1-2. APPLICABILITY. The word he when used in this publication represents both masculine and feminine genders, unless otherwise specifically stated.

1-3. EXPLANATIONS OF ABBREVIATIONS AND TERMS. Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. REFERENCES. Required and related publications are listed in appendix A.

Section I MANAGEMENT RESPONSIBILITIES AND MISSION OBJECTIVES

1-5. MANAGEMENT RESPONSIBILITIES.

a. The Director of Logistics (DOL) performs the Army's traditional G4/S4 function for the installation and has the primary staff responsibility for logistical doctrine, policy, and procedures as outlined in AR 5-3 and DA Pam 750-13.

b. The Installation Materiel Maintenance Officer (IMMO), DOL, is the single source manager for controlling available manpower/maintenance resources and facilities needed to accomplish the overall support maintenance mission of other DS/GS activities. Principal responsibilities of the IMMO are—

(1) Managing maintenance of materiel issued to or under the control of the installation commander.

(2) Managing and integrating maintenance resources within the installation's geographical area of support including both (TOE and TDA) units and activities.

(3) Advising the commander and his staff on matters pertaining to materiel maintenance and maintenance/logistical support plans.

(4) Monitoring the development of and executing the overall installation maintenance support directives/plans, etc.

(5) Directing transfer of workload, when backlogs are abnormal, (MTOE to MTOE, MTOE to TDA, etc).

(6) Monitoring day-to-day operations of maintenance functional areas, both organizational and support (MTOE and TDA) maintenance repair activities.

(7) Directing/tasking all nondivisional intermediate maintenance units on the installation.

(8) Developing and/or supplementing maintenance policy, procedures, priorities, and objectives.

1-6. MISSION/OBJECTIVE OF TOE/TDA SUPPORT MAINTENANCE ACTIVITIES.

a. Provide DS/GS maintenance support and local area organizational maintenance support that is beyond the supported unit's capability to accomplish.

b. Provide emergency repair, recovery, and evacuation services.

c. Provide fixed, mobile, and contact maintenance services upon request.

d. Provide help to identify and resolve logistical problems degrading unit readiness and/or deployment/mobilization capability.

e. Provide advice to the supported commander on the efficient use of maintenance materiel and personnel.

f. Provide coordination and management for equipment Materiel Changes (MCs), modifications and/or force modernization efforts, etc.

Section II. EQUIPMENT EVACUATION ACCEPTANCE AND MAINTENANCE PROCEDURES

1-7. EVACUATION OF UNSERVICEABLE EQUIPMENT. Unless precluded by operational situations, no item of equipment will be evacuated to a higher category of maintenance until required lower category maintenance is completed IAW AR 750-1, chapter 4, and logbook forms are correct and complete. The Army Maintenance Management System (TAMMS) forms, as prescribed in DA Pam 738-750 (except aircraft), must accompany items submitted to support maintenance for repair or classification:

- a. DA Form 2407 (Maintenance Request) or Unit Level Logistics System (ULLS).
- b. DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or ULLS Form 5988-E (Equipment Inspection and Maintenance Worksheet).
- c. DA Form 2408-4 (Weapon Record Data).
- d. DA Form 2408-5 (Equipment Modification Record).
- e. DA Form 2408-14 (Uncorrected Fault Record) or ULLS Form 5988-E (Uncorrected Fault Record).
- f. DA Form 2408-20 (Oil Analysis Log), if applicable (see TB 43-0210).
- g. Required forms for aircraft are indicated in DA Pam 738-751.
- h. Calibration records are described in TB 750-25

1-8. LOCATION OF FACILITIES.

a. TDA Support Maintenance. TDA maintenance activities are located primarily in the Fort Sill 2100 and 2200 areas, with the exception of aircraft, calibration, and avionics shops. Locations are as follows:

ACTIVITY	BLDG	ACTIVITY	BLDG
Director of Logistics	2258W	IMMO, Maintenance Div	2258W
CONTRACTOR OPERATED FACILITIES			
ACTIVITY	BLDG	ACTIVITY	BLDG
Project Manager	2590	Contract Admin	2590
Quality Control Mgr	2258E	Maint (QC) Inspector	2258E
Maintenance Mgr (Contract)	2252	Production Control	2255
Ammo Supply Point	2304	Comm/Elct Clerk	2258
Comm/Radio Repair Shop	2258	Pwr Generating Equipment	2258
Allied Trades/Sm Arms Clerk	2255	Maint Materiel Center	2255
Artillery Repair Shop	2182	Track Veh Repair Shop	2183
Cbt Veh/Wpns Inspection	2188	Optical Repair Shop	2189
Missiles (MLRS) Repair Shop	2258	COMSEC Elec Sys Repair Shop	2258
Elec Equip Repair Shop	2258	I-CIDS Repair Shop	225
Tactical Veh Repair Shop	2254	MHE (Forklift) Repair Shop	2254
Paint/Body Repair	2253	Tactical Veh Inspection Repair	2253
HEMTT Veh Repair	2258E	Light Component Rebuild, O/H	2250
Welding/Machine Repair	2251	Small Arms	2255
Heavy Component Repair	2255	Reparable Exchange (RXA)	2243
Tire Shop Classification (Bay 3)	2243	Mobile Equipment Pool	2272
Free Issue/Turn In	2241	DRMO Withdrawals	2243
CBS-X/Serialization	2243		
TECHNICAL ASSISTANCE			
AMC LAO	2594	ATCOM	2594
MICOM LAR	2594	ACALA	2594
TACOM LAR	2594	CECOM	2594
MWO/EVT Support	2596	TMDE/Calibration Lab	5033
Mobilization Issues (LOC)	2258W	ULLS/RAIDERS Classes	2596

LOAD TESTING: Wrecker, forklift, and chain hoists, Bldg 2250: Load Testing: Lifting devices mounted on combat/heavy construction vehicles, Bldg 2183.

b. TOE Support Maintenance. Units designated, by the IMMO, DOL, to receive direct support maintenance are 226th Light Equipment Maintenance Company and 588th Maintenance Company. Evacuate equipment, accompanied by DA Form 2407 and or ULLS form logbooks, and applicable maintenance forms IAW published external operating procedures. Appendix C identifies the support maintenance assignments for units. Locations of the TOE maintenance facilities are--

- (1) 226th Maintenance Company, Bldg 1502
- (2) 588th Maintenance Company Bldg 5386.

1-9. EQUIPMENT EVACUATION PROCEDURES

a. General. Detailed procedures for preparation of DA Form 2407 are contained in DA Pam 738-750.

(1) Unit commanders require an objective evaluation be made on the impact that lack of equipment will have on accomplishing the unit's mission prior to the assignment of urgency of need designators A and B or priority designators 01 through 10 to DA Form 2407, or ULLS form. The unit commander or his designated representative will authenticate the assignment of these priorities by placing his signature in the appropriate block.

(2) Personnel authorized to pick up and receive equipment and to authenticate priorities 01 through 10 will carry DD Form 577 (Signature Card) supplied by the responsible officer. DD Form 577 identifies authenticators on the reverse side. A person authorized to pick up and receive may also be designated as an authenticator on the reverse side. Evacuated Items with required forms to the quality control inspection points; coordinate all paperwork/transactions with work order clerks residing at the various shop locations

(3) Perform organizational maintenance prior to evacuation of equipment to DS/GS support units. Remove tarpaulins, end curtains, and pilferage items (tools, vises, etc.) from the cargo body of wheel vehicles. Organizational maintenance deficiencies cause delay or nonacceptance of an item by the support maintenance shop. Units submitting equipment ensure it is clean and is accompanied by a DA Form 2407 or ULLS form completed IAW DA Pam 738-750, for repairs, service, modification, and/or turn-in of equipment, as applicable.

(4) Following acceptance of the equipment (except aircraft) at the work center inspection point, the unit representative will give DA Form 2407/ULLS form to the specific work center technical inspector or the shop office of one of the TOE DS/GS units. Items with logbooks will have DA Form 2407 or ULLS form and logbooks verified by acceptance personnel. A job order number is given following verification of the unit representative on DD Form 577, the DA Form 2407 or ULLS form. Give logbook forms, DA Form 2408-4, and DA Form 2408-14 to the receiving clerk. Following assignment of a job order number, the receipt (#1) copy of DA Form 2407 or ULLS form is returned to the unit representative. Production control personnel will advise customers when equipment is ready to be picked up. Equipment is fully mission capable (FMC) when a unit is told it is ready for pickup, even though it is still physically located at support. Equipment is normally FMC on the day it is inspected and signed off in block 26 of the DA Form 2407. Status of any vehicles/equipment in TDA support repair is available by calling the appropriate work center clerk. TOE maintenance units publish their own detailed procedures in their external SOP.

b. Medical Equipment.

(1) Maintenance of medical equipment differs from other technical equipment in that organizational maintenance consists of proper operation of the equipment,

lubrication, cleaning, minor adjustments, and other acts of preservation which are normally within the capabilities of the individual operator and do not require the services of skilled maintenance personnel.

(2) DS maintenance of medical technical equipment is the responsibility of the Medical Maintenance Branch, Logistics Division, MEDDAC. When users of such equipment find that repairs, beyond their capabilities, are required, evacuate the equipment as outlined below:

(a) Unserviceable equipment requiring maintenance beyond the owner/operator's capability is referred to the medical maintenance shop on DA Form 2407, prepared in accordance with TB 38-750-2.

(b) Deliver items of equipment, with the DA Form 2407, to the Medical Maintenance Branch, MEDDAC, if feasible. If items are not readily movable, repairs are accomplished at the site where the equipment is installed.

(c) Telephone requests for emergency repairs to medical equipment are accepted at any time; however, the operator should be prepared to furnish information over the telephone on how to initiate a DA Form 2407.

c. Maintenance Inspections and Technical Assistance for Medical Equipment.

(1) Preventive maintenance inspections are made periodically as prescribed in DA Pam 310-1. These inspections are performed by medical equipment maintenance personnel for the purpose of instructing users in the proper operation of the equipment, of methods of performing organizational maintenance, and to perform routine maintenance as prescribed in TM 8-605. A record of medical equipment inspections and services performed is maintained, by the medical maintenance shop personnel, on a DA Form 2409 (Equipment Maintenance Log).

(2) The annual inspection of technical equipment in use at MEDDAC is scheduled and accomplished by representatives from HQ, Health Services Command.

1-10. ACCEPTANCE OF EQUIPMENT BY SUPPORT MAINTENANCE ACTIVITY. DS/GS.

a. Organizations evacuating unserviceable repairable equipment to the next higher category of maintenance ensure adequate packing, packaging, preservative, and storage methods are applied to prevent damage to or loss of the item while in support maintenance. Correct complete organizational level maintenance deficiencies prior to acceptance by the supporting maintenance activity, with the following exceptions:

(1) Repair parts that do not deadline equipment. Equipment is accepted for repair/return, by the support activity, if required repair parts that do not deadline the equipment, are on valid requisitions and are properly annotated on the DA Form 2408-

14.

(2) Equipment with organizational faults. Equipment with organizational faults, which does not deadline or preclude support maintenance from testing and operating the equipment, or cause further damage to the equipment, is accepted by support maintenance. Note these faults on the accepted DA Form 2404, which will serve as the document of condition. The equipment will be returned after support maintenance repairs have been completed without these faults being corrected. The using unit is encouraged to take aggressive action to correct these faults. Annotate results of STE-ICE compression checks and DA Form 2408-20, Army Oil Analysis Program (AOAP) on unit's DA Form 2404, if DS/GS work requested is related to assemblies, supported by those programs on equipment.

(3) Repair parts that deadline equipment.

(a) Owning unit request required organizational level repair parts that deadline the equipment from DOL Supply Division. If the repair parts are not received, the organization may evacuate the equipment to support maintenance after document control numbers have been established. This procedure does not apply to antifreeze. Equipment requiring liquid coolant is not accepted, under any circumstances, unless it contains adequate antifreeze solution protecting to -10 degrees Fahrenheit year round and alkalinity test indicates a blue or green color (see TB 750-651). Equipment with cracked engine blocks is exempted from this requirement.

(4) Submission of DA Form 2407 and supporting documentation. When the procedures indicated above are followed, the organization requesting support maintenance level repairs will attach to the DA Form 2407, organizational copy #4, the status cards, indicating "BB" or "BM" status, and/or the organizational portion of the DA Form 2765-1, indicating the item is due out. Upon acceptance of the item for repair, the status cards are returned to the requesting organization.

b. Inspection standards for acceptance, by support maintenance, includes equipment Preventive Maintenance Checks and Services (PMCS) charts and the following:

(1) Adequate antifreeze protection was checked.

(2) Equipment that requires fuel and has a mounted fuel tank has the tank at least half full; fuel will be of the proper type and free from contamination.

(3) Equipment must be clean with interior and exterior surfaces free of mud, dirt, sand, trash, and other debris; hulls drained. Safety deficiencies, on equipment, jeopardizing the health, welfare, and/or deterioration of equipment within the DS/GS shops are not accepted.

(4) Accepted equipment will have the means to be secured; for example, keys,

lock, chain, etc. Unit give keys to support maintenance when job order is opened, prior to receipt of the green copy of DA Form 2407.

(5) In no instance are track vehicles operated, road tested, evacuated, or accepted unless hull covers and access plates are properly installed.

(6) Equipment (generators supported by contract TDA maintenance shops) is accepted, less basic issue items, (BII) (trucks, less tarpaulins/end curtains and fire extinguishers; tracks, less sights and tarpaulins). Evacuating activity remove basic issue items from equipment, supported by TOE shops, in accordance with standard operation procedures (SOP).

(7) Equipment being transported will be mounted, secured in approved storage containers, or cushioned in such a manner as to prevent damage during movement. Items are not released, after repair or issued from the supply activity, unless adequate protection is provided to transport the item properly to supported unit or activity.

c. Action by DOL inspection activities.

(1) Quality control inspectors use DA Form 2404 to list maintenance deficiencies required to be corrected at the DS/GS maintenance level.

(2) Annotate DA Form 2407 indicating that an organizational item was required for this work order.

(3) TDA support maintenance personnel will request required repair part, and perform support repairs.

(4) The support maintenance activity will complete the support level maintenance work required and only that organizational maintenance that is required to complete support maintenance work and allow safe final inspection and road test.

1-11. PROCEDURES FOR EXPEDITING URGENT JOBS. Equipment, deadlined in TDA maintenance shops, is expedited, based on written request, approved by senior logistics officers of major activities. In cases of extreme urgency, for critical repair during nonduty hours, telephone calls are accepted by Fort Sill Field Officer of the Day (FOD), 580-442-4912, who will then relay the message and all needs or requirements to the DOL Duty Officer.

1-12. RETURN OF REPAIRED EQUIPMENT.

a. Installation Maintenance Repair Objectives. Objectives for return of materiel to supported units and activities are as follows:

PRIORITY	DAYS (PARTS NOT REQUIRED)	DAYS (PARTS AVAIL IN SPT MAINT	DAYS (PARTS NOT AVAIL IN SPT MAINT
01	4	7	14
02	4	7	15
03	4	7	16
04	4	7	18
05	5	8	19
06	6	9	20
07	7	10	21
08	8	11	22
09	9	12	35
10	10	13	36
11	11	14	37
12	12	15	38
13	13	16	39
14	14	17	40

When equipment is accepted by a shop and the completion date does not meet unit requirements, the commander will enter "required date" on the last line of DA Form 2407, block 168, and sign, indicating name and rank.

b. Pickup of Repaired Equipment. Equipment in the support maintenance activities may be returned to the owner upon presentation of the receipt copy #1 of DA Form 2407, applicable to equipment repaired or upon receipt of a memorandum certifying the receipt copy has been lost. The memorandum will contain the following information:

- (1) Support maintenance job order number.
- (2) Noun nomenclature.
- (3) Serial number/registration number.

(4) A statement that the receipt copy has been lost and, that if the receipt copy is found, destroy it. Address memo to the commander of the applicable support maintenance activity. Owing unit commander or his designated representative. Will sign memo.

c. Release of Equipment on Maintenance Request Prior to Completion of Required Repairs.

(1) Owing organization may request release of equipment, prior to completion of required repairs. Use a formal request (memo), signed by the commander and/or his authorized representative.

(2) Forward requests to the IMMO, Maintenance Div, for the DOL contractor, marked ATTN Production Control or shop office of TOE DS unit, at least 1 working day prior to the date equipment release is desired.

1-13. EQUIPMENT MAINTENANCE BY CONTROLLED SUBSTITUTION.

a. Perform controlled substitution of equipment (except aircraft) IAW AR 750-1, chapters 4-7 and/or 4-8. The maintenance officer, owning the equipment, can approve organizational level substitution, and the IMMO or the designated TOE shop officer, supporting the equipment being repaired, can approve higher-level substitution.

b. Controlled exchange on Operational Readiness Float (ORF) is not authorized.

c. Support Maintenance note repair parts, components, or assemblies removed in controlled exchange action on the DA Form 2407, or other appropriate document, for the materiel from which the serviceable items are removed. Combat Vehicle Evaluations (CVE) vehicles going back to the depot are the main source for controlled substitution actions. All unserviceable components must be put back on vehicles prior to shipment.

1-14. CANNIBALIZATION POINT (CP).

a. Location. The Installation CP is operated by the DOL contractor and is located west of Bldg 2255. Items available are predominantly automotive parts, recovered from wheel vehicles, which have been designated for local disposition to Defense Reutilization and Marketing Office (DRMO).

b. Source of Information. An article identifying the types of vehicles, retained at the CP, from which parts may be recovered for use in the DOL, Supply Activity and for issue to supported units, is published in the DOL Logistics Service Bulletin "The BILLBOARD" once a month.

c. Request for Support. Organizations will submit DA Form 2765-1 to the CP for repair parts/components. Ensure requests are legible and completed in accordance with USAFACFS Reg 725-1, para 1-12. Legibility and completeness of requests are important, as copies of these documents are furnished to DOL, Supply Activity, for update of prescribed load list (PLL) demand data. The CP should be the first source of supply for items coded salvage, fabrication, local purchase, and for other nonstocked items.

d. Issuing Procedures.

(1) Supported elements first attempt to satisfy nonstock demands from the CP prior to taking other acquisition action.

(2) Fill out DA Form 2765-1 for requests, which contain complete nomenclature,

catalog reference, and other descriptive data that help identify the items being recovered. Also include organization document number and DODAAC.

(3) If requested part, component, or assembly is on hand, the DA Form 2765-1 is posted "Issue" and returned to the unit with the part. The CP will keep one copy of the DA Form 2765-1 and will forward one copy to DOL, Supply Activity, Bldg 2243.

(4) If the item is not available, the DA Form 2765-1 is marked "Not Available" and returned to the requester.

(5) Major assemblies are only issued to DS/GS type activities, and a repair part, component, or assembly is only issued to customers authorized to remove the repair requested item as authorized by appropriate TM and SMR code.

(6) Items issued from the CP are free issue; however, use the unit price of the item, when the price is required for budgeting, accounting, or reporting purposes. For substitutes, use the price of the item requested.

e. Transfer of cannibalized Items to the DRMO.

(1) CP use DD Form 1348-1 to transfer cannibalized items to the DRMO activity.

(2) Majority of items being transferred are annotated as "scrap" depending on the extent of the cannibalization. Equipment, identifiable as end items, is turned in as such.

(3) Do not repair cannibalized items to be transferred to the DRMO and. send in an "as is" condition

1-15. DEFERRED DS/GS SUPPORT MAINTENANCE. You may defer DS/GS maintenance of equipment when backlogs exceed upper acceptable performance range and when you can operate the affected equipment safely, in its current condition, without further deterioration.

a. When maintenance is deferred, mark DA Form 2407 "deferred" by support maintenance inspectors and required repair parts ordered. Units are furnished copies 3, 4, and 5 of the DA Form 2407 and, if applicable, a copy of DA Form 2404. The unit must retain these forms and furnish, to the support maintenance activity, when the equipment is returned for repair. In the event the equipment becomes inoperable or unsafe to operate prior to call-in, turn in the equipment to support maintenance, with a memo, requesting upgrade of priority.

b. The technical inspector annotates, status column of DA Form 2404, what repairs are to be deferred and accomplished by the support maintenance activity. The inspector enters the words "LAST ITEM" on the DA Form 2404, when he has completed his inspection.

c. List equipment faults on the DA Form 2408-14 as prescribed by DA Pam 738-750/TB 9-1100-803-15 or listed on ULLS dispatch.

d. Each organization maintains a suspense file of DA Forms 2407, for deferred maintenance work, reflecting timely accomplishment of required maintenance.

1-16. APPROVAL FOR PERFORMANCE OF SUPPORT MAINTENANCE REPAIR BY UNIT LEVEL MAINTENANCE ACTIVITIES.

a. Supported unit that desires to perform a higher echelon of maintenance must first obtain written approval from its support TDA/TOE maintenance support shop prior to starting required repair.

b. For units supported by DOL TDA shops, request approval to perform maintenance, above the echelon of maintenance authorized, by submitting a DA Form 2407 (prepared IAW DA Pam 738-750 and this regulation) to the DOL, IMMO maintenance Division, Bldg 2258E. Block 16a, DA Form 2407, will contain a brief justification and a statement that required tools, time, and supervision are available to perform the work, and that it does not affect performance of organizational maintenance. The unit commander or his designated representative must sign the statement.

c. For units supported by the 588th/226th Maintenance Company TOE shops, approval will be IAW with internal SOP and/or authorized by the Commander, 19th Maintenance Battalion or his authorized representative.

d. If approval is granted, the DA Form 2407 is annotated and processed through the appropriate work center clerks.

(1) If parts are required, the request (DA Form 2765-1) must be approved by the IMMO, Maintenance Division, for units supported by DOL TDA shops.

(2) For units supported by 226th, 588th Maintenance Company TOE shops, the Commander, 19th Maintenance Battalion and/or his designated representative will approve the requests.

1-17. ESTIMATED COST OF DAMAGES (ECOD) - ACTUAL COST OF DAMAGES (ACOD).

a. Quality Control TDA/TOE section furnishes estimated cost of loss, when required, by the investigating and/or surveying officer, ECOC, ACOD. Technical and/or evaluative assistance is rendered, upon request, in regard to apparent cause of accident, mechanical/system failure and/or improper operating procedures that contributed to malfunction. Submit informal memorandum to appropriate quality control section, for this service, stating type of certificate or assistance required, listing the serial number of the equipment, date manufactured, and nomenclature (Interim Change

to AR 25-50).

b. Customer units may also obtain an ECOD by annotating "Estimate Cost of Damage Requested" in block 16, DA Form 2407. When an item is being surveyed, repairs are not made, without the surveying officer's release as prescribed by AR 735-5.

c. When the item is no longer required for investigation or surveying purposes, the officer conducting the investigation or survey provides the appropriate TDA/TOE support maintenance shop with a release statement. An example follows:

"Damage to Cargo Truck, 2 1/2 ton, M35A2, serial number 022514047, is being investigated IAW AR 735-5, but vehicle is no longer required for investigation and is released for repair. (The statement will include the signature block and signature of the responsible individual or investigating officer)."

Section III. ELECTRIC AND BUSINESS MACHINE MAINTENANCE

1-18. MAINTENANCE OF BUSINESS MACHINES. Many repairs required on typewriters, photocopying machines, adding machines, and calculators are directly attributable to the lack of both operator care and organizational maintenance. Preventive maintenance measures for better machine service are as follows:

- a. Cover machines when not in use.
- b. Turn off electrically operated machines when not in use.
- c. Move typewriter carriage, whenever possible, to one side when erasing.
- d. Do not strike keys without paper in the machine.
- e. Remove paper only after releasing the paper release lever and raising the paper bail.
- f. Keep typewriters away from radiators, stoves, and direct sunlight.
- g. Clean typewriter daily, using a stiff bristle brush. At least weekly, clean the typewriter with stiff bristle brush and cleaning compound. Clean platen and accessible rollers with a lint free cloth.
- h. Do not allow unauthorized maintenance to be performed on machines.

1-19. MAINTENANCE OF ELECTRIC OFFICE MACHINES. This paragraph provides instructions for obtaining repairs and services for government-owned office machines, and explains repair limitations and policy.

a. Maintenance of office machines is the responsibility of DOL and Directorate of Information Management (DOIM). This equipment is repaired and serviced primarily by

commercial contract.

(1) Call DOL Production Control at 580-442-5161 (recording) for the following office machine equipment repairs:

Typewriters	Calculators
Embossers	FAX Machines
Perforators	

(2) Send requests for office machine equipment repairs, managed by DOIM, by calling the Help Desk operators at 103 or by filling out an electronic request using the intranet or internet to the Help Desk system. The following electronic equipment is currently managed by DOIM:

Copiers (Cost-Per-Copy and government-owned with maintenance agreement)	Microfiche Reader/Printers
Typewriters with Disk/CRT	Word Processing Equipment

b. The term "commercial contract service" as used in this regulation is defined as the repair or servicing of government-owned equipment by a commercial firm on contract.

c. Routine or scheduled maintenance services are performed, periodically, by contractors, IAW the following schedule:

(1) Monthly.

(2) Semimonthly.

(3) Quarterly - 1 October through 31 December, 1 January through 31 March, 1 April through 30 June, and 1 July through 30 September.

(4) Triannually - 1 October through 31 January, 1 February through 31 May, and 1 June through 30 September.

(5) Semiannually - 1 October through 31 March, and 1 April through 30 September.

(6) Annually - No scheduled inspections. Services are rendered as requested by the user.

d. Each fiscal year, DOL, Production Control sends each property receipt holder a memorandum, listing office machines to be serviced, by annual contract. This memorandum indicates the nomenclature, serial number, service interval, and the contract number, under which they will be serviced, for the fiscal year. It also contains instructions for submitting FS Form 338 (Master Preventive Maintenance Schedule and

Record) and describes procedures for obtaining repair services for listed machines.

e. Property receipt holders submit FS Form 338 to the Cdr, USAFACFS, ATTN: ATZR-LCI-M, verifying that services under contract either have or have not been performed, by the scheduled dates. It is important that these reports be accurate because they are the basis for payment to the contractor for services rendered.

(1) If a machine is placed in a nonoperating status, for a period of 3 months or more, the receipt holder does not permit the contractor to perform the scheduled service on the machine.

(2) After the contractor has serviced each machine (cleaned, oiled, adjusted, and checked for proper operating condition), sign service ticket furnished by the contractor.

f. Units notify Cdr, USAFACFS, ATTN: ATZR-LCI-M, when electric machines are received, transferred, or turned in by their units and of any significant changes of machine locations. Make notification by memorandum and indicate nomenclatures, makes, models, serial numbers, locations, and dates received, transferred, or turned in.

g. Fort Sill hand receipt holders, or their authorized personnel, contact DOL, Maintenance Service Contract Section, when repair service questions need to be discussed and answered. Make normal routine service calls to 580-442-5161, which is connected to an answering machine.

h. Satellite units contact DOL, Production Control, 580-442-5216, Fort Sill, OK, for emergency service calls or replacement of parts. If this repair is not covered by the contract agreement, provide an estimated cost of service or parts. A list of machines, under yearly maintenance contracts, is sent to the unit, when annual contracts are awarded.

i. Office machines, which have become over age or are classified as uneconomically repairable.

(1) When an office machine that is on maintenance contract is determined to be uneconomically repairable, the contractor furnishes an estimate of parts and labor to DOL, and the property receipt holder is notified, by the contract clerk. For evaluation, present machine and DA Form 2407, to Technical Inspector, Office Machines, Bldg 2258W. If the machine is determined by Technical Inspection (TI) to be uneconomically repairable, this condition is indicated on the DA Form 2407. A copy is then used as authorization for turn-in and/or replacement.

(2) Present unserviceable or over age machines to technical inspection personnel, as shown in para (l) above for turn-in and replacement.

j. The following applies to satellite units:

(1) Send memorandum to the Cdr, USAFACFS, ATTN: TZR-LCI-M, Fort Sill, OK 73503-5100, when requesting repair on office machines that are not over age or on annual commercial maintenance contract, except manual typewriters and electric or hand operated adding machines. Telephone requests may be made to 580-442-5216. Include the following information, in case of emergency requirement:

- (a) Type of machine.
- (b) Make or manufacture.
- (c) Serial number and model.
- (d) Difficulty being experienced.
- (e) Exact location of machine (address) and person to contact.

(2) After a request has been received, a purchase order is issued, covering the repair. After repairs are completed, submit a report of satisfactory services, either by memorandum or stamped on the invoice, left by the vendor, to DOL Production Control, certifying satisfactory services were rendered

Section IV QUALITY CONTROL FOR TOE/TDA SUPPORT ACTIVITIES

1-20. QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES.

a. TOE/TDA Quality Control Support Activities. These activities will—

(1) Perform acceptance, initial, inprocess, and complete final inspections of vehicles and equipment IAW AR 750-1, DA Pam 750-13, TM 750-245-4, TRADOC Reg 750-2, and/or MIL-Q-9858A as required. Inspections are IAW TM 10-20 standards and safety related items affecting safe operation of vehicles.

(2) Establish, support, and maintain an effective quality control (QC) program, which encompasses measurable quality assurance and surveillance systems that involve complete evaluations of equipment repair from start to finish.

(3) Evaluate repair eligibility of items, determine repair parts needed, and/or maintenance actions required to bring it up to required standards.

(4) Guarantee customers, after final inspections, that after repair, the items of equipment returned are the best they can possibly be.

b. Initial Inspections. When equipment is brought to the DS/GS support activity for initial acceptance and inspection, include a completed DA Form 2407 and a DA Form 2404, which reflects the unit's organizational inspection results, actions taken, etc., and must be current (not more than 3 days old). Account for any due out organizational

repair parts and/or incomplete maintenance repair actions with an entry showing document number and status and/or reasons why item could not be fixed or repaired at the organization level.

c. Final Inspections. Final inspection results should determine that repaired equipment meets or exceeds established serviceability standards and should confirm that adequacy of each maintenance service or repair action is verified. Any items being returned that fails to meet above standards, should be brought to the immediate attention of the appropriate TOE /TDA quality control personnel for corrective action and/or resolution to the satisfaction of the customer/owning activity.

d. Quality Control Responsibilities (Contractor Operated Facilities). Establishment of a quality control program for, contract-operated facilities is the sole responsibility of the said contractor, IAW subject government contract and directives, etc. Government quality assurance personnel inspect and evaluate the contractor's quality control program IAW the performance of and the conformance to contractual specifications and requirements of said contract. The Contract Management Office and Services Section, Maintenance Division, are responsible for the overall quality assurance (QA) evaluation of the operations and management of DOL contracted functions, as follows:

ACTIVITY	PHONE	BLDG NO
(1) DOL Maintenance Division	(580) 442-3808	2258E
QA Inspection	(580) 442-3708	2258E
TDA Maintenance (Contractor)	(580) 442-4608	2252
Quality Control (Contractor)	(580) 442-5394	2258E
(2) Aircraft Maintenance		
QA Insp		
Contractor		
(3) Safe Repair	(580) 442-3808	2258E
(4) Mortuary services	(580) 442-4014	2243
(5) Office/Business Machines		
Typewriters, etc	(580) 442-4820	2258W

Section V. VEHICLE CARE, SAFETY, AND PREVENTIVE MAINTENANCE

1-21. CLEANING AND CARE OF VEHICLES. Organization commanders must provide the necessary training and supervision to make sure that U.S. Army materiel is cleaned IAW technical manuals and that any cleaning required will not damage internal components such as bearings, bushings, seals, etc.

a. Keep track vehicle hulls clean to prevent accidental injuries, fires, and/or contamination of components/assemblies, causing possible failure.

b. Do not use application of high-pressure water streams or live steam under pressure, unless under close observation by knowledgeable, senior NCO maintenance personnel from the owning activity. This type of cleaning may cause severe damage to

mechanical assemblies or to electrical components of materiel by forcing moisture and foreign matter through seals, vents, etc.

c. Do not use gasoline or other highly flammable liquids, as a cleaning solution or solvent, under any circumstances. Highly flammable liquids can cause serious injury or death when used improperly. Only authorized solvents are used for cleaning parts/components or assemblies, etc. Catastrophic injury or death can occur, even if flammable liquid containers are left unopened, in maintenance areas, where fumes can accumulate and then are set off by cigarette lighters, matches or hot water tank pilot lights, etc. **SECURE AND CLOSE TIGHTLY ALL FLAMMABLE LIQUID CONTAINERS WHEN NOT IN USE! (NO EXCEPTIONS TO ABOVE GUIDELINES ARE AUTHORIZED.)**

d. Do not store oils, lubricants, and cleaning materials in any maintenance repair area. Store IAW AR 420-90.

e. Operate vehicles and equipment systems IAW technical manuals and/or as authorized by higher headquarters or command.

1-22. REPAIR SHOP SAFETY PROCEDURES.

a. Drain fuel tanks in authorized areas only, as outlined by the Environment Quality Division and repair IAW published technical manuals and/or guidance from the IMMO.

b. Use chock blocks, front and rear of vehicle wheels, during any maintenance repair action to prevent movement of the vehicle. Use jack stands on any raised vehicle for support.

c. Properly ground power tools and electric powered equipment before operating. Check electrical components for frayed cables and/or shorted circuits before operation.

d. Operate equipment only when properly licensed.

e. Do not back vehicle out from the shop area unless a ground guide is available. Use escort vehicles, with track vehicles, when traveling main roads to turn-in for maintenance work at TDA/TOE Support Shops.

f. Secure loose clothing, ID tags, chains, or anything that might become entangled in the operating components of the equipment, while working on equipment, which is operating.

g. Leave shop doors open or use exhausts tubes while running or operating equipment in the shop.

h. Shop repair personnel must wear protective clothing/face shields/hearing

protection, when required by the specific task or repair being performed.

1-23. PREVENTATIVE MAINTENANCE PROCEDURES.

a. Use of Icing Inhibitors in Fuel Tanks/Starting Fluids During Cold Weather. Change 1, FM 9-207 contains instructions on products to be added to gasoline or diesel fuel during cold weather. Quantities to be added and NSNs of items are included in technical manuals. Add the fuel on top of the additive for better mixture and effectiveness. Do not use more additive than is specified, as the greater concentration could result in the rubber seals swelling.

b. Calibration of Artillery Systems. Each firing battery is equipped with the M90 chronographs for on-site calibration of artillery weapons. Calibrate each artillery weapon at least once annually and when retubed. If a continuous high rate of firing takes place, recalibration may be needed more often than annually.

c. Borescoping and Inspection of Cannon Tubes. Units are responsible for making sure cannon tubes are borescoped every 180 days for continuous or recurring firing. If the weapon has not been fired for sometime, on a scheduled basis, it must be borescoped prior to firing. Units must maintain DA Form 2408-4 to record the scheduled borescope. Arrangements, for the borescope, can be made, by calling DOL Inspection Section, 580-442-6846, or 226th Maint Company Artillery Shop, 580-442-6611. TM 9-1000-202-14 establishes criteria for pullover gauge reading and bore calibration specifications.

d. Cleaning of M-40 Field Protective Mask. When cleaning the M-40 field protective mask, be sure to keep any kind of brush or sharp object away from the voicemeter. Brush bristles can puncture the diaphragm. If the diaphragm is punctured, the M40/M17 masks are no longer safe for use. Organizations evacuate any unserviceable or excess protective masks to determine if organizational maintenance has been performed and to determine applicable condition codes. Turn in protective mask with condition code tags attached, upon completion of technical inspection, to Supply Branch, Bldg 2243. Separate DA Forms 2765-1 are furnished for each NSN and condition code, for example, H, X; replacement requests, if required, are prepared on DA Form 2765 - 1 and submitted to DOL, Supply Branch.

1-24. HYDROSTATIC/VOLUMETRIC TESTING OF DISPERSER/RIOT CONTROL AGENT/PORTABLE, M3.

a. The M3 and M5 are classified, as arms, by AR 190-11. Obtain specific security requirements from the servicing security organization for storage requirements. Test riot control M3 tanks at 4-year intervals. Test M5 disperser agent tanks at 54-month intervals. Tanks modified IAW MWO 4-1040-214-45/1 may be identified by the coupling cap holder attached to the agent delivery pipe support and the new quick disconnect coupling cap on the end of the agent delivery pipe. Volumetric specifications and other information concerning riot control agents can be found in AMC Reg 750-1, Oct 84.

b. The M8 hose, used with modified M3 dispersers, does not require hydrostatic testing. Mark as follows:

(1) Paint around each end with aluminum paint, NSN 8010-00-721-9721 on a 9-inch band.

(2) Stencil the words "M3 Disp Only" on each aluminum band in letters 1/2 inch high using red paint, NSN 8010-00-141-2952, on each end of the hose. Ensure markings on one end of the hose are at the opposite side from markings on the other end.

(3) Repaint the hose as required and use until visual inspection indicates damage or pending failure.

c. Do not use modified M3 dispersers and marked M8 hoses with flamethrowers.

d. M3 dispersers, not modified in accordance with MWO 3-1040-214-45/1, are tested in accordance with the technical manual. Do not use marked M8 hoses with unmodified M3 dispersers.

1-25. INSPECTION OF DOSIMETERS. Perform monthly inspection of IM 9E/PD, IM 93/UD, IM 93A/UD, and IM 147/PD dosimeters in accordance with TM 11-6665-214-10 as changed.

1-26. USE OF POLYURETHANE PAINT (PUP)/CHEMICAL AGENT RESISTANT COATING (CARC), MIL-P-53022A, MIL-C-22750, MIL-C-46168, MIL-C-53039. CARC is the only authorized paint to use when complete repainting of Army tactical and combat vehicles is required for preservation purposes. DOL Support Maintenance is the only authorized activity to perform this repainting requirement. Owing units are only authorized spot painting applications because of strict safety and medical requirements.

a. CARC Paint Safety and Medical Requirements. The following personnel safety requirements must be met and monitored by supervisory personnel when applying CARC paint:

(1) Respirators. Touch-up painting, using one quart of CARC paint outdoors with the brush or roller paint method, not in a confined space, can be done without a respirator. All other paint methods require an appropriate respirator.

(2) Indoor/outdoor use. IAW letter, OTSG. DA, 22 Feb 85, Subj: CARC Occupational Health Requirements, the volume of work for one painter, using brush or roller indoors or outdoors, cannot exceed one quart per day per vehicle/item of equipment at any one time.

(3) Protective clothing. Use full skin cover clothing and gloves when applying CARC paint. There are no restrictions on the type of gloves used as long as the hands are fully protected. Contact the USAFACFS Safety Office for information pertaining to safety requirements, 580-442-4466.

(4) Medical requirements. A preplacement medical examination is provided to personnel engaged in CARC painting operations for more than 30 days a year. Contact the Occupational Health Clinic, 580-442-3443, for additional information or medical requirements.

b. CARC Products. These products consist of the following:

(1) For external surface application. Polyurethane paint (PUP) is the top- coat applied over an epoxy primer (EP).

(a) PUP top coat, Specification MIL-C-46168. Quart Kit

Green 383	NSN 8010-01-160-6741
Brown 383	NSN 8010-01-160-6744
Black	NSN 8010-01-141-2419
Sand	NSN 9010-01-141-2416

(b) Epoxy Primer, Ferrous and Non-ferrous surfaces, Specification MIL-P-53022A, Quart Kit - NSN 8010-01-193-0516

(2) For internal surface application, the coating is epoxy enamel over an epoxy primer.

(a) Epoxy-Enamel, Interior Application, White, Specification MILC-22750, Two-Quart Kit - NSN 8010-01-03-2647

(b) Thinner, Specification MIL-T-81772

(c) One Gallon NSN 8010-00-181-8080

(d) Five Gallon NSN 8010-00-181-8079

Note: Epoxy paint, MIL-C-22750, is for crew compartments only. It will not be applied to areas other than those already authorized. It will not be applied to any engine or exhaust components.

c. PUP Application Procedures.

(1) Make sure surface, over which PUP is applied, is dry and clean and is free of contaminants such as water or petroleum residue and granular debris of any kind.

(2) PUP is a high solids coating. Apply evenly to ensure conformance with the original coat- -surrounding the painted area using the "feathering-in technique." Too much PUP may inhibit proper drying/curing of the PUP coat and the epoxy primer.

(3) Allow the primer coat to air dry a minimum of 20 minutes or until dry to touch before top coating with PUP. Epoxy primer, that has been allowed to dry more than 24 hours (especially when "baked" by hot sun) may require light sanding to ensure proper PUP adherence.

(4) Recoating may be performed when original coating is tacky. Once the original PUP coat has cured for 14 days or more (especially when "baked" by hot sun), light scuff sanding may be required to ensure proper adherence.

(5) PUP can be applied over a well cured (i.e.. 90 days) alkyd paint. The alkyd coating must be sound (i.e.. no corrosion, no substrate showing) and free of absorbed or deposited carbon, salt, diesel fuel, gasoline, oils, waxes/sheens, hydraulic/transmission fluids, solvents, etc.

(6) PUP cannot be applied over lacquer coatings or vinyl. Remove lacquer, which necessitates repriming, with epoxy primer, and apply PUP for a new topcoat.

d. Epoxy Primer. Apply evenly in one coat over exposed substrate: apply over portions of exposed original primer coat using "feathering in technique," that is, tapering off quantity applied to a fine edge. After application, immediately clean up equipment and tools.

e. CARC Application Restrictions. Do not apply camouflage patterns or touch-up painting during repair operations. The use of CARC is prohibited on exhaust system components. Use heat resistant paint, MIL-P-14105. Support maintenance activities and /or using units prohibit painting or over spraying of CARC on exhaust system components.

(1) Do not apply CARC to fuel-fired personnel heaters for combat and tactical vehicles, to any component within the vehicle crew compartment, or which has a direct airway connection with the crew compartment. Do not paint fuel -fired personnel heaters, rebuilt after 30 Jan 87, with epoxy paint.

(2) Military and civilian welders should be aware of potential dangers of welding on equipment without first removing CARC. Welding of CARC painted surfaces requires abrading the CARC paint down to the substrate, in the immediate area to be welded. This also includes CARC painted surfaces on the backside of the weld spot. After welding is completed, grazed surfaces, of the substrate, are eliminated prior to epoxy repriming and PUP over coating, etc.

(3) Users inspect turbochargers, exhaust manifolds, fuel -fired personnel heaters, etc., received in the supply system, to determine if CARC has been applied.

Immediately report any component found to have CARC applied, to the appropriate National Inventory Control Point (NICP) for resolution from commercial contractors. Also report CARC applied to any other restricted areas in the same manner.

f. Removing CARC Paint. There are currently two accepted methods for removing CARC paint from high heat surfaces:

(1) Sand blast, then high-pressure wash.

(2) Strip with solvents. Thinner Type II, NSN 8010-01-200-2637 and or NSN 9010-01-212-1704: then high-pressure wash.

g. Technical Assistance.

(1) Refer questions, regarding personnel safety issues, to MEDDAC, Preventive Medicine Activity.

(2) Direct environmental issues, such as waste disposal, to Cdr, USAFACFS, ATTN: ATZR-FE, 580-442-2715/4651.

(3) Questions/comments regarding application or use of CARC, PUP, or EP that are not covered in this regulation should be directed to: Cdr, TACDM, AMSTA-MTC, Warren, MI, DSN 786-7351/7911/7446; or write to: Cdr, U.S. Army Aviation & Troop Command, ATTN: AMSTR-WN, 4300 Goodfellow Blvd, St. Louis, MO 63120-1798.

h. Painting. Equipment will be completely repainted, only when required for preservation, or during overhaul, in accordance with colors authorized by AR 750-58 and by USAFACFS Suppl 1 to AR 750-58. **Do not completely repaint to merely change color or improve appearance.** Using units are responsible for the camouflage painting of their vehicles. Complete repainting of the basic coat requires approval by the IMMO, Fort Sill, OK.

Section VI. COMMODITY GROUP ITEMS

1-27. REPAIR OF TENTS. Organizations will repair tents in the following manner:

(1) Repair rips and tears smaller than 4 3/4 inches with patches and adhesive (NSN 8040-00-266-0850).

(2) Spread the tent out and place a flat object under the hole to be patched. With the flat object as a backing, use a wire brush to clean and buff the entire area to be patched.

(3) Select a patch that will overlap the damaged area by 3/4 inch. Apply cement to both the patch and the tent, allowing the cement to overlap the edge of the patch at least 1/2 inch. Allow the cement to dry for 15 minutes, and apply a second coat to each,

then place the patch over the damaged area. Work out air bubbles and set patch by necessary rubbing. Avoid moving the canvas for 24 hours to allow cement to dry properly.

I-28. CAMOUFLAGE NETTING. Units will repair camouflage netting.

1-29. PRESERVATION OF HAND TOOLS. Preserve hand tools by--

a. Painting mounted hand tools, on tactical vehicles, in accordance with the provisions of AR 746-1. Use the same type and color paint as is on the vehicle.

b. Painting emergency shovels and axes as specified, in applicable fire and safety regulations.

c. Painting entrenching tools with OD semigloss enamel.

d. Preserving other hand tools by applying a very light coat of linseed oil, NSN 8010-00-221-0611, on wooden handles; and lubricating oil, general purposes, preservative special, NSN 9150-00-231-6689, on metal parts and metal tools.

e. Painting tools with camouflage paint, when it is determined by a commander, that camouflage is of paramount importance.

f. Exercising extreme care that--

(1) Serrated jaws and cutting edges are free of paint at points of contact.

(2) Pivots, joint pins, slides, and swivels are free of paint to permit effective lubrication.

(3) Knurled grips do not become paint clogged and smooth.

1-30. UNIT MARKINGS ON SMALL ARMS, BAYONETS, AND SCABBARDS. There is no directive authorizing painting or unit identification markings on individual small arms, bayonets, and scabbards. To avoid costly refinishing upon turn-in, the recommended method is to use easily removed materiel such as tape, adhesive cloth backing, waterproof, green, 1-inch, NSN 8935-00261-8088. You can place unit markings on the tape, and then you can readily remove, when the item is to be reissued to another unit.

Section VII. INSTRUMENTS AND FIRE CONTROL EQUIPMENT

1-31. CLEANING LEVEL VIALS. Clean level vials with a camelhair brush or another soft bristle brush. You can use lens tissue provided it is not silicone treated and if you apply no excessive pressure to the vials during cleaning. Never use grease, oil, or solvents on vial covers or on surfaces of vials; it may lead to the deterioration of the red

lines or Plaster of Paris. Ethyl alcohol is recommended for cleaning vial covers.

1-32. AIMING CIRCLE, M2. A notation strip is provided on the base plate of the aiming circle, M2. This strip is a raised machine surface on which scale readings, settings, or declinations may be recorded. Do not mark by etching or painting. The use of ink, pencil, or similar marking device that can be easily erased is acceptable.

1-33. ON-CARRIAGE SIGHTING FIRE CONTROL EQUIPMENT.

a. Painting on-carriage sighting equipment is prohibited, since painting can result in damage or create a major maintenance problem.

b. Perform basic testing of all howitzers on a regular basis IAW applicable TM-10 series. A plumb line facility is available for unit use at Bldg 2189. Units make prior arrangements to use by calling the optical instrument lead man at 580-442-6023.

1-34. PURGING OF FIRE CONTROL INSTRUMENTS. Purge optical fire control instruments, having purging ports or valves, in accordance with TM 750-116. This will prevent or remove an accumulation of moisture inside the instruments and reduce the frequency and amount of repair. Record purging of optical fire control instruments on DD Form 314.

1-35. INSPECTION, TESTING, AND MAINTENANCE OF LIFTING DEVICES.

a. Inspection and Testing. Inspection and testing of lifting devices are done IAW TB 43-0142. Special type and special use lifting devices, to which load test intervals have been assigned by DA technical publications, are inspected, tested, and maintained as prescribed by applicable publication.

b. Responsibilities.

(1) Organizational maintenance will inspect and load test tool set components as defined in TB 43-0142, and perform periodic inspection on other lifting devices in accordance with TB 43-0142.

(2) DOL, TDA Maintenance will repair and load test lifting devices in accordance with TB 43-0142, except components of tool sets (TB 43-0142, para 5e) or cranes and hoists, installed on structural components of buildings.

c. Procedures.

(1) Activity or unit responsible for inspection of lifting devices will initiate and maintain required historical records (DD Form 314).

(2) Submit requests for lifting devices requiring repair or load test at TDA Maintenance to Bldg 2250 on DA Form 2407. Identify item by serial number, NSN,

rated load, and type of load test (initial issue, after repair, or required per specific listed directive).

(3) Unless organizational repairs are covered by a specific directive, repair of lifting devices is accomplished by DOL Maintenance Department. DOL Maintenance Department will not repair locally fabricated lifting devices.

Section VIII. MISCELLANEOUS

1-36. ANTIFREEZE SOLUTION.

a. Protect liquid cooled vehicles from freezing in accordance with procedures contained in TB 750-651. Protect equipment operated in the Fort Sill, Oklahoma, and support area to -10 degrees F. Use premixed antifreeze solutions, when available, at issued strength without regard to expected low freezing temperature. Protect vehicles, being shipped, by common carrier, with a 50-50 mixture of antifreeze and water.

b. Notwithstanding the exception contained in TM 750-651, para 3h, do not leave equipment unprotected during the period when freezing temperatures may occur. If it becomes necessary to operate a vehicle with only water in the cooling system, drain the system whenever there is a danger of freezing. Reinstall antifreeze solution at the earliest possible time.

c. Vehicles are not accepted, on job order, by support maintenance units, unless the cooling system is properly protected with antifreeze solution.

d. Military specification type antifreeze is considered usable as long as it meets the criteria set forth in TB 750-651.

e. Commercial type antifreeze solution used in military equipment cooling Systems must be changed upon receipt of specification type antifreeze or 1 year, whichever occurs first.

f. Conspicuously identify each cooling system, containing commercial type antifreeze solution, with the brand name entered on a tag, attached to the radiator.

1-37. REQUISITIONING OF 35P REPAIR PARTS.

a. Reference USAFACFS Reg 725-1, chapter 2.

b. Units, supported by DOL's TDA maintenance shops, requisitioning repair parts above their authorized levels of maintenance must have requisitions approved by the DOL, Chief, Maintenance Division/IMMO, Bldg 2258E, prior to submission to the DOL, Supply Division.

c. Accompany parts requisitions with the appropriate publication during the

approval process.

d. Units supported by 588th/226th TOE maintenance shops will have requisitions approved by Commander, 19th Maintenance Battalion or his authorized representative.

1-38. WARRANTY CLAIMS ACTION.

a. This paragraph describes provisions of the manufacturer's warranty and the actions required in submitting warranty claims. These instructions apply to all persons involved in submission of warranty claims against items of equipment under manufacturer's warranty for equipment supported by DOL, Maintenance Division, 588th and 226th Maintenance Companies.

b. Manufacturing corporation agrees to replace specific defective assemblies or parts without cost to the government.

c. Parts and assemblies covered by the warranty are listed on decals attached to the equipment, inserted in the equipment TAMMS records, included in the equipment technical manuals, and warranty technical bulletins.

CHAPTER 2

THE ARMY MAINTENANCE MANAGEMENT SYSTEM (TAMMS)

2-1. PREPARATION AND USE OF FORMS.

a. Maintain mandatory TAMMS forms prescribed in DA Pam 738-750 on equipment. Commanders are encouraged to maintain any additional records or forms considered beneficial for proper maintenance of equipment. Forms, required or optional, must be maintained as prescribed in DA Pam 738-750 and in this regulation. Submit only those forms prescribed for items listed in AR 700-138, appendix B, to TDA/TOE maintenance support shops for processing.

b. Units forward National Maintenance Point (NMP) copies of TAMMS DA forms to the appropriate Logistics Data Center, NMPs and/or Commodity Command for Quality Deficiency Reports (QDRs) or Equipment Improvement Recommendations (EIR). Disregard forwarding action prescribed in DA Pam 738-750 for other NMP copies of TAMMS DA forms. Deliver NMP copies of these DA forms to the Supply Activity, DOL, for forwarding as required. NMP copies of QDR/EIR are forwarded IAW DA Pam 738-750.

c. Use Julian dates on TAMMS forms that are processed through automated data centers. Calendar or Julian dates may be used on other forms as desired or as directed by DA Pam 738-750.

d. Corrected copies of forms prepared in accordance with DA Pam 738-750,

paragraph I-6c, will contain the following note in the remarks block: "To correct Block (number) from (Incorrect Data)." Initiate new forms only when the old forms are mutilated, lost, or destroyed.

2-2. DD FORM 314 (PREVENTIVE MAINTENANCE SCHEDULE AND RECORD).

a. When DD Form 314 is used to schedule services on several like items (DA Pam 738-750, para 3-3), only the number of items that can be serviced in a normal 8-hour workday is scheduled on one form. Place quantity and serial or other identifying numbers in the remarks block.

b. Load tests of equipment used or supported by DOL are scheduled and controlled using the "N" listing of the monthly calibration lists.

c. If for any reason the maintenance workload becomes unbalanced, services may be rescheduled. Time intervals for services prescribed, by appropriate manuals, will not be exceeded, but they may be reduced. When services are rescheduled for this reason, an explanation is entered in the remarks block.

d. Schedule purging of fire control instruments, borescoping of cannon tubes, and basic periodic tests, for artillery pieces, on DD Form 314.

e. Any item of equipment with a deferred maintenance request, that is available to the unit for use and is operational, will not reflect Not Mission Capable Supply (NMCS)/Not Mission Capable Maintenance (NMCM) data on DD Form 314. Collect NMCS/NMCM data on DD Form 314 upon receipt of equipment, performance of organizational or support maintenance, and/or when the equipment/vehicles are not FMC and not available to the unit.

f. NMCS/NMCM data on DD Form 314 are primarily for unit readiness and materiel readiness computations. Only NMCS/NMCM time as defined by the appropriate PMCS guidelines is included.

2-3. DA FORM 2404 (EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET).

The maintenance, unit commander and/or his designated representative will sign block 9a, DA Form 2404 (see DA Pam 738-750, para 3-4), when corrective action is taken. The unit maintenance officer or his designated representative is considered to be the person responsible for the level of repair and/or maintenance being performed.

2-4. DA FORM 2406 (MATERIEL CONDITION STATUS REPORTS).

a. This regulation provides supplemental instructions for the preparation and submission of materiel condition status reports required by AR 700-138, paragraph 1-5, Army Logistics Readiness and Sustainability.

b. Active Army units submit monthly reports to arrive at DOL, Production Control, not later than COB on the 3d workday after the 15th of each month. U.S. Army Reserve units submit quarterly reports to arrive at Production Control, Bldg 2255, NLT COB on the 5th working day following the report cutoff date.

c. Edit DA Form 2406 by preparing agencies to assure completeness, legibility, and accuracy of entries. Commanders of reporting agencies ensure that individuals preparing or reviewing reports are qualified and knowledgeable of reporting requirements and procedures.

2-5. REPORTING PROCEDURES. Prepare materiel condition status report in at least two copies and distribute as follows:

a. Hand carry original, signed by the unit commander, to DOL, Production Control (Bldg 2255). Intermediate commanders should review reports of subordinate units prior to submission.

b. Originator retains only one copy.

c. Prepare other copies as required by intermediate headquarters.

d. Enter name and telephone number of the person, in the reporting agency, to be contacted in the event additional information is required in the upper margin of the report form.

e. Negative reports are required when applicable.

2-6. DA FORM 2407 (MAINTENANCE REQUEST).

a. Except as noted in the following paragraphs, initially submits all copies of DA Form 2407 to support maintenance. Attach a copy of the unit's DA Form 2404 to the DA Form 2407 for retention by support maintenance.

b. Submit the following required specific data on DA Form 2407 to support maintenance:

(1) Block 2b (MCSR) If the item is reportable enter a "y" If nonreportable leave blank.

(2) Work order number block 3a is reserved for the support maintenance job order number. Enter the organization job order number, if applicable, in block 10a.

(3) Enter Serial number of the tactical and combat equipment in block 11.

(4) Block 9 will reflect noun nomenclature (use the same nomenclature and model listed in FEDLOG) and tonnage or type of equipment (e.g., Truck 1 1/4 Ton; Howitzer,

105mm.) Do not enter identification or NSN of end item when turning in a component for repair.

(5) When the maintenance request lists component items, enter the noun, model, and NSN of the end item, from which the component was removed, on the last line of block 25. Also, include "R" on the last line of block 25, if item in block 9 is a recoverable item, or the letter "N" if the item is non recoverable.

(6) Block 10b is reserved for entry of the Equipment ID Code, for that end item IAW DA Pam 738-750.

(7) Use the following entries in block 22 to identify level of support maintenance:

(a) Block 4b enter "TDA Maintenance Support, DOL", or 588th Maintenance Support Company, or 226th Maintenance Support Company, etc.

(b) Block 22. Units submitting DA Form 2407, to their supporting maintenance activities, enter an "F."

(c) Block 22. Direct support maintenance units, evacuating items to general support maintenance activities, enter an "H."

(d) Block 22. Support maintenance activities, performing general support level maintenance, on items received directly from an organization, delete the "F" and enter an "H."

c. Apply the following procedures to equipment that is on maintenance request, to support maintenance, at the time of transfer between units:

(1) For items of equipment, except small arms, the PBO of the unit which placed the equipment on job order will prepare the following certificate and attach to DA Form 2407: "(date); the item listed above has been transferred to (gaining unit); and (signature block of property book officer)."

(2) The gaining unit will notify the appropriate production control office, at their specific support maintenance shop, of the transfer.

(3) For security purposes, open a new job order, when small arms are transferred between units. The original owner must close out his/her maintenance request and, at the same time, the new owner must open a new maintenance request.

d. When a MWO is to be applied to an item, the unit owning the equipment will submit a DA Form 2407 to the applying local maintenance shop and/or depot/contractor field team. Unless directed otherwise, prepare an individual DA Form 2407 for each serial numbered item listed in the MWO. Take copies of the form, to the applying activity for processing. Deliver items to be modified, to application sites at the time

specified. If additional work is required on the equipment requiring an MWO, prepare a separate DA Form 2407

e. Upon completion Section II, DA Form 2407, support maintenance organizations, forward the National Maintenance Point (Lexington KY) copy, reporting accomplishment of DS/GS maintenance, to DOL, Production Control, DOL, Bldg 2255, to arrive not later than 1500 on the workday following completion of work.

f. Responsibilities for assigning and validating priorities on maintenance requests (DA Form 2407) are set forth in TM 738-750, paragraph 3-7. Priorities indicated on DOL supported DA Form 2407s may be upgraded by commanders, XO's, and BMO's. Those requesting work order priority upgrade may send e-mail through channels to the Cdr, USAFACFS, ATTN: ATZR-LIM, or to shop officer of TOE maintenance unit. E-mail should specify work order number, new priority requested, and justification. Base these requests on increased urgency of need (e.g., inability to perform training mission with remaining equipment on hand). Priority indicated on a maintenance request will not be upgraded based on a telephone request. Commanders are urged to review priorities of equipment being repaired in maintenance support activities and to request upgrading, as deemed appropriate, commensurate with assigned FAD and Urgency of Need designation.

g. Support maintenance activities will record start and stop dates for each NMCM and NMCS days for materiel condition status reportable and unit status reportable items in block 16a of DA Form 2407.

2-7. DA FORM 2408-5 (EQUIPMENT MODIFICATION RECORD). Record all MWO applications IAW Fig 5-6, DA PAM 738-750. Owning units will list all required MWO's, that apply to each specific vehicle or piece of equipment, no matter what level of maintenance, and who will apply or has applied MWO.

2-8. DA FORM 2408-9 (EQUIPMENT CONTROL RECORD)

a. DA Pam 738-750, appendix E, lists items of equipment that require DA Form 2408-9 be prepared.

b. Determine and enter serial numbers on forms as prescribed in DA Pam 738-750. Do not precede preprinted control numbers of forms, when used as serial numbers, by the letters "SN." Use preprinted control numbers from DA Form 2408-9 as serial numbers for those items not having serial numbers.

c. Check the appropriate type of report in block 16, and the report codes from DA Pam 738-750, for each type transaction.

2-9. DA FORM 2408-14 (UNCORRECTED FAULT RECORD).

a. When components or accessories are removed, for evacuation, to support

maintenance, on equipment other than aircraft, note removal on DA Form 2408-14. DA Pam 738-750, figure 3-23, provides sample of completed form.

b. Use DA Form 2408-20 as prescribed by DA Pam 738-751 on aircraft.

2-10. DA FORM 2408-20 (OIL ANALYSIS LOG). Use this form for the AOAP IAW DA Pam 738-750, figure 5-15, (for additional information see TB 43-0210).

2-11. DA FORM 2409 (EQUIPMENT MAINTENANCE LOG CONSOLIDATION).

a. DA Form 2409 provides a complete maintenance history of wheel/tracked vehicles, power generating equipment, artillery systems, etc.

b. Both organizational and support maintenance agencies are responsible for making entries on DA Form 2409, when they perform work on the item of equipment.

c. When appropriate, enter data, on antifreeze protection, as prescribed by this regulation.

CHAPTER 3

LOGISTICAL POLICY, INSTRUCTION, AND SUPPORT PROGRAMS

Section I. LOGISTICAL POLICY AND INSTRUCTION PROGRAMS

3-1. LOGISTICAL POLICY AND INSTRUCTION PROCEDURES. DOL has staff responsibility to Commanding General, USAFACFS, for the overall management of installation logistical policies, procedures, and associated assistance or support programs.

a. The Chief, Logistics Operations Division (LOD), DOL, serves as an overall coordinator/advisor to DOL, installation staff, and Commanding General, USAFACFS, in the following areas of Logistical policy or support:

(1) Coordinates transportation policy, doctrine, and procedures; proponent of all above local governing regulations.

(2) Coordinates logistical unit movement and transportation support programs concerning doctrine/policy/analysis.

b. Chief, Logistics Assistance Office (LAO) is responsible to the installation staff and Fort Sill Commanding General for implementation of Army Materiel Command (AMC) policies and procedures. LAO also manages AMC's Logistics Assistance Program (LAP) as outlined in AR 700-4. LAO is located in Bldg 2594 Currie Road, 442-4961.

3-2. LOGISTICS ASSISTANCE AND TECHNICAL INSTRUCTION PROGRAM.

a. AMC Logistics Assistance Program (LAP). LAP is a DA directed and AMC managed assistance program designed to furnish commanders advice, guidance, and feedback on systemic problems that degrade a unit's readiness, mission, and/or deployment capability. LAP responsibilities are to--

(1) Assist units, organizations, or installation commanders in understanding relationships between the wholesale/retail logistic systems.

(2) Identify and resolve logistical problems degrading readiness or deployment postures.

(3) Recommend improvements in logistical support/services programs.

(4) Provide assistance for in-storage maintenance, care, and preservation of materiel, vehicles, equipment, etc.

(5) Conduct technical reviews of inadequacies and/or support furnished by the host installations and the logistics wholesale systems/NICPs, etc,

(6) Determine shortfalls/problems in the interface between the Army (in the field)/installation logistics systems and the wholesale system, and recommends corrective action to eliminate problem areas.

(7) Provides liaison between major commands and the materiel developer concerning new developments, commercial acquisitions, or major product improvements.

(8) Improve logistics support through the generation and use of logistics intelligence and furnishes technical feedback in a timely manner to HQ DA; HQ AMC\major subordinate commands; and other materiel developers.

(9) AMC logistics assistance personnel "WILL NOT" supervise, evaluate, administer, control, and/or command the following:

(a) Military or civilian personnel of the using command.

(b) Depot/contractor personnel and/or contractor's performance.

(c) Quality assurance/acceptance or be assigned as inspectors.

(d) AMC logistics assistance personnel will not be attached or assigned to an installation Maintenance Assistance and Instruction Team (MAIT) or Command Inspection Team, etc.

(e) Nor will they coordinate, direct, and/or bring any depot/contractor field teams to Fort Sill to perform modification, (MWO's/Retrofits) applications, apply, or authorize any modification to, Army equipment or materiel, and/or perform any routine (hands-on) maintenance repair/actions, except as a part of the scheduled/supervised instruction or training IAW AR 700-4.

b. Technical Instruction provided by DOL organizations, is outlined below:

(1) Unit Level Logistics System (ULLS) Course - 40 hours. (Chief, CPBO).

(2) Standard Property Book System-Redesign (SPBS-R) Course - 40 hours (Chief, CPBO)

(3) The Automated Asset Accountability System/Remote Automated Issue Document Entry Register System (TAAAS/RAIDERS) Course - 40 hours.

(4) Equipment Validation Team (EVT) Augmentee Course - 24 hours.

(5) Logistics Operations Center (LOC) Augmentee Course - 8 hours.

c. Technical training given by Unit Movement personnel, Transportation Division, DOL is outlined below:

(1) Unit Movement Officer Course - 40 hours.

(2) Departure/Arrival Airfield Control Group (D/AACG) Course - 24 hours.

(3) Pallet Building Class (hands-on) - 40 hours.

(4) Convoy Clearance Course - 40 hours.

d. Fort Sill currently has no MAIT or Logistics Assistance and Instruction Team (LAIT), nor Logistics Readiness Office; call III Corps Artillery (CA) G-4 or Logistics Assistance Office for technical assistance and advice on readiness reporting/procedures on vehicles/equipment systems, etc.

Section II. LOGISTICAL MANAGEMENT PROGRAMS

3-3. ARMY MAINTENANCE AND MATERIEL MANAGEMENT PROGRAM.

Commanders, leaders, and supervisors at every logistical management level should have the desire and the initiative to establish efficient, reliable, and effective maintenance management programs, which can sustain, meet, or achieve any mission requirement. Command objectives for Fort Sill supported units/activities include the following:

a. Organizational Maintenance Management Program goals and objectives are to

maximize equipment availability, reliability and deployability. You can only accomplish this through developing and implementing command emphasis management systems, that affix responsibility and accountability for services rendered, actions taken, and quality of repair achieved to "INDIVIDUAL" leaders, mechanics, operators, and/or equipment technicians who are directly involved with subject equipment.

b. A critical factor and key objective for effective maintenance management is to provide adequate training to equipment operators, mechanics, and supervisory personnel. AR 350-1, Army Training Manual, provides guidance to commanders in developing viable organization training programs. Calling LAO, Bldg 4070, (580) 442-4961 provides additional assistance and/or technical instruction.

c. A unit's maintenance management program must be flexible in providing continuity of support in spite of major training events, personnel turnover, MTOE changes, equipment fieldings, etc. Highly effective and successful maintenance management programs begin at the commander's desk and flows on down the chain of command with accountability procedures and feedback provided along the way.

d. Local commanders and supervisors will establish management controls to ensure that materiel, vehicles, and/or equipment, departing from the organization is properly supervised, dispatched, and cleared before departure. Members in the chain of command are responsible for ensuring those individuals under their command or supervision complies with the instructions as outlined in AR 735-5.

3-4. MATERIEL/UNIT READINESS PROGRAMS. IAW AR 700-138, Army Logistics Readiness and Sustainability, the Army's highest priority peacetime function is to maintain its component forces in an operational readiness condition that would permit their timely mission accomplishment.

a. Local commanders and supervisors at every echelon must be able to manage and effectively use assigned resources to achieve and maintain the required readiness conditions that assure mission accomplishment. Command emphasis must be placed upon timely identification and reporting, and reporting of any logistical readiness deficiency affecting either mission and/or deployment capability.

b. Direct all FORSCOM readiness/mission/training problems to III CA, G3 and G4, for assistance and resolution. G-3 is located in Bldg 1653, (580) 442-6971/5800, and G4 is in the same Bldg, (580) 442-4962/6485.

c. Unit Status Reporting (USR)/WWMCCS Terminal. POC for these reports is located at McNair Hall, Rm: 1A (Basement), (580) 442-5600/5513.

3-5 COMBAT VEHICLE EVALUATION (CVE) MANAGEMENT RESPONSIBILITIES. This paragraph covers the procedures required on implementation of the CVE program for Fort Sill supported units and activities.

a. The purpose of CVE is to evaluate combat vehicles over the designated threshold mileages for possible qualification as "overhaul" candidates as prescribed in AR 750-1.

b. The CVE coordinator negotiates a memorandum of agreement (MOA) with TACOM annually on CVE team visits, etc. CVE Coordinator is located in Bldg 2596, DOL, (580) 442-2410/5498. The following areas are agreed upon:

- (1) Composition of Contractor Field Team (CFT).
- (2) Date and complete itinerary of units to visit.
- (3) Number and location/site of vehicles.
- (4) Detailed information provided to TACOM below:
 - (a) Noun nomenclature of CVE candidate.
 - (b) Model & current mileage.
 - (c) Serial number and USA number.
 - (d) Owning unit and location.

c. Identification of vehicles evaluated within CVE Program:

TYPE OF VEHICLE	REWIRED EVALUATION MILEAGE SEE NOTE
TANK Includes - M48A, M1/MIAI, M60, M6OA1 series and M6OA05	7,000 (11,200 km)
APC/ANTI -ACFT/MISSILE TYPE Includes - M2/M3 BFVS, M270 MLRS, MII3A2s, M981 FISTV	6,500 (10,400 km)
SP Artillery Includes - M109A2, M109A3, M992 FAASV, and M578	5,000 (8,000 km)
Other Vehicles Includes - M51A11/M551 OPFOR. M88A1. M728. M48/M60 AVLB	4,000 (6,400 km)

***NOTE: Units and commands may nominate vehicles for evaluation that have less mileage than the recommended amount. A separate justification is required for each "different mileage" vehicle nominated for evaluation. TACOM Project Officer will make the final decision in evaluating such vehicles.**

d. The CVE administrative support installation will provide on-post transportation for contractor field teams if POVs are not allowed in unit motor pool areas. The CVE Coordinator will assist team members in obtaining temporary vehicle registration for

POVs and coordinate with owning units on POV restrictions and/or parking requirements, etc.

e. Emergency medical services are provided for CVE contractor personnel, during duty hours, the same as is provided for civil service employees:

(1) Reimbursement for services rendered by U.S. Government medical facilities is directly recoupable from contractor and/or sponsoring Commodity Command.

(2) After emergency services are provided and the patient can be moved, transfer the patient to a civilian medical facility, for further treatment/ care as necessary.

(3) Notify the Post Safety Officer in case of any accidents and/or safety problems. etc.

f. Prepare vehicles for CVE evaluations s follows:

(1) Clean vehicle exterior/interior of dirt, grease, oil, and water.

(2) Clear weapons and removes ammunition.

(3) Perform maintenance, when possible, to restore nonoperational vehicles to a functional status.

(4) During hull inspection, make personnel and equipment, required to pull the pack, available, when requested by the CVE team. Additionally, the following hull preparation measures are required:

(a) Remove interior floor plates.

(b) Open access doors, hatches, and covers.

g. Logistics Operation Section (LOS) is the installation POC for the CVE program; they can be reached by calling (580) 442-2410/5498/5709.

3-6. MATERIEL CHANGE MANAGEMENT/MODIFICATION WORK ORDER PROGRAMS. Department of Army (DA) Deputy Assistant Secretary for Plans and Programs RDA memorandum, SUBJECT: Interim Operating Instructions (IOI) for U.S. Army Materiel Change Management (MCM), 6 Sep 90, established a requirements-oriented base system which provided the Army with a comprehensive plan of ongoing and future modification changes to a system/end item during its life-cycle. Above IOI supersedes AR 70-15, dated 1 Sep 88, Product Improvement of Materiel; and AR 750-10, 1 Jul 84, Modification of Materiel and Issuing Safety-of-Use Messages and Commercial Vehicle Safety Recall Directives.

a. Summary of DA Guidance and Requirements.

(1) Directed compliance with the established guidance and implementing policies and procedures for the management of the Army's Modification Work Order (MWO) Program until superseded, prohibits any deviation or changes to these listed procedures and instructions unless approved by HQDA.

(2) Outlines the negotiation, programming, and approval process; application, documentation and reporting requirements of the MWO system; and posting of the DA data base, by the Army Materiel Command's (AMC's), Major Subordinate Commands (MSCs).

(3) Requires Materiel Change (MC) of existing Army materiel systems and end items be considered prior to acquiring or developing a new system under the Army's Materiel Acquisition and Procurement Program.

(4) Considers MCs only after rejecting changes to tactical or strategic doctrine, improvements to training programs, and/or reconfigurations or redesigns of affected MTOE organizations. NOTE: MCs have been historically referred to as PIPs, ECPs, retrofits, reconfigurations, modifications, conversions, upgrades, remanufacture, design or engineering changes, etc.

(5) Allows Major Army Commands to develop Memorandums of Understanding (MOU) to delineate support, provided under the MC/MWO Program and the authority of the respective MC/MWO Coordinators.

(6) Defines the Army equipment MC/MWO Program and process as: All efforts to incorporate hardware or software changes to a vehicle, system or end item in the field which enhances its capability to perform its mission or to achieve increased equipment reliability.

(7) Compels equipment or systems classified as a change in function and/or demonstrated performance to be accomplished by a MC/MWO Fielding Plan.

(8) Requests re-evaluation and revitalization of existing programs designed to extend the useful life of vehicles/systems and/or end items.

(9) Requires block modifications of MCs/MWOs be undertaken whenever possible (grouping of similar/like modifications for the purpose of achieving economics in funds, manpower, equipment, and/or application times).

(10) Warranty Program Modifications include hardware, software, and firmware repairs to a system/end item, under a manufacturer's warranty. These repairs are managed and controlled under the Installation MC/MWO) Program for AMC. Each warranty program is unique in design, method of operation, and application to correct the deficiency, installation support, and documentation requirements. These requirements are governed by contractual agreements between AMC and the

manufacture; and then negotiated individually by the manufacture with each installation MC/MWO Coordinator.

b. Installation Management Responsibilities.

(1) Appoint a MC/MWO Coordinator, in writing, with the responsibility and authority for managing the Army's MC/MWO Program (negotiating, approving, and executing MWO Fielding Plans (MWOFPs)) for Fort Sill, external commands, supported units, and activities as stated in separately negotiated support agreements.

(2) The MOU between TRADOC and AMC, signed and approved in 1993 established broad policies and procedures that control and govern implementation of the MC/MWO Program between each command and their subordinate elements. HQ TRADOC designated the installation MC/MWO Coordinator as their only "Authorized Agent" to coordinate and manage the Army's MC/MWO Program IAW MWOFPs negotiated AMC's various Commodity Commands.

(3) Complete modifications, in a timely manner, after coordination and signing of an approved MWO Fielding Plan. Incorporate specific details of installation support requirements into each fielding plan, for each type of vehicles or equipment to be modified.

c. Fort Sill MC/MWO Coordinator will coordinate, staff, negotiate, resolve and approve MWOFPs; execute modifications/MWOs, through own initiative, IAW with DA and TRADOC/AMC guidance and this regulation. Coordinator may obligate installation facilities/assets for modification purposes and resolve other MWO related issues not specifically addressed in negotiated fielding plans.

(1) Ensure key personnel of supported units/activities are kept informed of MC/MWO actions and associated issues that are being programmed, pending application, current/on-going, applied and reported as completed. Collects DA 2407s/5504s on completed materiel changes/modifications and forwards to Commodity Commands.

(2) Coordinate all MWOFP actions with supported units/organizations.

(3) Ensure all MC/MWO methods of application are reviewed and considered in the coordination and negotiation phases of each MC/MWO Fielding Plan. These methods consist of joint efforts (pooling of installation TDA and MTOE maintenance personnel and facilities, etc.) in accomplishing materiel changes/modification efforts IAW the most expeditious, cost effective and efficient manner (achieving economies and conservation of resources in manpower, funds, equipment, facilities and/or time).

(4) As necessary, act as or assign/designate a POC for each MWOFP to ensure compliance with (administrative, logistical and Base Operating Information System (BASOPS) support requirements) agreed upon by all parties. Assure that completed

MC/MWO application documents are processed and forwarded to appropriate Commodity Command within 3 working days.

(5) Take immediate action on Safety-Of-Use (SOU) messages as required.

(6) Responsible for ordering, receiving, securing, storing and accounting of all MWO kits/hardware, special equipment and tools until issued to the activity authorized to accomplish the specific modification mission.

(7) Will act as COR (as required) for the Government Administration Contracting Office (GACO), Air Force Logistics Center (AFLC), Wright-Patterson AFB, OH, duties as follows:

(a) Computes and verifies CFT man-hour figures for number of hours worked per unit/vehicle modified versus application times on MWOFP and government contract documents, etc.

(b) Assures proper administrative and logistical support is provided to the Contractor Field Team as outlined in the contract and fielding plan.

(c) Validates contractor's certificate of services provided indicating the number and type of contract personnel used. Signs time and attendance documents to assure payroll payments to on-site CFT personnel.

(d) Evaluates contractor's overall performance, documentation, quality control program/procedures, conformance to Fielding Plan's MWO application times/standards, and required totals or numbers to be modified, etc.

(e) Reviews contractor's records on any rework requirements performed IAW contract procedures, confirms MC/MWO completion dates and serial numbers/totals of items/equipment modified, etc.

d. Effectiveness of Fort Sill's MC/MWO Program (Policies, Procedures, Requirements and Guidance).

(1) Supported unit/organizational commanders have the ultimate responsibility in providing factual, equipment on hand information, to the installation MC/MWO Coordinator to assure all weapon systems, vehicles, and/or equipment is modified IAW fielding plans/regulatory requirements and within specified time frames.

(2) Without command emphasis and high visibility to MC/MWO Program requirements, supported units may find they have outdated or obsolete equipment, because they failed to provide required information and did not keep abreast of MC/MWO changes.

(3) MCs/MWOs are increasing in number and degree of complexity of application

due to DOD new equipment funding constraints.

(4) Timely application of MCs/MWOs at organizational, DS, Gs and/or depot levels is essential in ensuring that the DA Materiel Change Information System (MCIS) accurately reflects current status of each Army system/end item. This involves the prompt reporting of completed MCs/MWOs, by contract teams and owning activities, to installation MC/MWO Coordinator and on to specific AMC Commodity Command POCs.

(5) MCs/MWOs are not considered applied until the DA Form 2407/5504 is delivered to the Fort Sill MC/MWO Coordinator, Bldg 2596, (580) 442-2410/5498), who then forwards all required paperwork and documentation to appropriate AMC Commodity Command for posting to the DA MCIS data base.

(6) The MCIS is the "official" Army data base for recording of modification efforts and reflects the current MC/MWO status of all materiel/equipment systems within the Army inventory by Unit Identification Code (UIC), unit location, and end item serial number/registration number, etc.

(7) Installations failing to keep the MCIS updated properly could be required to perform a 100% inventory and accountability study/evaluation of all supported equipment that has been issued MWO kits.

(a) Above actions would require a physical check/inventory of each MWO kit on-hand (not applied), and/or verification that MWO kit was applied by producing a DA Form 2407 showing completion date. This would be DA directed compliance.

(b) Occasionally, it could involve partial disassembly of end-items/components to confirm validation of MWO application.

(c) Physical inventories to reconcile the MCIS must be held to a minimum due to the direct impact on readiness/deployment postures and the associated high costs. Prompt and accurate reporting of MC/MWO applications and processes to the MCIS database will assure no above costly inventories would ever be required.

e. Responsibilities of Supported Units/Owning Activities.

(1) Each supported unit or owning activity will designate, in writing, to their specific G-4/S-4 sections, an organizational POC who is responsible for coordinating MWO applications within their own activity. POCs should have a Military Occupational Specialty (MOS) directly related to equipment being modified.

(2) Each POC above will coordinate for receipt of MWO kits, special tools, etc., and provide access for modification teams to motor pools and modification work sites. Appropriate AO's will establish accountability, as required, and ensure hand receipt accounting as necessary.

(3) Secure and store excess MWO kits with associated special tools until turned over to the installation MC/MWO Coordinator for disposition.

(4) Hand carry applied MWO DA Form 2407 to the installation MC/MWO Coordinator, Bldg 2596, within 3 working days after MWO completion. Exception(s): AMC contractor teams and DOL contractor paperwork arrangements are outlined in negotiated agreements and/or contracts.

(5) Return excess MWO kits to the Fort Sill MC/MWO Coordinator who will then get disposition from item managers, etc.

f. Organizational, DS, GS, and Depot Level Modification Team Duties/Activities.

(1) Organizational, DS, or GS Level of Application: Prepare a DA Form 2407 (accountability and issue document to be used until notified differently) and hand-carry to the installation MC/MWO Coordinator for issue of mod/MWO kits.

(2) Depot Level of Application: AMC CFTs, Depot Field Teams, and/or DOL contractor will coordinate directly with MWO Office, Bldg 2596, for issue/receipt/pick-up of MWO kits. The designated modification site/activity leadman, manager, and/or authorized POC will issue a completed DA Form 2407 or other approved method or document for accountability.

(3) Installation MC/MWO Coordinator will issue MWO kits as outlined and directed in the materiel fielding plan (MFP)/MWOFP.

(4) MWO kits are issued directly to the application MOD team and not to owning units or organizations.

g. Criteria and Classifications of MCs/MWOs.

(1) Emergency Materiel Changes/MWOs are the highest funding priority in the modification program, and immediately deadline all affected equipment until stated deficiencies are corrected or the risk is reduced to an acceptable level. Emergency MWOs are usually preceded by a Safety-of-Use (SOU) message.

(a) Emergency MWOs pertain to any defect or hazardous condition, actual or potential, where a high or medium safety risk condition has been determined that can cause death or serious injury to personnel or damage to Army equipment.

(b) A Safety-Of-Use message is released when the condition is caused by potential malfunction of an equipment component or a safety hazard during operation and/or movement of subject equipment, etc.

(2) Urgent modifications/MWOs are the second highest priority in the modification program. The equipment may continue to be operated for more than 2 years after the

MWO effective date, under restrictions determined by AMC. A SOU message is required when the condition is caused by a safety hazard.

(3) Routine modifications/MWOs are the lowest priority for application. Report equipment having unapplied routine MWOs, after the assigned completion date, to appropriate Commodity Command MWO Coordinator, through command channels, within 45 days of the published completion date.

(4) Designation of MCs/MWOs is contained with the MFP and/or MWOFPP.

3-7. CHIEF OF STAFF, ARMY, AWARD FOR MAINTENANCE EXCELLENCE. This support program governs the annual competition for the Chief of Staff, Army (CSA), award to maintenance units or activities that have maintained excellent maintenance management programs within their respective units, etc. IMMO, 442-3708, can provide advice concerning this award. The CSA Award, for Maintenance Excellence, is governed by DA circulars, and is published annually.

3-8. OPERATIONAL READINESS FLOAT (ORF) SUPPORT RESPONSIBILITIES.

a. ORF assets are selected items of equipment authorized for stockage at the Direct Support (DS) level. ORF assets are used for exchanging or replacing equipment (one-for-one) with supported units when their equipment cannot be repaired within specified required time.

b. The Chief, Maintenance Division, DOL, has overall responsibility in managing, supporting and coordinating control and issue of ORF assets. Coordinate and process ORF actions through the installation ORF Coordinator, Bldg 2258E, (580) 442-3808/3708.

c. Make ORF exchange IAW AR 750-1, AR 710-2, and this publication.

d. Primarily, base decisions initiating float exchange upon the following priorities:

(1) Items required for immediate unit deployment.

(2) Items required for unit readiness sustainment above 90% FMC/EMC rates.

(3) Items required to maintain a unit's training or other mission related requirements.

(4) For replacement of items with excessive repair parts delay or repair time projected to exceed 30 days.

(5) For replacement of items with chronic maintenance problems of a repetitive nature.

(6) When required to ensure rotation of ORF assets; to prevent deterioration of "ready to issue" ORF equipment, because of nonuse.

e. Do not issue ORF items/equipment to--

(1) Fill TOE/TDA equipment shortages or replace uneconomically repairable items.

(2) Fulfill temporary loan requirements (i.e., to expand assigned missions or establish new operational missions).

(3) Replace items that have been cannibalized during peacetime.

f. ORF items, authorized for stockage, at Fort Sill are announced quarterly in the DOL "BILLBOARD." If a current Fort Sill ORF list is required, contact the ORF Coordinator, Bldg 2258E, (580) 442-3808/3708, for assistance. Process requests for additions thru ORF Coordinator to the installation ORF account. Items selected, must appear on the DA Authorized Stockage List before the request can be forwarded to TRADOC for final approval. You may contact the ORF Coordinator anytime to view the DA Authorized Stockage List.

g. ORF support responsibilities and float procedures are outlined below:

(1) ORF float action or issue begins with the installation ORF Coordinator as outlined above. Upon initial submission or telephonic request for an ORF action, the ORF Coordinator will initiate, fill out, and hand-carry the ORF Worksheet (filling in blocks 1-14) to the DOL Contractor. The ORF Coordinator is responsible for the initial notification to owning units of pending ORF action. After the unit is notified that a float action is in process and that the ORF item is available, the unit will, no longer, compute downtime against the equipment/item being floated.

(2) Upon receipt of the ORF worksheet, DOL Contractor, Quality Control will inspect both the incoming ORF candidate and the outgoing ORF asset using DA Form 2404. If both pass acceptance inspections, the ORF exchange will proceed. If the incoming ORF candidate requires correction of organizational deficiencies, correct it prior to acceptance by the DOL Contractor. If the outgoing ORF asset fails inspection, it will immediately be put on job order with the highest priority authorized. ORF work orders are handled expeditiously.

(3) After the unit has corrected all organizational faults and a subsequent acceptance inspection has been completed by the DOL Contractor, hand-carry the ORF worksheet to the ORF Coordinator, Bldg 2258E, for ORF Coordinator's final approval and signature. When required repair parts are not available in supported unit's PLL, organizational faults are considered corrected, when the unit furnishes copies of current and valid fill or kill requisitions that could not be filled by their SSA. Account for all expendables costing over \$50.00 each, durables, recoverables, and nonexpendable shortages IAW AR 735-5 paragraph 12-11 (Damaged Property).

(4) The DOL Contractor is responsible for coordination with the receiving unit, when actual exchange is to be finalized.

(5) After acceptance by the receiving unit, the DOL Contractor will return the "original" ORF worksheet to the ORF Coordinator, Bldg 2258E, for filing.

(6) ORF exchanges are considered a one-for-one simultaneous turn-in and issue transaction. BII common to the end items are not exchanged.

h. Unit Commanders will --

(1) Accept the ORF equipment/item being issued, if it is an authorized substitute listed in SB 700-20 and meets TM serviceability standards.

(2) Ensure deficiencies identified on DA Forms 2404, by DOL Contractor Quality Control inspector, have been corrected.

(3) If ORF item is rejected or denied acceptance, by the unit even though it meets TM standards, ORF Coordinator will inform either the G-4, III Corps Artillery, CofS, Training Command, or S-4, ATC. Unit commanders are required to provide documented reasons for nonacceptance; send memos to Cdr, USAFACFS, DOL, ATTN: ATZR-LIM.

(4) Ensure that the following required forms are hand-carried to DOL Contractor, Supply Department, ORF Section, during float exchange: DA Form 2408-9, DA Form 2408-4, DA Form 2408-20, or AOAP Component History printout, DA Form 2765-1, DA Form 2765-1, DA Form 3254-R (Oil Analysis Recommendation and Feed Back), and DD Form 314 (Preventive Maintenance Schedule and Record). Without these forms, ORF issue and exchange is delayed.

(5) Equipment already on work order to the DOL Contractor will continue through the repair cycle. The unit must bring their green copy of the DA Form 2407 to Production Control, Bldg 2255, which will change block IA to DOL, Supply Department. Do not close out the work request.

(6) Ensure direct coordination between MO and AO prior to initiating any request for ORF items.

i. DOL Contractor, Supply Department, will--

(1) Ensure that ORF is reported IAW the latest TRADOC ORF Policy Letter and that changes, during the year, are reported to TRADOC.

(2) Establish an accountability program, to determine the number of ORF demands and average turn-around time, during the past 12 months, etc.

(3) Be responsible for requisitioning and storage of ORF items that are authorized for stockage IAW TRADOC approval documents.

(4) Ensure that "Ready To Issue" ORF equipment/items are properly repaired, serviced, and maintained IAW Technical Manuals 10-20 combat serviceability standards.

(5) Notify AOAP Lab of additional or new ORF items that require AOAP support and sample submission.

(6) Be responsible for the storage of BII related to on-hand ORF assets.

(7) Process request for issue and turn-in transactions through the Stock Record Account.

(8) Record serial and USA numbers on TAMMS Forms and maintain records on all modifications performed or required on ORF equipment/assets, etc.

(9) Request the repair of unserviceable ORF items using DA Form 2407 IAW instruction outlined in DA Pam 738-750. Identify work orders for ORF equipment/items by UIC WOVG4C.

j. Avionic items are the responsibility of the aircraft maintenance contractor, who is responsible for implementation of an internal SOP, for ORF issue and transfer. Do not coordinate avionic ORF items through the Installation ORF Coordinator. Supported units will deal directly with the aircraft maintenance contractor, Aviation Maintenance Contractor POC, Bldg 4908, (580) 442-6417, when avionic systems are unserviceable and need ORF exchange.

CHAPTER 4

TMDE CALIBRATION

Section I. GENERAL

4-1. GENERAL. Test Measuring and Diagnostic Equipment (TMDE) calibration/repair support is provided by units/activities listed in appendix B. Support responsibility of these units/activities is established primarily, by the calibration responsibility, as defined in TB 43-180 and mission assignment. Recall of TMDE supported, by the Area TMDE Support Center (ATSC) AMC, and by all other calibration support activities, is automated, using the U.S. Army TMDE Support Activity (USATSA) Recall System, Redstone Arsenal, AL.

Section II. BASIC RESPONSIBILITIES OF UNIT/ACTIVITY

4-2. TMDE UNIT COORDINATORS. Each unit/activity will designate (in writing) a TMDE calibration coordinator IAW AR 750-25, paragraph 2-6, to include designee's name, rank (military only), UIC, unit name, telephone, and ETS (military only). It is also highly desirable to have an alternate TMDE coordinator. Unit/activity TMDE coordinators will operate in close coordination with the installation TMDE Laboratory on all matters pertaining to TMDE support. **NOTE: There are no TRADOC approved personnel slots for an Installation TMDE Coordinator.**

4-3. RESPONSIBILITIES. Unit/activity TMDE coordinators will--

a. Review property records and performs physical inventories of TMDE and coordinate with equipment managers (PBO, hand receipt holder, materiel officer, etc.) to be sure that an up-to-date inventory of the unit/activity's TMDE is accurately identified and maintained on the TMDE Master Listing (formerly Instrument Master Record File (IMRF)). The TMDE Master Listing must contain the identification of all TMDE listed in TB 43-180, including TMDE in temporary storage that requires calibration before use (CBU), training equipment, and TMDE not requiring calibration.

b. Assure that TMDE inventory contains only equipment and quantities that are justified by need, cost, operational effectiveness, and assure unit/activity is authorized TMDE by TOE/TDA that is adequate to perform unit/activity's mission.

c. Assure that appropriate forms are submitted to the supporting laboratory to update inventory. **NOTE: Submit additions, deletions, and changes in the TMDE inventory of equipment supported by USATSA on AMXTM Form 34A (Calibration Data Card).**

d. Ensure that DA Forms 3758 are completed and submitted to the installation TMDE Laboratory for TMDE identified as requiring calibration, but not listed in TB 43-180, as prescribed by TB 750-25.

e. Ensure that segregate, controlled areas, within units, are designated for temporary storage of TMDE whom DA Labels 80 are over stamped "CBU (calibrate before use)." This precludes unnecessary recalibration, when no immediate need for equipment exists and inappropriate use of the TMDE, when it is uncalibrated.

f. Ensure that TMDE, requiring calibration, is submitted to the designated supporting calibration laboratory IAW the calibration recall schedule and that TMDE is turned in for calibration, on or before the "CALIBRATION VOID DATE," on the DA Label 80 has been exceeded.

g. Ensure that TMDE submitted for calibration is complete with all unique or special adapters, etc., required by the designated support laboratory, to accomplish calibration/repair.

h. Ensure that TMDE is delivered and picked up, as appropriate, at the site where cyclic calibration/repair services are to be provided, on a timely basis. Proper protection/cushioning of equipment is required to protect equipment from hazards of transportation.

i. Ensure that, TMDE users provide organizational maintenance on organic TMDE IAW the Maintenance Allocation Chart (MAC) or Operator Manual (AR 750-1) and that DD Form 314 is maintained as required.

Section III - SYSTEM/LISTING IDENTIFICATION

4-4. U.S. ARMY TMDE SUPPORT GROUP RECALL SYSTEM.

a. Area USATSA will furnish automated listings of this system, including the TMDE Master Listing, a current customer delinquency listing, and a current TMDE due calibration listing, on a monthly basis. Use the Calibration Management Information System (CALMIS) to extract these listings, on the first workday of each month. For further distribution, furnish listings to unit/activity TMDE coordinators no later than the fifth calendar day of the month.

b. Listing Identification.

(1) Master listing (figure 4-1). This is a listing by owner UIC of all equipment belonging to that owner which is supported by the ATSC team or by DS/GS/AVIM. Header columns are defined as follows:

- (a) ID CODE - bar code designation.
- (b) SERIAL - serial number of TMDE.
- (c) MODEL - model number of equipment (ref TB 43-180).
- (d) MFG - manufacture code (ref TB 43-180).
- (e) NOMEN - nomenclature of TMDE (ref TB 43-180).
- (f) NAT STK NR - national stock number of equipment.
- (g) WORK C/T - work center team designator (used by performing UIC).
- (h) ERC CUE - unused at present.
- (i) LEV CDE - designated calibration level (ref TB 843-180).
- (j) PUIC - performing UIC.

(k) SYS CDE - systems code (ref TB 43-180).

(1) LAST ACT DATE - calendar date last action was performed on TMDE.

(m) INT DAYS - number of days from last action to due recalibration.

(n) DUE CAL DATE - date calibration is due.

(o) STATUS OR REMARKS - for use by performing UIC.

(2) CUSTOMER DELINQUENT LISTING - this is a listing indicating what TMDE is delinquent for each owner.

(3) TMDE DUE CALIBRATION LISTING - this is a listing of TMDE showing a projected date (due date) during the next 0-30 and 31-60 days following the listing date.

Section IV. EQUIPMENT TURN-IN, RECEIPT, AND ISSUE PROCEDURES USATSG CALIBRATION RECALL SYSTEM

4-5. TURN-IN. Prior to the beginning of each month, normally around the 15th of the preceding month, the installation TMDE laboratory will provide each unit or activity TMDE coordinator with four copies of preprinted AMXTM Forms 34A, hereafter referred to as AMXTM Form 34A (see fig 4-4), for all items due calibration during the subsequent month. Unit/activity TMDE coordinators will locate equipment identified on these forms and on or before calibration "Due Date" (block 12 of AMXTM Form 34A), present equipment and applicable AMXTM Form 34A (four copies) to the USATSG receiving/issue clerk located in Bldg 5033 (north entrance).

4-6. RECEIPT. The USATSA receiving/issue clerk will acknowledge receipt of equipment by signing and dating block 36. One copy of AMXTM Form 34A is returned to customer to be retained as a receipt for equipment turned-in.

4-7. ISSUE. Upon notification of availability of equipment for pickup, customer will present the receipt copy of AMXTM Form 34A to the receiving/issue clerk, who will locate and issue equipment.

4-8. EQUIPMENT REQUIRING UNSCHEDULED CALIBRATION/REPAIR. The customer will hand prepare AMXTM Form 34A (see fig 4-5), to be used for turn-in of equipment. If item is listed on Item Master Listing, the AMXTM Form 34A data must be identical to that appearing on the master list to include all slashes, dashes, blank spaces, etc. **NOTE: Blank AMXTM Form 34A is available only from the USATSA Lab, Bldg 5033, not through DOIM Publications.**

4-9. TMDE ISSUES REQUIRING CALIBRATION/REPAIR. TMDE issued to a unit/activity that requires calibration/repairs as specified in TB 43-180 must be added to

the TMDE Master Listing. Complete the AMXTM Form 34A per example, fig 4-6. If the TMDE is not listed in TB 43-180, but a like item requires calibration/repair, complete DA Form 3758 (Calibration and Repair Requirements Worksheet) as specified in TB 750-25 and complete a AMXTM Form 34A, as stated above. Submit TMDE with completed forms to the USATSG receiving/issue clerk, Bldg 5033.

4-10. SPECIAL PROCESSING. If equipment requires special processing, due to urgency of need, note priority annotated in block 2 (Priority) and authenticate in block 33 (Remarks), by the commander or his designated representative IAW USAFACFS Reg 725-50.

4-11. CLASSIFICATION. Submit TMDE requiring classification for turn-in, to the QA, DOL utilizing DA Form 2407 completed IAW DA Pam 738-750. The QA is located in Bldg 2253, bay 3. There is no requirement to submit TMDE to the USATSA for classification.

4-12. CORRECTIONS TO LISTINGS. Upon receipt of the monthly listing, the unit/activity TMDE coordinator will review the listing for accuracy and submit needed corrections to the Installation TMDE Laboratory within 5 working days.

4-13. AMXTM FORM 34A. Complete instructions for this form are in TB 750-25. Examples of preprinted and hand prepared Forms 34A are shown in figure 4-4 through figure 4-10.

4-14. TORQUE WRENCHES, CALIPERS, AND MICROMETERS. If the model number of a device, covered by one of the general federal specifications indicated, is not specifically listed in section I of TB 43-180, then the range of the device is entered in block 9. Follow this rule regardless of whether or not a model number, not listed in TB 43-180, is available.

4-15. DINING FACILITY SCALES. The post food advisor is responsible for obtaining calibration and or repair service on food weighing scales, located in dining facilities. Telephonically relay requirements for these services to Post Food Service Branch, Bldg 2258E, telephone (580) 442-3307/3170.

4-16. TRANSFER OF TMDE. Do not delete items of TMDE, being transferred from one unit to another (both of which are being supported by the USATSA Fort Sill) from the Master Recall List. The losing unit will initiate an AMXTM Form 34A changing the UIC, from the losing unit, to the gaining unit

Section V. DATA PROCESSING PROCEDURES FOR TMDE-SP "F" LEVEL CALIBRATION

4-17. PROCEDURES. The following procedures are applicable to equipment calibrated by Direct Support Units (DSUs) and/or DOL Contractor. Procedures to be utilized, by aviation companies, supported by the aviation contractor, are as directed by contract.

4-18. PURPOSE. The purpose of these procedures is to provide direction, guidance, and control of that data, used by the performing UIC, on TMDE-SP items that are to be supported by item owner or intermediate direct support/general support (DS/GS/AVIM) units. This procedure applies to ATSC - Fort Sill and all units requesting data/statistical support from the ATSC Data Processing Section

4-19. UNITED STATES ARMY TMDE ACTIVITY (USATA) LABORATORY RESPONSIBILITIES. The Fort Sill USATA will compile the data furnished by the performing UIC and furnish the following:

a. TMDE Master List. AR 750-25 requires TMDE calibration and repair activities to establish and maintain the TMDE Master List. The accuracy of these lists rests with the TMDE owner/user, who must initially provide accurate information and, therefore, review master lists and projected lists for accuracy, and take corrective action, when necessary. The TMDE owner/user must advise the supporting USATSA, D/S Maintenance or AVIM as changes, additions, or deletions in the TMDE inventory occur. The Master List must contain all TMDE that requires support.

b. TMDE Due Calibration List. This list indicates what items are due calibration during the following month. The list distributed in January will show those items of TMDE that are due in February and so forth. The TMDE owner to plan and manage the submission of TMDE for calibration uses this list. The supporting unit uses the list to plan and manage the calibration workload. There must be coordination between the owner/user and the supporting unit as to the exact date, time, and items for submission.

c. Delinquent Item List. This list indicates those items of TMDE that have not been submitted for calibration prior to scheduled due date. They are, therefore, due calibration and must not be used until calibrated. This list is a management tool used to determine owner/user compliance with the TMDE support program.

4-20. MONTHLY LIST. Furnish the above lists on a monthly basis, by the Fort Sill USATSG, to all unit/activity calibration coordinators no later than the 5th workday of the month.

4-21. TMDE OWNER/USER RESPONSIBILITIES. TMDE owner/user for organic TMDE, DS/GS/AVIN units for organic and supported units, TMDE will provide updated information to the Fort Sill USATSG (using AMXTM Form 34A) on a timely basis. Deliver the annotated Form 34A to the Fort Sill USATA, Bldg 5033, immediately after the work has been performed. Deliver data affecting the status of TMDE to the USATASG Data Processing Section, prior to noon Friday each week. This will enable the Master List to be updated and the weekly management report will reflect more accurate data. USATA, Redstone Arsenal, Alabama, has established a goal of less than 2 percent delinquent items. In order to meet that goal, adhere strictly to this paragraph.

Section VI - BASIC CHECKLIST FOR UNIT TMDE COORDINATORS

4-22. BASIC CHECKLIST.

- a. Have all TMDE accountable on hand receipts, TMDE that is part of sets, kits, and outfits reviewed to determine calibration/repair requirements?
- b. Is TMDE in use affixed with a correct DA Label 80 or 163 correctly annotated?
- c. Is TMDE, that was provided a limited calibration, identified with a DA Label? 163?
- d. Is a physical inventory periodically conducted, to verify the types and quantities of TMDE on hand, that requires calibration and repair?
- e. Are all TMDE changes, additions, and deletions identified, to the supporting calibration and repair facility, on appropriate forms as they occur?
- f. Is TMDE being removed from temporary storage submitted for calibration, prior to being used?
- g. Are calibration recall schedules provided, by the supporting facility, reviewed for accuracy?
- h. Are delinquent lists of TMDE, not presented for calibration, reviewed and corrective actions taken?
- i. Are controls established to assure that instruments are not used, after expiration of the calibration due date, on the DA Label 80 or 163?
- j. When there is doubt about the accuracy of TMDE, is action taken to request unscheduled calibration?
- k. Is operator/organizational maintenance performed, as prescribed by equipment maintenance manuals?
- l. Is preventive maintenance service performed on TMDE, as listed in appropriate technical publications, and faults recorded on DA Form 2408-14?
- m. Is DD Form 314 maintained, at unit level, for all items of TMDE requiring scheduled periodic preventive maintenance services?
- n. When TMDE becomes unserviceable, is timely action taken to request service or evacuate the item to the appropriate support activity?
- o. Is new TMDE being inspected and calibrated prior to use?

p. Does each organic unit/activity maintain a current file/library containing, as a minimum, the following publications?

- (1) AR 710-2, Inventory Management Supply Policy Below the Wholesale Level.
- (2) AR 750-1, Malfunctions Involving Ammunition and Explosives.
- (3) AR 750-25, Army Test, Measurement and Diagnostic Equipment (TMDE), Calibration and Repair Support Program.
- (4) AR 750-43, Test, Measurement, and Diagnostic Equipment (TMDE).
- (5) DA Pam 510-2-1, Using Unit Supply System.
- (6) DA PAM 738-750, Army Equipment Record Procedures.
- (7) TB 43-180, Calibration and Repair Requirements for the Maintenance of Army Materiel.
- (8) TB 385-4, Safety Precautions for Maintenance of Electrical/Electronic Equipment.
- (9) TB 43-181, Calibration Workload Requirements in Table of Organization and Equipment (TOE) and Sets, Kits, and Outfits.
- (10) TB 43-182 Series, Calibration Workload Requirements in UICs.
- (11) DA Pam 25-30, Consolidated Index of Army Publications and Forms.
- (12) Applicable TMs, TBs, LOs, and MWOs for each item of TMDE on hand.
- (13) Maintenance bulletins and EIR digest.
- (14) The Preventive Maintenance Monthly (P.S.) Magazines.
- (15) Blank forms and records for implementing and managing the unit/activity TMDE calibration and repair program.
- (16) Command regulations, SOPs, etc.

q. Is there a command required reading/refresher program established for the review of the documents mentioned above?

CHAPTER 5

ARMY OIL ANALYSIS PROGRAM (AOAP)
Section I. PURPOSE AND OVERVIEW

5-1. PURPOSE. This chapter prescribes policies, procedures, states objectives, and assigns responsibilities for operation and conduct of the AOAP at Fort Sill, OK. The AOAP is applicable to all active Army, Army Reserve, and National Guard units/activities having aeronautical and motorized nonaeronautical equipment designated for the program and is supported by the Fort Bliss, TX Oil Analysis Laboratory.

5-2. OVERVIEW. The AOAP is part of a DOD-wide effort to detect impending equipment failure and determine lubricant condition through on-line and laboratory evaluation of used oil, which includes liquid lubricants used in engines, transmissions, and hydraulic systems. AOAP participation is MANDATORY and will be performed IAW policies and procedures outlined in DA PAM 738-750 and AR 750-1.

a. Failure to comply with AOAP policies and procedures or failure to respond to laboratory recommendations may be considered negligence in instances where equipment damage would have been prevented by following AOAP policies, procedures, or laboratory recommendations. Commanders and supervisors at all levels will see that equipment damaged in this manner is accounted for as prescribed by AR 735-5. Strictly adhere to DA Forms 3254-R and initiate corrective action immediately upon receipt.

b. FORSCOM Reg 750-1, endorsed by HQ, TRADOC, contains the basic SOP for this installation. TB 43-0211 serves as a guide for leaders concerning AOAP objectives and goals.

c. Fort Sill's AOAP Laboratory is located at Fort Bliss, TX. Address is:

COMMANDER
ATTN: ATZC-ISL-MC-AOAP-LAB
USAADACENFB
BUILDING 2588, ROOM 116
FORT BLISS, TX 79916-0058
PHONE: DSN 978-3155/1877, COMM (915) 568-3155/1877, FAX 987-0833

d. It is the deploying unit's responsibility to arrange for AOAP support at the deployment site. Prior to deployment and/or departing home station, deploying units perform the following actions:

(1) Make contact with the MOB site AOAP laboratory to find information on AOAP service provided at the deployment site (see above).

(2) Provide a complete list of equipment being deployed to the home lab.

(3) Take oil samples and submit to the home laboratory, prior to departure, when tactical vehicles are projected to exceed the 100 hour or 1,000 mile interval, while on route to the deployment/mission site.

Section II. OBJECTIVES, POLICY, AND RESPONSIBILITIES

5-3. OBJECTIVES. The key elements and goals of the AOAP include short oil sample response time, improved methods of field sampling, more precise laboratory sample analysis and data evaluations, improved communications, timely recommendations to the submitting activities, and accurate maintenance repair feedback for overall effectiveness. Specific objectives of the AOAP are to--

a. Extend operational readiness of military equipment through the efficient and effective use of oil analysis.

b. Reduce maintenance, repair, and replacement costs through preventive maintenance efforts prior to major repair as indicated by symptomatic techniques.

c. Conserve lubricant resources, maintain equipment safety, and help establish component failure trends.

d. Monitor improper maintenance practices.

e. Pinpoint and establish source of wear metals to help maintenance personnel evaluate repairs needed.

f. Assure AOAP personnel are knowledgeable of their duties and responsibilities.

5-4. POLICY.

a. Analyze lubricating oil at specified intervals, from selected equipment, to enhance unit readiness and deployability.

b. Employ oil analysis (spectrometric and physical property tests) as an equipment malfunction/failure, diagnostic and prognostic aid, oil condition indicator, and to aid in the development of failure patterns and trends.

c. Apply oil analysis to lubricated fluid-wetted components.

d. Use oil analysis to determine the necessity for changing component oil IAW the ON-CONDITION oil change policy.

e. Supporting oil laboratory will analyze samples, evaluate results, and provide maintenance recommendations to customer.

5-5. RESPONSIBILITIES.

a. The AOAP Laboratory in Fort Bliss, TX is responsible for--

- (1) The overall management of the AOAP for Fort Sill area of support.
- (2) Distributing the AOAP computed monthly printouts.
- (3) Providing feedback to units on problem areas and accomplishments.
- (4) Coordinating with AMC on problems and recommended improvements to materiel as a result of AOAP findings/investigations.
- (5) Providing AOAP guidance to using units.
- (6) When requested, supported units, issued a DA Form 3254-R, will receive guidance on required actions to perform.

b. Major subordinate unit commanders are responsible for--

- (1) Appointing individual unit AOAP monitors, in writing, to the Installation AOAP Laboratory.
- (2) Monitoring compliance of AQAP requirements, in subordinate units, through the use of monthly computer printouts and by monitoring "DO NOT OPERATE" recommendations, by the oil laboratory.
- (3) Taking corrective action when the Installation AOAP Laboratory reports delinquent units.

c. Battalion and company commanders are responsible for--

- (1) Complying with AOAP recommendations and requirements.
- (2) Appointing an AOAP monitor (commissioned or warrant officer).

d. Battalion maintenance/motor officer as battalion oil analysis monitors are responsible for--

- (1) Monitoring the battalion AOAP and be designated, in writing, to the Installation AOAP Laboratory.
- (2) Maintaining a list of company oil analysis monitors and conducting periodic meetings and training of these individuals.
- (3) Supervising the battery/company oil analysis monitors and ensuring routine samples are taken IAW DA Pam 738-750.

- (4) Acting as a point of contact for questions related to the AQAP.
- (5) Conducting individual training and certification of company AOAP monitors.
- (6) Conducting quarterly inspections to establish the degree of accuracy of DD Form 314 and DA Form 2408-20.

NOTE: Units not within a battalion command structure will receive a quarterly verification AOAP inspection from the next higher HQ.

- (7) Assuring the AOAP Laboratory Fort Bliss, TX, is promptly notified of component serial number changes resulting from receipts or removal of assemblies.
 - (8) Assuring units maintain a log of DA Form 3254-R.
 - (9) Assuring that special samples are drawn and submitted to the AOAP NLT 3 working days after receiving laboratory request for resample.
 - (10) Ensuring laboratory recommendations are accomplished immediately.
 - (11) Notifying the installation AOAP Laboratory when a unit is leaving Fort Sill, for training, humanitarian/war deployment, and/or unit readiness exercises.
- e. Battery company maintenance/motor officer as company oil analysis monitors are responsible for--
- (1) Training and certification of personnel authorized to take oil samples.
 - (2) Overseeing that oil samples are taken IAW DA Pam 738-750 within the unit.
 - (3) Assuring that samples are shipped to the AOAP Lab, on the same day that the samples are drawn.
 - (4) Ensuring that special samples requested are drawn immediately and as prescribed by AOAP directives.
 - (5) Assuring that vehicles that appear on the deadline report, during scheduled sampling, are sampled immediately after their return to an operational status.
 - (6) Keeping the motor sergeant, as well as the battery/company commander, aware of significant changes and problems, while providing the battalion AOAP monitor with adequate support, in order to maintain this vital program.
 - (7) Monitoring requisitions to assure that sufficient sampling supplies (60/90 days) are available at all times.

(8) Assuring that equipment users, of selected equipment, are properly instructed on the techniques of drawing samples from equipment components and preparation of DD Form 2026/DA Form 5991-E (Oil Analysis Request Form).

(9) Assuring that laboratory requested resamples are drawn and shipped to the AOAP Lab, NLT 3 working days after notification. Submit DD Form 2026 (Oil Analysis Request)/ULLS with a job order, annotated in remarks column, when no vehicle samples can be taken because of DS/GS maintenance, but are due sampling.

(10) Ensuring DD Form 314 indicates oil samples are scheduled and completed after maintenance, overhaul, or replacement of an oil lubricated assembly IAW DA Pam 738-750.

(11) Upon receipt of a notification indicating a serious problem, assuring the vehicle is immediately removed from service.

(12) Assuring that placement of equipment in a NMC status is done after receipt of a DA Form 3254-R.

(13) Assuring maintenance feedback requested on DA Form 3254-R is provided to the oil laboratory within 10 working days.

f. Commanders of DSUs are responsible for--

(1) Assuring special samples are taken and shipped to the AOAP Laboratory after maintenance.

(2) Assuring that performance of those maintenance actions, recommended by the AOAP Laboratory, as indicated on the DA Form 3254-R, are completed.

(3) Assuring that blocks 14-16 of the received DA Form 3254-R are completed, detailing the DS maintenance accomplished. Provide the completed form to the AOAP Laboratory.

(4) Assuring that components, being evacuated, are not reparable at the DSU and have AOAP labels affixed to the container, and that the component is being accompanied by the DA Form 3254-R.

5-6. ASSIGNING OIL ANALYSIS MONITORS. Unit Commanders are required to designate, in writing, an overall unit AOAP monitor. Provide copies of the appointment document, for the battalion and separate company monitors, to the Installation AOAP Laboratory. Units within a battalion/company will provide copies of AOAP monitor orders to the battalion AOAP monitors.

5-7. TRAINING AND CERTIFICATION.

- a. G4, III Corps Artillery provides certification and training for unit AOAP monitors.
- b. Battalion AOAP monitors will train and certify using unit (company troop, battery, and activity) AOAP monitors.
- c. Give each operator an AOAP training course of approximately 2 hours. Trained unit monitors or other qualified personnel will train operators.
- d. Minimum requirements for operator training are:
 - (1) Sampling procedures-vampire pump or sampling valves-tubing lengths.
 - (2) Identification of components requiring sampling.
 - (3) Importance of a representative sample.
 - (4) Importance of safety, when taking oil samples, to prevent entanglement of clothing and oral suction.
- e. Annotate certification of equipment operators, after completion of training, on DA Form 348 (Equipment Operator's Qualification Record (Except Aircraft)) and SF Form 46 (Government Motor Vehicle Operator 5 Identification Card).

5-8. EQUIPMENT CHANGES.

- a. Report component changes to the AOAP as soon as they occur, using a DD Form 2026 and/or unit prepared DA Form 5991-E.
- b. Report end items, that are received or turned-in to the AOAP laboratory, using a DD Form 2026.

5-9. EQUIPMENT REQUIRING AOAP SAMPLING. Enroll equipment/components listed in tables 4-1 through 4-8, DA Pam 738-750, in the Army Oil Analysis Program.

- a. Submit oil sample, on hydraulic systems (excluding brake systems) as indicated in DA Pam 738-750, prior to changing fluid. Change hydraulic fluid at the direction of the oil laboratory.
- b. File processed DD Form 2026/DA Form 5991-E, received from the oil laboratory, behind the DD Form 314, for a period of 90 days from submission date.
- c. Scheduling of hydraulic oil sample on DD Form 314 is not required, nor is there a requirement to maintain DA Form 2408-20.

5-10. SAMPLING INTERVALS.

a. Units and activities will comply with the prescribed oil sampling intervals, indicated in DA Pam 738-750, for nonaeronautical equipment.

b. DA Pam 738-750 authorizes a 10 percent variance, prior to or after, the scheduled date/hour.

5-11. SAMPLING KIT SUPPLIES. Units will ensure adequate sampling supplies are available. Items comprising the recommended AOAP sampling kit are listed in DA Pam 738-750 and TB 43-0211. Maintain a 60/90-day stock of supplies. Protect oil-sampling supplies to prevent contamination.

5-12. ROUTINE SAMPLES. Schedule routine samples on DD Form 314, for every item of equipment having a prescribed oil-sampling interval.

NOTE: Equipment NMC will not require an oil sample until equipment is in an FMC condition. However, when the component is returned to FMC condition, a special oil sample is required immediately.

5-13. SPECIAL SAMPLES. Take special samples as follows:

a. Immediate action is required on special oil samples requested by the laboratory. Clearly mark "SPECIAL" on those samples.

b. DS maintenance shops will submit special oil samples after repair, replacement, or installation of any oil-lubricated assembly. The remarks section of DD Form 2026, prepared by DSUs, will list reasons for repair or replacement.

NOTE: DSUs will require the last DD Form 2026, from customers evacuating equipment for repair of components, enrolled in the AOAP. In the event customers do not have the last results of oil analysis, DD Form 2026, the oil analysis laboratory may be able to furnish results of last oil sample taken, if serial number of components is provided.

c. GS maintenance shops will take special oil samples after overhaul/repair of components in the AOAP.

d. Do not enter special samples in scheduling section of DD Form 314, but entries are required on DA Form 2408-20.

5-14. SAMPLING PROCEDURES.

a. Equipment need not be brought to operating temperature to take an oil sample, if the vehicle has been operated within the last 30 days, regardless of ambient temperature. When the above conditions are not met, take samples with the component at operating temperature.

b. DA Pam 738-750 and TB 43-0211 provide instructions on how to take oil samples.

c. Do not take oil samples using the oral suction method. Many lubricants contain toxic fumes or compounds that are hazardous to your health.

5-15. CARE IN OIL SAMPLING. Take special care to assure representative oil samples.

- a. Use plastic tubing for one sampling only.
- b. Keep sampling supplies clean.
- c. Clean contaminated vampire pumps with solvent and blow dry.
- d. Discard syringes that get oil in the tube.

5-16. BOTTLE MARKINGS. Identify oil samples, for shipment to the oil lab, with the following information:

- a. Vehicle Bumper Number
- b. Engine or transmission serial number.
- c. Component operating hours and hours since last oil change, on the equipment, from which the oil sample was taken.

5-17. SHIPMENT AND PACKING. Send oil samples, by the most expeditious means, on the same day sample is taken. Use the 3-ounce bottle, NSN 8125-01-082-9697, only, for package of 120. No substitute is authorized.

5-18. LABORATORY RECOMMENDATIONS.

a. Maintenance recommendations "DO NOT OPERATE" stamped on DD Form 2026 or typed on DA Form 3254-R means that vehicles are not operated, except for emergencies, until results of a resample are obtained.

b. Submit resamples, requested by the laboratory, ASAP, NLT 3 working days.

c. Complete oil changes, requested by the laboratory, ASAP, NLT 5 working days.

d. Maintenance recommendation, DA Form 3254-R, will have corrective action taken ASAP, NTE 10 working days and provide feedback (completion of blocks 14-16) to AOAP Lab, Fort Bliss, TX. When you cannot complete corrective action within the 10 working days, submit interim reports to the AOAP Lab every 10 working days thereafter,

providing reason for delay.

5-19. ON CONDITION OIL CHANGE PROGRAM. Change oil and filters for components and selected hydraulic systems, under the oil analysis program, only when directed, by the Oil Analysis Laboratory; therefore, scheduled changes, required by technical publications and lubrication orders, are suspended. Exceptions are the seasonal changes, manufacturer's warranty requirements, and at discretion of maintenance officer.

5-20. OIL SAMPLING VALVES. To improve oil sample quality, TM 9-2300-422-23 & P outlines procedures and provides NSN requirements, to install oil sampling valves on combat/tactical and special purpose vehicles. This requirement is mandatory for FORSCOM/TRADOC units.

Section III. PROCEDURES FOR ADP PRINTOUT/REPORTS

5-21. ADP PROCEDURES. Distribute the following ADP printouts/reports, monthly, to the various/separate brigades, battalions, and battery levels. Commanders and users are encouraged to use these listings to better manage unit readiness.

a. Components enrolled in AOAP.

(1) Identifies components and end items enrolled in AOAP by UIC, serial number, and vehicle bumper number.

(2) Provides sample interval (hours/days), hour sample taken, date sample taken, and reason sample taken, etc.

(3) Each unit will receive a two-part copy of this report and will review listing for any discrepancies. Unit will then return one copy, with corrections, to AOAP Lab NLT the 25th of the following month.

b. Monthly Activity Report.

(1) This listing reflects all components on which samples were received, for the reporting month, by component and end item.

(2) Provides sample number, date analyzed, days in transit, hours since last sample, etc.

c. Resample and Type Recommendation Report.

(1) Lists all components that received abnormal advice.

(2) Listed by index number, end item number, component serial number, etc.

d. Laboratory Work Load Summary. Lists number of end items enrolled, percent of end item usage, number of components enrolled, percent of delinquent samples, number of normal samples, resamples, and laboratory recommendations.

e. Usage and Sample Status Report. Lists equipment enrolled, date last sampled, equipment samples overdue/number of days delinquent, and date next sample due.

5-22. PROCEDURES FOR CONVERSION OF MILES FOR COMAT/TACTICAL VEHICLES. Accomplish hour estimates, necessitated by broken or nonexistent hour meters, by using accumulated vehicle mileage in the following ratios: Combat and tactical vehicles- -1 hour = 10 miles. This ratio equals an average speed of 10 MPH. If operating on open highway in excess of 35 MPH, use actual travel time (clock wise) for estimating operating hours.

Section IV. OIL ANALYSIS REQUEST

5-23. DD FORM 2026 (OIL ANALYSIS REQUEST).

a. Purpose. OD Form 2026 or DA Form 5991-E will accompany every oil sample submitted to the oil analysis laboratory. Accurately complete entries, so as to furnish laboratory with total description, for history and evaluation.

b. Use.

(1) Oil sample submission form.

(2) Report sample results and activity on unit vehicle components in AOAP Program maintained as a record of most recent sample.

c. Preparation. Take entries, concerning end items and components from DA Form 2408-20 and transcribe to the DD Form 2026 in the following manner:

(1) TO--enter lab address.

(2) FROM- -enter unit address and UIC, not DODAAC.

(3) Enter equipment component model number.

(4) Enter equipment component serial number.

(5) Enter end item model number.

(6) Enter end item serial number.

(7) Enter date and time sample taken.

(8) Enter hours since new or overhauled.

(9) Enter hours since last oil change.

(10) Enter reason for sample; (Routine, Special, etc.).

(11) Enter oil added to component since last sample. Information may be maintained on DA Form 2401 (Equipment Organizational Control Record for Equipment).

(12) Enter method of sampling.

(13) Enter sample temperature (hot/cold).

(14) Type of oil.

(15) Remarks block on front of DD Form 2026 may be used to add any additional information that might be necessary, such as:

(a) Component condition and symptoms.

(b) Identify corrections or changes to component hours, oil change hours, serial numbers, or model numbers.

(c) Enter (M, H, or K) for end item odometer mileage, hour, or kilometers.

(d) When a vehicle is in support maintenance and cannot be sampled, at its appointed sample interval, enter job order number in the remarks block.

(16) Enter end item unit (bumper) numbers in upper left corner of DD Form 2026.

d. When using the prepared DA Form 5991-E for submitting oil analysis requests, units use the above data elements.

5-24. EVALUATION CHECKLISTS.

a. Use attached checklist to evaluate the battalion/separate unit AOAP management systems.

b. Use attached checklist to evaluate the battery/company level AOAP management systems.

Section V. REFERENCES

5-25. REFERENCES. Each AOAP supported unit will requisition and retain the following publications in the motor pool:

- a. AR 750-1, Army Materiel Maintenance Policy and Retail Maintenance Op.
- b. TB 9-2300-422-23 & P, Organizational and Direct Support Maintenance Manual (including Repair Parts and Special Tools Lists) for Army Oil Analysis Sampling Valves, Army Oil Analysis Program, Nonaeronautical Equipment (Combat. Tactical and Special Purpose Vehicles).
- c. TB 43-0211, Army Oil Analysis Program Guide for Leaders and Users.
- d. TB 43-0106, Aeronautical Equipment Army Oil Analysis Program, used by units with aircraft.
- e. AR 735-5, Basic Policies and Procedures for Property Accounting.
- f. DA Pam 738-750, The Army Maintenance Management System (TAMMS).
- g. DA Pam 738-751, Functional users manual for TAMMS-A, used by units with aircraft.
- h. USAFACFS Reg 750-6, Maintenance of Supplies and Equipment.

APPENDIX A

REFERENCES

AR 5-3	Installation Management and Organization
AR 70-15	Product Improvement of Materiel
AR 190-11	Physical Security of Arms, Ammunition, and Explosives
AR 310-10	Military Orders
AR 350-1	Army Training
AR 385-30	Safety Color Code Markings and Signs
AR 385-40	Accident Reporting and Records
AR 385-55	Prevention of Motor Vehicle Accidents
AR 385-95	Army Aviation Accident Prevention
AR 420-90	Fire Protection
AR 700-4	Logistic Assistance Program
AR 700-138	Army Logistics Readiness and Sustainability
AR 710-2	Supply Policy & Below the Wholesale Level
AR 725-1	Special Authorization and Procedures for Issues, Sales and Loans
AR 735-5	Basic Policies and Procedures for Property Accounting
AR 746-1	Packing of Army Materiel for Shipment and Storage
AR 750-1	Army Materiel Maintenance Policies
AR 750-25	Army Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Repair Support Program
AR 750-43	Test, Measurement and Diagnostic Equipment
AR 750-58	Printing, Camouflage Painting, and Marking of Army Materiel
DA Pam 25-30	Consolidated Index of Army Publications and Blank Forms
DA Pam 710-2-1	Using Unit Supply System (Manual Procedures)
DA Pam 710-2-2	Supply Support Activity Supply System (Manual Procedures)
DA Pam 738-750	The Army Maintenance Management System (TAMMS)
DA Pam 738-751	Functional Users Manual for The Army Maintenance Mgt System (Aviation)
DA Pam 750-13	Operating Guide for TDA Support Maintenance Activities
FM 6-40	Field Artillery Cannon Gunnery
FM 9-207	Operation and Maintenance of Ordnance Materiel in Cold Weather
MIL-Q-9858A	Quality Assurance Program
SB 700-20	Army Adopted/Other Items Selected for Authorization/List of Reportable Items
SB 740-94-8	Storage Serviceability Standard for AMCCOM Materiel Riot Control Agent Dispersers and Ancillary Items
SD 740-94-13	Storage Serviceability Standards for AMCCOM Materiel Flamethrowers, Flame Rocket Launchers and Ancillary Items

USAFACFS Reg 750-6, 20 June 2002

TB 10-7400-201-15	Serial Number Listing for Office Machines
TB 38-750-2	Maintenance Management Procedures for Medical Equipment
TB 43-180	Calibration and Repair Requirements
TB 43-181	Tables of Organization and Equipment
TB 43-182	Calibration Workload Requirements in Unit Identification Codes
TB 43-0002-2	Maintenance Expenditure Limits for FSC Groups 17 and 49, FSC Classes 1710, 1730, 1740, and 4920
TB 43-0002-3	Maintenance Expenditure Limits for Army Aircraft
TB 43-0106	Aeronautical Equipment Army Oil Analysis Program
TB 43-0142	Safety Inspection and Testing of Lifting Devices
TB 43-0211	AOAP Guide for Leaders and Users
TB 385-4	Safety Precaution for Maintenance of Electrical/Electronic Equipment
TB 750-25	Army Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Repair Support Program
TB 750-97-74	Maintenance Expenditure Limits for FSC Group 74; FSC Classes 7420, 7430, and 7490
TB 750-651	Use of Antifreeze Solutions and Cleaning Components in Engine Cooling System
TM 3-1040-204-14	Operator's Organizational Direct Support and General Support Maintenance Manual (including Repair Parts and Special Tools List) Flamethrower, Portable
TM 3-1040-257-14	Operator's Organizational Direct Support, and General Support Maintenance Manual: Flamethrower, Portable M9A1-17
Th 9-1000-202-14	Operator's Organizational Direct Support, and General Support Maintenance Manual for Evaluation of Cannon Tubes
TM 9-2300-422-23 & P	Organizational and Direct Support Maintenance Manual
TM 11-6665-214-10	Operator's Manual: Radiacmeters, IM-9E/PD
TM 55-1500-326-25	Aeronautical Equipment Maintenance Management Policies and Procedures
TM 750-116	General Procedures for Purging and Charging of Fire Control Instruments
USAFACFS Reg 725-1	Supply Standing Operating Procedures
USAFACFS Reg 725-50	Assignment and Approval of Priority Designators (PD) (FOUO) (DOL)

APPENDIX B

FORT SILL AND MAINTENANCE SUPPORT PLAN

DOL, Maintenance Division, will provide DS/GS maintenance for the following units:

USAFAS
OTC
USAFATC
P&SB, USAFACFS

FORSCOM III Corps Artillery units are supported IAW with a negotiated Maintenance Support Plan. Copies of support plans are provided by the IMMO, Maintenance Division, DOL, Bldg 2258E, (580) 442-3808/3708.

APPENDIX C

Glossary

AMC	Army Materiel Command
AMCOM	Aviation and Missile Command
AMCCOM	Army Munitions/Chemical Command
AMXTM	Army Materiel X Test Measurement
AVIM	Aviation Intermediate Maintenance
DS	Direct Support
ECP	Engineering Change Proposal
FSC	Federal Stock Class
GS	General Support
HEMIT	Heavy Expanded Medium Tactical Truck
J-SIIDS	Joint Service Identification/Intrusion System
MC	Materiel Change
MWO	Modification Work Order
NICP	National Inventory Control Point
NMC	Non Mission Capable
NMCM	Not Mission Capable-Maintenance
NMCS	Not Mission Capable-Supply
NMP	National Maintenance Point
PIP	Product Improvement Program
OTSG	Occupational Training Support Group
QAE	Quality Assurance Evaluator
RDA	Research & Development Actions
SSA	Supply Support Account
STE-ICE	Standard Test-Internal Combustion Engine
TMDE	Test, Measurement, and Diagnostic Equipment
UJC	Unit Identification Code
USATSG	U.S. Army TMDE Support Group
WWMCCS	World Wide Military Command & Control System

(ATZR-LIM)

FOR THE COMMANDER:



ROBERT A. CLINE
COL, FA
Chief of Staff

NICHOLAS L. BONACCI
Director of Information
Management

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