



UNITED STATES MARINE CORPS

MARINE CORPS BASE

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7 Oct 10

BASE ORDER 4790.1D

From: Commanding Officer
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

Ref: (a) MCO P4790.1B
(b) MCO P4790.2C
(c) MCO 5311.1D
(d) MCO 4400.16G
(e) MARADMIN 092/02, "Interim Policy Clarification For UMMIPS"
(f) TM 4700-15/1H
(g) MCO P4030.36A
(h) UM 4790-5
(i) MCBUL 3000 (canc: Jan 11)
(j) MCO 3000.11D
(k) UM 4400-124
(l) MCO 4733.1B
(m) TI 4733-OD/1
(n) TI 4733-OD/11N
(o) NAVMC DIR 5100.8
(p) MCO 5100.8
(q) OSHA 29 Code of Federal Regulations, Part 1910
(r) OPNAVINST 5090.1C
(s) MCO P5090.2
(t) MCO P4400.150E
(u) UM 4400-76
(v) LMT EAST ltr 4400 U87/TG of 1 Jul 10
(w) MCO 4855.10B
(x) MCO 1510.34A
(y) MCO P5215.17C
(z) MCO P5600.31G
(aa) NAVMC 2761
(ab) MCO P7000.14K

DISTRIBUTION STATEMENT A: Approved for public release;
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1. Situation. To promulgate current Marine Corps Base (MCB), Camp Lejeune (CamLej) maintenance management policy and procedures in accordance with the references.
2. Cancellation. BO P4790.1C.
3. Mission. Establish MCB maintenance management policy and procedure in accordance with the references.
4. Execution. This Order is to be used by all MCB subordinate units that are in the local area of CamLej and Stone Bay.
5. Administration. Recommendations for changes to this Order are invited. Submit proposed changes via appropriate chain of command for evaluation.
6. Command and Signal
 - a. Command. This Order is applicable to MCB CamLej.
 - b. Signal. This Order is effective the date signed.


D. J. LECCE

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Received	Date Entered	Signature of Person Incorporated Change

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Chapter 1

General Information

1. Background. This Order provides policies, procedures and instructions for the implementation and administration of maintenance management within MCB CamLej.

2. Status and Scope

a. Requirements in this Order are applicable to all MCB CamLej organizations.

b. Any deviation from instructions contained in this Order must be authorized by the Commanding Officer, MCB CamLej (Dir, S-4).

c. This Order contains instructions for the implementation and administration of maintenance management procedures.

3. Marine Corps Integrated Maintenance Management System (MIMMS)

a. Reference (a), MIMMS Introduction Manual, reference (b), and MIMMS Field Procedures Manual establish the policies and procedures for the management of ground equipment maintenance in the Marine Corps. The objectives of MIMMS is to establish a uniform maintenance management system for all ground equipment, which includes but is not limited to: communications; engineer; general supplies; motor transport; ordnance; audio-visual; Chemical, Biological, Radiological, Nuclear Defense; and selected equipment that supports the accomplishment of MCB unit missions.

b. This Order provides a comprehensive guide for the performance and management of ground equipment maintenance within MCB CamLej organizations, establishes command and staff relationships for equipment maintenance management functions, provides procedures, assigns responsibilities to appropriate organizations, and identifies relationships between MIMMS and other maintenance related Marine Corps programs.

4. Purpose. For the purpose of implementation of MIMMS at this Command, the term "Organization" as used in this Order shall be

considered synonymous with "department, division, unit and battalion," and the term "Commander" synonymous with "Assistant Chief of Staff, Base Facilities Maintenance Officer, Base Motor Transport Officer (MTO)/Garrison Mobile Equipment (GME) Fleet Manager, Base Property Control Officer and Commanding Officer."

5. Priorities. To achieve a high state of equipment readiness and extract maximum effectiveness from the maintenance and supply system, it is necessary to establish clear maintenance priorities, in order of importance reflected below:

- a. The repair of deadlined mission essential equipment.
- b. The procurement of repair parts, tools, and publications.
- c. The timely flow of equipment through the maintenance cycle.
- d. The establishment and maintenance of accurate records to be used for future management decisions.

6. Applicability

- a. Procedures established herein are applicable to all equipment listed in the Table of Equipment (T/E).
- b. Specifically excluded from the provision of this Order are appliances used in government quarters, field printing equipment, non-tactical food service equipment, and GME.

7. Command Responsibilities. The requirement to maintain material in a condition to perform its assigned function is an essential responsibility of the commander. Each commander shall personally ensure that a sound and continuing equipment maintenance program exists within the organization and the proper maintenance procedures are followed per applicable directives. Commanding officers of all MCB organizations are responsible for implementation of adherence to the policies, procedures and instructions contained in this Order.

- a. To ensure that an effective equipment maintenance program is established and implemented, commanders must:

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(1) Provide necessary guidance in the formulation of standing operating procedures, desk-top procedures and turnover folders.

(2) Ensure that the necessary tools; test, measurement and diagnostic equipment (TMDE); publications; personnel; supplies; and facilities are available and used properly.

(3) Assign responsibilities to individuals to accomplish necessary maintenance and associated documentation.

(4) Allocate sufficient time to accomplish to required maintenance.

(5) Provide necessary technical training to enable assigned personnel to accomplish the maintenance mission.

(6) Provide the impetus for the program through an active, continuing and visible display of command emphasis and genuine interest. The establishment, support and maintenance of a viable internal review and inspection program are critical to the maintenance and supply efforts and preventing occurrences of waste and abuse.

(7) Assign in writing a Maintenance Management Officer (MMO) as required.

(8) Ensure authorized echelons of maintenance identified in the current Table of Organization (T/O) are not exceeded without prior approval of the Commanding Officer, MCB CamLej (Dir, S-4).

(9) Ensure all requirements and programs which have been implemented remain current and pertinent.

b. Subordinate organizational commanders shall advise their senior commanders of any equipment maintenance problems which cannot be resolved through normal channels and procedures.

c. Requirements for a Maintenance Manager Officer (MMO)

(1) Units, to include detached or separate commands, which are authorized second echelon or higher maintenance capability for more than one commodity area, shall assign an

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officer, staff noncommissioned officer (SNCO), or civilian as appropriate, in writing, as the MMO, to provide supervision over equipment maintenance. In units that do not meet the above criteria, the individual designated as the commodity manager shall perform the maintenance management functions and does not need to be assigned as the MMO. These responsibilities may be assigned as an additional duty for an officer/civilian or as a primary duty for a SNCO when a full-time officer assignment is not required.

(2) Assignment of MMO to organizations below the base level will be accomplished in writing by commanders maintaining equipment to which this Order is applicable. A copy of the appointing order/letter shall be submitted to the (Commanding Officer, Director, and S-4 (MMO)) upon initial appointment and on each occasion when a new MMO is appointed. The Base MMO will maintain a file of appointment orders/letters on all current organizational MMOs.

8. Staff Responsibilities

a. Director, S-1. Serve as the principal Base Staff Officer pertaining to military personnel management; including the assignment and replacement of maintenance and maintenance management personnel.

b. Director, S-3

(1) Serve as the principal Base Staff Officer on matters pertaining to formal training, including equipment maintenance training.

(2) Coordinates with the Base MMO and the Civilian Personnel Director (CPD) on the training of maintenance and maintenance management personnel.

c. Director, S-4/S-6/BPO

(1) Serve as the principal Base Staff Officer on matters pertaining to logistics including those matters relating to equipment maintenance.

(2) Coordinates the logistics functions for all Base organizations to include all commodity areas.

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(3) Exercise staff cognizance over the Base Maintenance Management Program.

d. Director, Comptroller

(1) Serve as the principal Base Staff Officer on matters pertaining to internal control, guidance and management of appropriated funds.

(2) Periodically evaluate direction over budgeting, accounting, and expenditure of funds; provides technical guidance, coordination, and advice on matters pertaining to efficient utilization of appropriated funds.

e. Base Adjutant

(1) Manages the Directive Control Program and inspects/assists base organizations with proper directives control procedures.

(2) Assist the MMO to ensure correct administrative procedures are used within commodity area directive systems.

f. Base Safety officer

(1) Serves as a special staff officer to the Commanding Officer with respect to matters dealing with safety.

(2) Coordinate with the Base S-4 on all safety aspects of equipment maintenance operations.

g. Base Maintenance Management Officer (MMO), S-4, Operations Division

(1) The MCB CamLej MMO will be assigned as a Special Staff Officer to the Commanding Officer, under the staff cognizance of the Director, S-4 on all matters pertaining to organizational and support equipment maintenance management. Assignment of the Base MMO will be made in writing with a copy of the appointing letter retained in the office of the (Dir, S-4).

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(2) Advise the Commanding Officer, MCB CamLej on all matters related to equipment maintenance and the impact of the Base Maintenance Management efforts on equipment readiness.

(3) Plan, organize and coordinate the use of all equipment maintenance activities and resources.

(4) Prepare the Base's Maintenance Management Standing Operating Procedures (MMSOP).

(5) Coordinate and assist commodity maintenance officers in establishing maintenance production and quality control programs, and centrally coordinates the Base Product Quality Deficiency Report (PQDR) program.

(6) Monitor the MIMMS program to ensure timely and accurate maintenance related report submissions.

(7) Plan and implement assist visits for the Commanding Officer to assess the effectiveness of the maintenance effort.

(8) Monitor proper recording and upkeep of maintenance information in maintenance records.

(9) Coordinate the overall conduct of the Base's equipment maintenance program.

h. S-4 Officer

(1) Serve as the principle Staff Officer to the Commanding Officer on all matters pertaining to logistics, to include equipment maintenance, its management and the availability of maintenance resources.

(2) Coordinate a sound and visible internal review program, particularly for those functional areas vulnerable to fraud, waste and abuse.

(3) Exercise staff cognizance over the organization's MMO on matters pertaining to maintenance and/or maintenance management.

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i. Unit Maintenance Management Officer/Chief

(1) Serve as a special staff officer to the Commanding Officer on all matters pertaining to maintenance management.

(2) Advise the Commanding Officer on all matters related to equipment maintenance and the impact on readiness.

(3) Develop and manage the unit's maintenance management program, to include coordination of limited technical inspections (LTIs) and maintenance stands down (MSDs).

(4) Provide technical assistance and instructions to OIC and/or commodity managers in maintenance management matters.

(5) Prepare, update and revise the unit's maintenance management policy letters.

(6) Assist the Officer in Charge (OIC) and/or commodity managers in establishing quality assurance (QA) and maintenance production programs, to include active participation in a viable internal review and inspection program to ensure the effectiveness of the maintenance effort.

(7) Centrally coordinate the unit's Product Quality Deficiency Reports (PQDR), modification, calibration, tool control, technical publications, and corrosion control programs.

(8) Initiate action to correct or change technical publications (NAVMC 10772) and ensures that required maintenance publications are on hand, on order, and/or properly distributed.

(9) Has staff responsibility for the operation and functioning of MIMMS within the respective areas of responsibility.

(10) Identify facility requirements for maintenance operations and training, and coordinates the use of available facilities.

(11) Review T/E modification of allowances (MOA's) against the Table of Organization (T/O) for maintenance supportability.

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(12) Evaluate organizational support and test equipment allowances, and ensure on hand equipment is properly maintained, inventoried and calibrated.

(13) Ensure that procedures are developed, implemented and followed through for coordinating maintenance support with the Intermediate Maintenance Activity.

(14) Ensure the proper recording of maintenance information and upkeep of required maintenance resource records.

(15) Coordinate with the S-1 and S-4 regarding personnel assignments.

(16) Coordinate with the S-3 and S-4 regarding technical training of maintenance personnel and balancing of operational requirements and maintenance scheduling.

(17) Coordinate with the Supply Officer in regards to repair parts and other supply support requirements and ensure a bi-weekly reconciliation/validation is accomplished by commodity managers and the Supply Officer.

(18) Assist in the budget process and identifies maintenance funding requirements.

(19) Monitor the organization's administrative deadline program.

(20) Coordinate the overall conduct of the equipment maintenance program.

(21) Conduct an annual review of the T/O and advises the Commanding Officer and the S-1 recommended changes. Validate the logistics capabilities paragraph to ensure proper level of maintenance regarding authorized ground equipment.

j. Commodity Manager

(1) Manage the performances of equipment maintenance operations (to include contracted maintenance) in the commodity to which assigned.

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(2) Act as the technical advisor to the Commanding Officer on all commodity functions.

(3) Plan maintenance production, preventive and corrective maintenance based on the level of maintenance authorized and resources available.

(4) Schedule, direct and supervise the care, inspection and maintenance of assigned T/E equipment.

(5) Monitor support and test equipment allowances and ensures on hand equipment is properly maintained, inventoried and calibrated.

(6) Initiate action to correct or change technical publications, ensure required allowances of technical publications are on hand, and responsible personnel are instructed in their use and maintenance.

(7) Ensure all maintenance information is recorded and maintenance resource records are properly maintained.

(8) Ensure the proper training and use of assigned operators, maintenance, and supervisory personnel.

(9) Coordinate with the Supply Officer regarding all supply support matters.

(10) Supervise all validations and reconciliations to include daily and weekly internal shop validations, bi-weekly external reconciliations with the Intermediate Maintenance Activity and Repairable Issue Point (when applicable) and bi-weekly parts reconciliations with supply.

(11) Assist in the organization's budget process by identifying maintenance funding requirements.

(12) Establish and manage the calibration control procedures and commodity manager's modification records.

(13) Establish sound maintenance production, prevention maintenance (PM) and quality assurance programs.

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(14) Ensure that maintenance personnel have a valid Operator's License for the equipment requiring maintenance and any mandatory certificates required for position.

(15) Prepare policy letters for maintenance operations within the commodity when unit's MMSOP does not adequately outline those procedures.

(16) Evaluate the serviceability of equipment per the internal quality assurance plan.

k. Supply Officer

(1) Serve as a special Staff Officer to the Commanding Officer with respect to general supply matters, including supply support for the organization's maintenance program.

(2) Coordinate with the MMO, commodity officers and supporting activities pertaining to supply support of T/E equipment.

(3) Administer the organizational supply program in support of maintenance operations and conduct bi-weekly reconciliations.

(4) Submit accurate and timely supply data into the supply system for all supply items.

(5) Reconcile the LM-2, MAL and T/E monthly with the MMO.

(6) Maintain a library of supply publications in support of all maintenance, maintenance management functions.

(7) Ensure appropriated funds are available to support maintenance operations and reviews justifications for all financial obligations.

(8) Recommend allocation of funds based on projected operational requirements and makes any required financial adjustments based on actual obligations.

(9) Ensure all Type I allowances are on hand, on order, or identified as unfunded deficiencies, when appropriate.

9. Standing Operating Procedures (SOP)

a. Commanders at major subordinate commands (MSC) will publish a MMSOP. The MSC MMSOP need not contain all subordinate unit functions but will be clear and applicable at the unit level. Maintenance and maintenance management SOPs are required to establish the commander's policy, assign responsibility for certain tasks, and document standardized procedures to be followed in those areas where standardization is possible. SOPs provide for the orderly accomplishment of assigned tasks and ensure continuity of operations. SOPs should expand, as necessary, on the general guidelines established in publications and directives issued by higher authority and adapt those guidelines to the peculiarities of the activity.

b. When the maintenance mission at subordinate units requires deviation from or amplification to the MSC MMSOP, clearly defined written procedures will be included in the unit maintenance policy letter identifying the commander's additional policy guidance. These procedures will also include rationale for why the MSC MMSOP guidance is inappropriate.

c. Commanders of those organizations which possess ground equipment on their organic property accounts, or are assigned selected equipment for their use from another base organization, but are not authorized maintenance beyond first echelon, will publish the command's policy and procedures for preventive maintenance, modification records, and procedures for evacuating the equipment to a supporting maintenance organization aboard the Base, except when the policy and procedures may be published as a part of one of the unit's logistics SOPs or in a maintenance policy letter for the unit's commodity areas.

10. Desk-Top Procedures (DTP) and Turnover Folders (TOF)

a. Desk-Top Procedures (DTP)

(1) Frequent changes of personnel within units create a lack of expertise and continuity in day-to-day operations. The proper use of DTPs will alleviate the adverse results which are caused by the temporary absence or the transfer of personnel. DPR provide detailed information necessary for carrying out day-to-day operations, including but not limited to: current references, procedures for required duties, point of contact

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information for those who might need to be contacted, and reports required.

(2) DTP will be prepared for each billet involving administrative and management functions. For example, MIMMS clerk, tool room personnel, supply personnel, publication clerks, shipping and receiving personnel, quality control, training, and safety personnel.

b. Turnover Folders. A turnover folder will be maintained by all OICs, commodity managers and/or chiefs and subordinate supervisory personnel. It will include, at a minimum, statements reflecting the following:

(1) Title of the billet.

(2) To whom the individual occupying the billet reports and incumbent billets subordinate thereto, to include letters of authorization.

(3) Mission of the billet.

(4) Functions involved in accomplishing the mission, including primary and collateral duties.

(5) Location and list of inspection checklists, and previous inspection results and deficiency corrections.

(6) Tasks and basic operations regularly performed in accomplishing specific functions.

(7) Publications and directives which are pertinent to the billet.

(8) List of required reports and dates of submission.

(9) Relationship with activities both in and outside the official chain of command, including official liaison and coordinating functions. Write a brief statement concerning the type of matters on which these agencies are consulted.

(10) Personnel contacts within or outside the command, listing telephone numbers and/or addresses as well as purpose served by contact.

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(11) Miscellaneous information should be included, e.g. administrative or operational procedures peculiar to the billet, or any information that might assist in carrying out the responsibilities.

(12) Past, pending, and anticipated projects that are considered unusual or worthwhile will be itemized and kept current. For each project include a brief outline and status report.

c. When practical, desktops and turnovers of personnel scheduled for transfer or reassignment will be reviewed and approved as current within 30 days prior to the departure. All DTPs/TOFs will be reviewed and approved as current at least annually.

Chapter 2

Maintenance Operations

1. Maintenance Policy

a. The maintenance management policies and procedures of this Command are in accordance with the directives of higher headquarters.

b. Units shall accomplish required maintenance on assigned equipment within authorized levels of maintenance in accordance with applicable orders and technical publications and within the level of maintenance authorized on the unit's T/O cover page. Maintenance efforts will be organized with the goal of maintaining the maximum amount of equipment in a ready status and a review of TO&Es and mission statements is required every four years to ensure the stated requirements can lead to the accomplishment of the unit's mission.

c. Equipment requiring maintenance beyond the organizational level of maintenance shall be evacuated to the supporting facility per reference (b).

d. Maintenance Echelons

(1) First Echelon Maintenance. First echelon maintenance is performed by the user or operator of the equipment. It includes the proper care, use, operation, cleaning, preservation, lubrication, minor repair, adjustment, publications and tools/parts allowance.

(2) Second Echelon Maintenance. Second echelon maintenance is work performed by specially trained personnel in the organization. Appropriate publications authorize second echelon maintenance, additional tools, necessary parts, supplies, test equipment, and skilled personnel to perform maintenance beyond the capabilities and facilities of the first echelon.

(3) Third Echelon Maintenance. Third echelon maintenance is that authorized by appropriate publications to be performed by specially trained units in direct support of one or more using organizations. However, third echelon maintenance

may be performed by organic maintenance units within the using organization in specially authorized cases. They also support the lower echelons by providing technical assistance, mobile repair crews and repair parts, when necessary.

(4) Fourth Echelon Maintenance. Fourth echelon maintenance activities are authorized a larger assortment of assemblies, parts, additional and more precise tools and test equipment than is provided to lower echelons. The principal function of fourth echelon maintenance is to repair major items, assemblies and subassemblies for return to the lower echelons or the supply system.

(5) Fifth Echelon (Depot Maintenance). Depot maintenance is performed on material requiring major overhaul or complete rebuild of assemblies, subassemblies, and items or parts including the manufacture of parts, modifications, testing, and reclamation, as required. Fifth echelon maintenance, synonymous with depot maintenance, is the maintenance authorized for rebuilding major items, assemblies, parts, accessories, tools, and test equipment.

e. Echelon of Maintenance (EOM) for MCB Units. Authority to perform maintenance and at what level is contained in each unit's T/O. Requests for authority to exceed the authorized EOM will be submitted to the MCB (Director, S-4). The authority period is not to exceed six months. Requests for T/O changes are governed by MCO 5311.1D and should be coordinated with Director, S-1.

<u>Organization</u>	<u>TAMCNs</u>					<u>(Commodity Area)</u>
	A	B	C	D	E	
Headquarters and Support Battalion	O					O
Weapons Training Battalion						O/I
Deployment						

- Organizational maintenance (1st and 2d echelon) on organic infantry weapons.

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- Intermediate maintenance (3d echelon) on M9 pistols, M16A2/A4, and M4 carbines.

- Intermediate maintenance (limited 4th echelon) on competition rifle and pistol weapons.

f. The maintenance process and the relationship of maintenance production to information flow as it pertains to equipment status reporting will be standard among all Base organizations performing 2d echelon or higher maintenance. Appendix F, of reference (b), will be used as standard procedures for shop supervisors/commodity managers.

g. A detailed inspection of equipment entered into the maintenance cycle, and requisition of known faulty repair parts and components shall be accomplished within the time frame prescribed per reference (b), from the date the equipment is identified as requiring repairs.

h. Commanders and Staff Officers are responsible for their maintenance programs to include but not limited to: preventive maintenance, corrective maintenance, modification of equipment, calibration and limited technical inspections.

2. Assignment of Operators

a. When feasible, a specific operator/crew will be assigned to a Principal End Item (PEI) of equipment for the performance of operator maintenance on such equipment. Where necessary, operators may be assigned responsibility for more than one piece of equipment to accomplish this requirement. Commodity managers will maintain a list of all equipment and assigned operators.

b. Operators will conduct first echelon maintenance on the equipment they are properly assigned to operate. Commanders and commodity managers are to ensure that assigned operators are properly trained on assigned equipment.

3. Allocation of Maintenance Training/Performance Time

a. Individual training skills (ITS) requirements are contained in the 1510 series of MCOs and applicable NAVMCs. These requirements must be considered in the allocation of maintenance training time and tasks.

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b. Equipment maintenance as well as technical, operator and maintenance supervisor training will receive emphasis equal to that given to operations and training.

c. Commanders will ensure adequate time is allocated for equipment maintenance prior to, during and following operations or training involving equipment, but not to exceed the maximum maintenance cycle times allotted in paragraph 3003.5 of reference (b).

d. Scheduled (preventive maintenance) services will be performed per the appropriate directives and under the control/supervision of qualified personnel.

e. Commanders and commodity supervisors are responsible for the execution of scheduled maintenance, to include a physical modification check of the equipment, record jacket and modification control records.

f. Staff sections which provide support to and/or are tasked with accomplishing specific base functions such as motor transport, communications electronics, facilities repair, telephone repair, and warehouse operations must ensure that the work day/week is scheduled to permit adequate time for operator maintenance of the equipment.

4. Shop Operations

a. Shop operations are actions taken to manage maintenance and supply activities, and to control the resources provided to accomplish the unit's mission. Each commander and commodity officer is required to establish an effective shop operation. Reference (b) provides amplifying guidance for shop supervisors.

b. All areas where maintenance actions will be performed shall be in designated areas that provide adequate space, lighting and access to necessary tools, with proper personal protective equipment.

c. Commanders and commodity officers will assign in writing the title, authority and responsibilities of key personnel as follows:

- (1) Commodity Officer
- (2) Commodity Chief
- (3) Maintenance Officer
- (4) Maintenance Chief
- (5) MIMMS Clerk
- (6) Publications Clerk
- (7) Training clerk
- (8) Modifications Control Clerk
- (9) Records Clerk
- (10) Tool Room NCO
- (11) Calibration Clerk
- (12) Quality Control Clerk

d. The above letters or orders will be maintained in the designated person's desktop procedures/turnover folder.

e. All maintenance elements will be organized so that maintenance teams are composed of inexperienced personnel working with skilled personnel during active maintenance.

f. Commanders will designate in writing personnel authorized to sign equipment repair orders (EROs) and associated requisitions/documentation in the priorities for which they are authorized. Use of the priority system requires that commanders either personally review or delegate in writing to specific personnel the authority to review all requirements based on Urgency of Need Designator "A," and this review be accomplished before releasing requisitions to the supply source. The sample letter shown in Figure 2-1 may be used for these authorizations.

g. Priorities will be assigned to repair parts requisitions per the instructions contained in references (d) and (e). The proper priority is determined by combining the Force/Activity

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Designator (F/AD) with the urgency of Need Designator (UND). The following procedures will be used for changing priorities on EROs:

(1) In those cases where the priority is upgraded, a new priority signature and date will be required if the original signer did not have the authority to assign the upgraded priority. Procedures for upgrading ERO priorities are contained in reference (f). The category code of the ERO may have to be upgraded also. The priority of critical parts and/or maintenance will be in agreement with the ERO priority.

(2) An ERO priority will be downgraded whenever the priority of maintenance and parts is less than ERO priority. The category code of the ERO may have to be downgraded as well.

h. Recommend that only one category code "N" ERO per end item be opened at one time. Upgrading and downgrading of category codes will be in consonance with the priority. Use of category code "M" and "X" EROS is restricted to use by Fleet Marine Forces and MCB CamLej units supported by the Field Maintenance Subsystem (FMSS).

5. Equipment That Exceeds Maintenance Capabilities

a. Equipment that exceeds a unit's capabilities or authorized echelon of maintenance stated in the mission statement on the cover page of the unit's T/O will be evacuated to the nearest supporting maintenance facility. All maintenance authorized by the unit will be performed prior to evacuation to the supporting maintenance facility.

b. Units requesting maintenance support from the Intermediate Maintenance Activity (IMA) will prepare letters of authorization to sign EROs (Figure 2-1) and provide a list of personnel authorized to receipt for material and equipment from the IMA (Figure 2-2). These letters will be updated on an annual basis or as changes occur, whichever comes first. MCB units must ensure that a funding document exists for maintenance support from the IMA.

c. The evacuated equipment will be accompanied by supporting equipment documents: Record Jacket (if applicable) and courtesy third ERO filled out properly.

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d. When responsibility for a piece of equipment cannot be adequately assigned to an operator or the equipment is Level "A" packed, that equipment is administratively deadlined. Level "A" packing is that level of preservation which provides the maximum protection, as outlined in reference (g). This equipment should be identified and tagged accordingly, and will not be used without the consent of the organizational commander. Requests for placing equipment into a Level "A" pack status are to be submitted to the Commanding Officer, MCB CamLej (Dir, S-4) for approval. Preventive maintenance requirements/intervals for equipment administratively deadline are contained in paragraph 3002.11 of reference (b).

6. Performance of Maintenance Services

a. A Preventive Maintenance Checks and Services (PMCS) program consisting of inspecting, cleaning, servicing, lubricating, and adjusting is the key to equipment readiness in a unit. It is normally a function of organizational maintenance and accomplished by the unit's operational and maintenance personnel. Effectively administered PMCS will help prevent early breakdown or failure of equipment, thus assisting in preventing costly, complex, and time-consuming repairs and in attaining the optimum utilization of maintenance resources.

b. PMCS will be scheduled and is the responsibility of commanders, commodity officers, users and/or operators. Adequate time must be allocated within the training schedule to complete scheduled maintenance services.

c. First echelon PMCS are the responsibility of the assigned operator under the supervision of the commander and/or commodity manager. The foundation of the preventive maintenance program is the operator on the lowest level of maintenance. No one is more familiar with equipment than the individual who uses it. Command attention and supervision by supervisory personnel at all levels is required to ensure that proper first echelon maintenance procedures are in effect.

d. Second echelon and above PMCS are the responsibility of the trained mechanic or technician under the supervision of the maintenance officer. Accomplishment of required PMCS is the responsibility of the commander of the organization to which the equipment is assigned. Accordingly, organizational SOPs will

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establish policies and procedures for that organization's preventive maintenance program. Specific guidance for the conduct of preventive maintenance as follows:

(1) All required PMCS services shall be performed, if practical, prior to evacuating the equipment to a higher echelon for maintenance. Common sense and good judgment may indicate, however, that certain PM requirements be omitted if the corrective maintenance action duplicates or negates the effect of the PM. For example, it is unnecessary to change oil in a vehicle prior to evacuation, when it is obvious the engine will either be replaced or the oil will be removed in the corrective maintenance process.

(2) PM services coming due on equipment which has been evacuated for higher echelon maintenance remains the responsibility of the owning maintenance activity. PM services will be completed as far as is possible without interfering with the required corrective maintenance. Again, common sense and good judgment will be used to preclude the accomplishment of unnecessary PM functions.

e. PMCS will be conducted per reference (f), current technical manuals, and lubrication orders applicable to the specific equipment. Maintenance intervals are specified in the above publications. These PM services are generally cyclic in nature; therefore, they must be scheduled on a periodic basis. This achieves a systematic inspection, detection and correction cycle that prevents potential failures either before they occur or before they develop into major defects. If the instructions in the technical publications conflict with those of the manufacturer, the manufacturer's instructions will be complied with to preclude invalidating the warranty.

f. Commanders are authorized to vary the frequency of scheduled PMCS services when climatic conditions, operational commitments or additional factors warrant variation of the frequency of established PM schedules. Any variation of the PMCS schedule must be documented with sufficient justification.

g. When equipment technical manuals do not establish a definite PMCS frequency for the end item, the commodity manager will establish a PM schedule per reference (b). The interval

will not normally be greater than semiannually unless directed by Headquarters Marine Corps (HQMC).

h. Corrective Maintenance (CM) will be performed by the authorized echelon of maintenance as established by the T/O. Commodities will not requisition parts that exceed their authorized echelon of maintenance as established in the SL-4 (parts manual) of that equipment. The Source Maintenance Recoverability (SMR) code specifies which parts may be installed at the organizational level.

i. Following operational training commitments, adequate time will be scheduled to perform PMCS and CM. This maintenance may be performed concurrently with training requirements.

j. The commander will combine the use and maximize the efficiency of all maintenance resources available, while monitoring maintenance requirements of subordinates. As a last resort, overflow maintenance may be requested from the next higher level of maintenance support. Requests for overflow maintenance should be routed through the chain of command.

k. Contact Team Maintenance

(1) There are times when it is not practical or possible to deliver equipment requiring repair to the supporting maintenance organization. Such is the case when equipment is permanently installed in a fixed location or when a quantity of the type equipment in an organization requires the accomplishment of the same maintenance action such as modification. In such cases, it is more practical to provide maintenance support at the equipment location by use of a contact team.

(2) Contact teams will be task organized to provide the support required. It may consist of one or more persons equipped with the necessary test equipment and/or tools required to accomplish the specific task requested.

(3) The decision to utilize a contact team will be made by the head of the supporting maintenance organization after considering such factors as transportation costs, the feasibility of moving the equipment, work space in the shop, and the specific situation. Requests for a contact team will be

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made to the commander of the supporting maintenance organization in writing. Documentation (use of an ERO) is required where the support is provided.

7. Records

a. General

(1) Proper record keeping procedures cannot be over emphasized. The maintenance records document actual services performed. Quality control and supervision is required to ensure that maintenance services were actually performed as indicated to ensure the safe operation of equipment. In the event that the equipment is transferred, the equipment record jacket is the sole source of equipment maintenance documentation.

(2) Accurate equipment records are the responsibility of everyone in the chain of command, from the unit commander to the operator. Record jackets will be maintained per TM-4700-15/1 and appropriate technical manuals. Additionally, safety messages will be included in each record jacket. Commodity officers will ensure that those messages are retained in the record jacket for the life of the equipment or as dictated by message.

(3) The commodity officers will be required to maintain, prepare, care for and handle all maintenance records. When equipment is temporarily loaned or issued, a temporary record jacket will be reproduced for the using unit. The original record jacket will leave the commodity shop only for intermediate maintenance services or when the equipment has been permanently transferred from the organization to another.

b. Record Types

(1) Maintenance Records. Maintenance records are maintained to provide a history of equipment maintenance requirements, to ensure the performance of required preventive maintenance, and to facilitate management decisions. Maintenance records are further classified as equipment records or maintenance resource records.

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(2) Equipment Records. Records required by the current edition of reference (f) will be maintained on equipment held by Base organizations. Records for equipment for which no records are specified in reference (f) will be maintained in accordance with other applicable Marine Corps directives. If no Marine Corps requirement exists, commanders will establish records that require the accomplishment of preventive maintenance.

(a) Use of Equipment Repair Order (ERO)

1. An ERO, NAVMC 10245, will be used by all commodities. The ERO will not be used to request or record either operator maintenance (first echelon) or depot level maintenance (fifth echelon). The ERO will be used by second echelon personnel in conjunction with the Equipment Repair Order Shopping List (EROSL) to requisition repair parts and/or SL-3 components.

2. All entries on the ERO will be completed in accordance with reference (f). Entries made on the ERO in columns marked "status" and "status date" are mandatory.

(b) Use of the Equipment Repair Order Shopping List (EROSL)

1. The EROSL (NAVMC 10925) is designed to be used in conjunction with the ERO to requisition, receipt for, cancel, record partial issues and equipment undergoing repair. The EROSL has been designated primarily for units supported by the FMSS.

2. Instructions for completion of the EROSL are contained on the template, which is attached to the EROSL pad. The EROSL will be completed as outlined in reference (f).

3. Though the EROSL may not be the control document for the actual requisitioning of repair parts, the organization's maintenance and supply sections may use it as an effective management tool during internal validation and reconciliation.

(3) Local Records. Local records are those maintained by a unit in addition to those required by higher authority. Since the maintenance of any record requires the expenditure of

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personnel resources, the use of local records shall kept to the minimum necessary to satisfy definite information requirements of the unit. Such records will be established only when it can be demonstrated that a unit record would be beneficial to other activities. Local records are not authorized when Marine Corps standard records that do the job are available.

(4) Records Review. Commodity supervisors will periodically, not less than semi-annually, review all records being maintained to ensure that a requirement exists for their continued use. Particular attention should be given to local records. Recommendations for improvements to records required by higher authority will be submitted through the chain of command to the requiring activity. Recommendations will be submitted via the Commanding Officer, MCB CamLej (Dir, S-4).

(5) Records Responsibilities. Commodity managers or chiefs must designate the type of records required for the section and the responsibility for the preparation, care, and handling of maintenance records, by billet.

8. Reports

a. Maintenance reports provide data and information for use in determining policy, planning, controlling, and evaluating operations and performance, and preparing reports for higher authority. Format and frequency of reports are determined by specific requirements of the requiring organization.

b. Commanders will ensure local reports are required only to meet definitive requirements, are economically designed, the information contained cannot be aquired from an existing report, and they are canceled when no longer justified.

c. Automated Reports

(1) Automated Information System. MIMMS/AIS will be used by all Base units possessing tactical equipment, for the recording and control of maintenance actions. References (a), (b) and (c) provide policy, guidance, procedures and background relative to the Field Maintenance Subsystem (FMSS). MIMMS FMSS provides units with an information system for MIMMS/AIS reporting.

(2) Source Documents. The ERO and EROSL will be used by Base units supported by PCMIMMS for the input of all MIMMS transactions. References (c) and (f) provide detailed instructions and requirements for each type of input transaction.

(3) Input/output Processing/Report Pickup. Units supported by the FMSS must keypunch all data transactions no later than 1500 each day for subsequent extraction by courier to the MISCO. Output reports will be updated during the nightly cycle and available for download through MISCO website, SASSY Management Unit (SMU) FTP site or through LOGCOM request.

(4) Output Reports. The FMSS creates various management reports to be used at all levels of command. The following list provides principle report, their frequency, and primary and alternate user:

<u>Report Title</u>	<u>Frequency</u>	<u>Primary/Alternate User</u>
Daily Transaction Listing	Daily	MIMMS Clerk/MMO/SUPO
Daily Process Report	Daily	Commodity Manager/MMO MIMMS Clerk
Daily Maintenance TAM Report	Daily	MIMMS Clerk/MMO
Due and Status File (DASF)	Daily	SUPO/MIMMS Clerk/MMO
Weekly Material Report	Weekly	SUPO/MMO/Commodity Manager
Equipment Status Exception Report	Weekly	CO/MMO/Base MMO
Equipment Status Report	Weekly	CO/MMO
LM2 Unit Report	Weekly	CO/MMO/Base MMO
History Process Report	Semi-Annually	MMO/Base MMO

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d. Retention of Class I MIMMS/AIS Reports. PCMIMMS retains the maintenance reports within the system as of the release of PCMIMMS 2.0.1. To ensure records are updated and current the MIMMS clerk must extract all transaction files into the commodity PCMIMMS workstation, as well as the MMO workstation. MMO will maintain a copy of the daily courier on the MMO workstation in case a courier is not properly ran during the evening cycle. All commodities will forward their transaction maintenance file to the unit MMO for batching and will receive a commodity extract the following morning. This will eliminate the necessity of printing and retaining reports on a daily basis; however, the system must be maintained daily to ensure that the most recent data is inputted.

e. The MARES LM2 Unit Report and associated RM4 remarks was designed to provide pertinent data on select organic T/E equipment authorized and possessed which have been designated as MARES reportable by reference (i). Additionally, this report provides commanders at all echelons a weekly automated report reflecting current condition/status of deadlined MARES reportable equipment to include T/E excesses, deficiencies and planned allowances as well as unit readiness ratings. The purpose of RM4 remarks is to provide a narrative summary in free text format, by TAMCN for equipment affecting unit readiness and identifying potential equipment problems that could be detrimental to the mission of the unit. The LM2 report and RM4 remarks provide an overview of the effectiveness of maintenance and supply systems to include the maintenance/supply production process. The following policy/guidance is provided:

(1) Daily. Review the Daily Transaction List (DTL) to ensure that all MIMMS transactions have been processed with either no errors or ensure non-critical errors are corrected paying particular attention to MARES reportable equipment. MIMMS transactions that have been processed with non-critical errors or fail the daily front-end edit shall be identified and corrected in an expeditious manner per reference (j).

(2) Weekly

(a) Review all RM4 Remarks for accuracy and completeness.

(b) Reconcile all category code "M" EROs reflected on the Daily Process Report (DPR) against the LM2 Unit Report

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and the Weekly TAM Report. Units will manually load to the LM2 active category "M" EROs which is not reflected on the LM2 per reference (j).

(c) The commanding officer will review the MARES LM2 Unit Report on a weekly basis. The reports will be maintained by the maintenance management officer per reference (b).

(3) Monthly

(a) Reconcile the MARES LM2 Unit Report against reference (i), T/E, and Mechanized Allowance List (MAL) in accordance with reference (j). This will ensure "Authorized," "Possessed" and "Planned Allowance" quantities are reported correctly and that all MARES Reportable Equipment authorized and possessed is reflected on the LM2 Unit Report per reference (j). This reconciliation will be conducted by the MMO and Supply Officer, and documented by both parties. Results of the reconciliation will be filed and maintained with the LM2 Unit Report.

(b) Dates on RM4 Remarks will not exceed 90 days. This will validate that all information contained in the RM4 Remarks remains unchanged. Reference (j) provides examples of RM4 remarks required on the LM2.

9. Modification of Equipment

a. Reference (b) requires each unit accountable for equipment, regardless of the echelon of maintenance authorized, to establish a modification control program. Accordingly, the following policies and procedures are set forth for Base organizations:

(1) Establish a modification control point by billet and outlines its responsibilities.

(2) Establish a modification control program per reference (b).

(3) Maintain modification control records per reference (f).

(4) Monthly, as the new Master Library File is released online or when the SL 1-2, is published, update the commodity

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managers and MMO modification control records with all applicable Modification Instructions (MI).

b. Equipment modification consists of those maintenance action performed on equipment to change the design or characteristics in order to improve the equipment's functioning, maintainability, reliability, and/or safety characteristics.

c. Modification of Marine Corps equipment will be accomplished only when directed by the Commandant of the Marine Corps. Authority and instructions to modify Marine Corps equipment are contained in the MI. MIs are classified as "Urgent" or "Normal" as follows:

(1) Urgent. A modification required to prevent death or serious injury to personnel, prevent damage to equipment, or to make changes that are considered so essential that their accomplishment must be completed at the earliest possible time. Urgent MIs may specify a required completion in the time compliance paragraph or may specify upon receipt date and may restrict the operation of unmodified equipment.

(2) Normal - All other modifications. Normal modifications must be completed within one year of the effective date of the MI and are normally accomplished on a planned/scheduled basis.

d. Kits or material required for applying a modification should be requisitioned in accordance with the current edition of reference (k), using Demand Code "N" (nonrecurring demand). Requisitions received by the LOGCOM, Albany, within 12 months from the effective date of the MI will be filled on a "free issue" basis. Requisitions received after the 12-month period will be filled on a "free issue" basis only if the kits and material which were initially procured to support the MI are in stock. Upon depletion of material stocks initially procured for equipment in use, or after the 12-month free-issue period, whichever occurs last, requisitions will be rejected with Status Code ME; and the unit will be required to submit funded requisitions for the individual components of the modification kit.

e. The owing organization is responsible for ensuring that all modifications required on equipment are accomplished and

properly recorded in equipment records.

f. Equipment requiring modifications that exceed the maintenance capability of the owning organization will be reported to the supporting maintenance organization. The maintenance organization, if capable of performing the modification will determine the total requirement for all supported units, obtain the required parts/material, and establish a schedule for the accomplishment of the modification.

g. Equipment modification will be accomplished in conjunction with preventive or corrective maintenance whenever possible. For example, a normal modification should be performed at the next scheduled preventive maintenance or during the next corrective maintenance period.

10. Support and Test Equipment

a. General

(1) Calibration is the process by which a standard, test or measuring instrument is compared to a standard of higher accuracy and adjusted to assure that the instrument being tested meets specifications approved by the Marine Corps. The Marine Corps Calibration Program is described in reference (b) and reference (l), and amplified in reference (m) and other reference (n) series publications.

(2) TMDE used in maintenance of other Marine Corps equipment must be periodically calibrated to ensure that repairs are properly accomplished and/or the accuracy of the repaired item. The calibration process is a continuing effort applicable to all commodity areas and technical fields using test and measuring equipment.

b. Equipment requiring calibration services will be evacuated to Electronic Maintenance Company, 2d Maintenance Battalion or commercial vendor as appropriate. Preparation of a third echelon ERO for induction of TMDE into the calibration laboratory is required. Although organizational level maintenance facilities are unable to service calibration equipment they are expected to prepare a second echelon ERO for evacuation of items to establish a record on their DPR in category code "K."

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c. Commodity managers with calibration requirements must ensure that TMDE assets are submitted to the calibration facility no less than 15 days prior to the Cal Due Date written on the label. This will maintain the established calibration schedule and account for a heavy workload the higher echelon. A current calibration control record should be maintained whether in spreadsheet, logbook, or automated system to keep proper control of TMDE and infantry weapons gauges.

d. Calibration Control

(1) Establish a calibration control system as outlined in reference (1).

(2) Annually, perform an inventory of all TMDE available in the organization. Special care must be exercised in this inventory to ensure that TMDE which are components of other end items, such as tool kits or chests are included. Concurrent with this inventory, it shall be determined the calibration requirement, i.e., full calibration, special, calibration not required, or inactive for each item possessed. The annual inventory shall include an evaluation of all TMDE and its function to determine if an item is required or not.

(3) Coordinate with the supporting calibration facility on those items for which commodity managers cannot determine calibration.

(4) Marine Corps equipment with an Operational Test Code (OTC) of three on the FED-LOG disk will require calibration. However, if there is questions regarding this information, contact the calibration facility. The calibration facility is the final local authority to determine calibration requirements and intervals.

(5) Submit for calibration all TMDE that has been purchased new, received from another organization without a current label, on regular recall, or removed from inactive status.

(6) Request special calibration from TMDE which is used in only a specific portion of its complete range.

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(7) Request "calibration not required" labels from the calibration laboratory for those instruments which are not used for quantitative measurements.

(8) Request "inactive" labels from the calibration laboratory for TMDE not expected to be used during the next full calibration cycle.

(9) Ensure correct labels are affixed to all TMDE.

(10) Establish a calibration control point within the maintenance shop.

(11) Upon return of TMDE from calibration, the calibration control point must update the calibration control records with the calibration due date from the label on the equipment and notify the unit's MMO of the following information:

(a) The date calibrated

(b) The next due date

(12) TMDE designated as "CNR" or "INACTIVE" require organizational PMs at 6 and 12 month intervals. PM scheduling and recording on the calibration control records is not required. Validation status for items designated as "CNR"/"Inactive" is required to be scheduled annually. Record date validated in "Date Cal Perf" block and schedule next validation in "Date Cal Due" block of calibration control form.

(13) TMDE designated for special calibration as defined above, will have specific calibration requirements entered in the remarks block of the calibration record.

(14) Reference (n) provides procedures and instructions for operation of the Infantry Weapons Gauge Calibration Exchange Program (IWGCEP), along with the following website:
<https://tmde.logcom.usmc.mil/TMDE>.

11. Safety

a. Commanders are responsible for the prevention of accidents involving personnel, equipment, and property within their organization. They will incorporate safe practice into all operations and will initiate corrective action to eliminate safety hazards. Supervisory personnel at all levels shall ensure that all personnel in their charge are instructed in safe measures applicable to their respective areas of operation and that all safety regulations are strictly observed and enforced.

b. The unit's safety officer, acting in conjunction with the Base Safety Officer, MMO and the maintenance officers, will ensure safe practices and procedures are developed and followed in all maintenance operations.

c. Standing operating procedures for safety within this Command are set forth per reference (o). The Marine Corps Safety Program is established by reference (p). A comprehensive treatment of safety precautions is contained in the Occupational Safety and Health Administration, more specifically in reference (q).

12. Hazardous Materials. Procedures for handling hazardous material are contained in reference (r). Reference (s) provides policy and guidance concerning emergency spill response, personal protective equipment, etc.

BO 4790.1D
7 Oct 10

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE NC 28542-0004

SSIC
ID
(Date)

From: Commanding Officer
To: Distribution List

Subj: PERSONNEL AUTHORIZED TO SIGN EQUIPMENT REPAIR ORDERS
NAVMC 10245'S AND EQUIPMENT REPAIR ORDERS SHOPPING
LISTS, NAVMC 10925'S

Ref: (a) BO P4790.1D
(b) MCO 4400.16G

1. Per the reference, the following personnel are authorized to sign
Equipment Repair Orders (EROS) NAVMC 10245's and Equipment Repair Order
Shopping Lists (EROSLs) NAVMC 10925's

a. Personnel authorized to sign UND "A":

NAME	GRADE	BILLET	SAMPLE SIGNATURE
------	-------	--------	------------------

b. Personnel authorized to sign priority UND "B" and "C" NAVMC 10245's
and NAVMC 10925's:

NAME	GRADE	BILLET	SAMPLE SIGNATURE
------	-------	--------	------------------

2. This letter supersedes the previous letter of authorization dated _____

/s/ _____
Commanding Officer

DISTRIBUTION:

Figure 2-1.--Sample Letter of Personnel Authorized to Sign EROS
and EROSLs by Priority

BO 4790.1D
7 Oct 10

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE NC 28542-0004

SSIC
ID
(Date)

From: Commanding Officer
To: Distribution List

Subj: PERSONNEL AUTHORIZED TO RECEIPT FOR MATERIAL AND EQUIPMENT FROM THE
INTERMEDIATE MAINTENANCE ACTIVITY

Ref: (a) BO P4790.1DB
(b) MLGO P4790.

1. Per instructions contained in the reference, the following personnel are authorized to receipt for material and equipment from the supporting intermediate maintenance activity.

NAME	GRADE	BILLET	SAMPLE SIGNATURE
------	-------	--------	------------------

2. This letter supersedes the previous letter of authorization dated _____

/s/ _____
Commanding Officer

DISTRIBUTION:

Figure 2-2.--Sample Letter of Personnel Authorized to Receipt
for Material and Equipment at the Intermediate Maintenance
Activity.

Chapter 3

Supply and Fiscal Support

1. Supply Support

a. General. Conduct requisitioning, receipt, storage, and issue of repair parts and materials per reference (e), reference (b) and reference (h).

b. The key to an effective maintenance management program is availability of sufficient repair parts and materials to perform equipment maintenance. The ultimate goal of the supply support program is to provide the appropriate repair parts and materials on a timely basis. Accurate identification of required repair parts, timely processing of demands and aggressive follow-up actions on pending demands is essential by all concerned.

c. The maintenance management program requires continuous coordination between supply and maintenance personnel. The passing of accurate and timely information is the foundation for cooperative actions. Maintenance personnel must correctly identify repair parts and material requirements and submit demands to the appropriate supply activity for issue/establishment of back-orders. Supply personnel must ensure maintenance demands are processed in a timely manner and that all appropriate follow-up actions are taken.

2. Repair Parts Request System

a. Source of Supply. There are three sources of supply for repair parts for Base organizations; Supply System Stocked Items, Supply System Non-stock Items, and Non-System Items procured from local vendors.

(1) Stocked/System Items

(a) As stated in paragraph 1 of this Manual, certain units possessing tactical equipment and authorized reimbursable accounts with the SMU will use the SMU as their primary source of Class IX repair part support. Commanders of those organizations should familiarize themselves with the contents of reference (h) and reference (k).

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(b) For commercial equipment, the Base is primarily supported by the Lejeune Servmart. Issue points are established to position this supply support as near as possible to the point of use.

(c) Per reference (u), the Marine Corps Unified Material Management System (MUMMS) Direct Support Stock Control (DSSC) Manual concludes that only items which meet specific criteria with respect to cost, frequency of demand, and suitability be considered for stockage.

(2) Non-stock Items. System items not stocked in the Lejeune Servmart Store because of lack of usage will be requisitioned on DD 1348 MILSTRIP documents through the DSSC office.

b. Non-System Items

(1) Repair parts not stocked in the Supply System (Non-System Items) may be purchased by authorized organizations using Government Small Purchase cards with local vendors.

(2) Organizations authorized to place orders against established BPA's are identified by separate correspondence addressed to that organization.

(3) Organizational commanders possessing this authority must establish internal control procedures to ensure the following is accomplished:

(a) Repair parts numbers are checked for availability online at the Lejeune Servmart website.

(b) Repair parts numbers not stocked in the catalog are verified with Lejeune Servmart as Non-System Item.

(c) Non-System repair parts which exceed authorized limitations are submitted via DSSC to the Base Contacting and Purchasing Officer on DD Form 1348-1.

c. Source, Maintenance and Recoverability (SMR) Codes

(1) Repair parts will not be ordered for any echelon of maintenance that exceeds the authorized capability of the unit.

The echelon authorized to remove, replace, and repair a part/component is indicated by the third and fourth digits of the Source, Maintenance and Recoverability (SMR) code. The third digit identifies the echelon that may remove and replace the part/component. SMR codes are listed in SL-4's and repair parts lists.

(2) To the maximum extent possible, all parts required to repair an item of equipment will be requisitioned at one time to preclude prolonged deadline time.

(3) Persons authorized to review/approve UND "A" and "B" priority designators will affix their signature to the original and retained copy of all supply/maintenance documents requiring approval prior to submission to the service provider.

3. Repair Parts Control

a. Pre-expended Bins (PEB). PEB will be managed in accordance with the current editions of paragraph 5018 of reference (t) and reference (v).

b. Excess Parts. Excess repair parts received from any source will be turned into the supporting supply agency/section to facilitate proper accounting. Prior to turn-in, parts will be properly identified by NSN. Repair parts will not be stockpiled in maintenance sections. "Goody Boxes" will not be condoned.

c. Maintenance by Cannibalization. Maintenance by cannibalization is defined as the removal of a serviceable part or component from one item of equipment for use in repairing another item of equipment. Selective interchange is a form of cannibalization. Cannibalization/selective interchange will only be used when all other means of repair/replacement have been exhausted.

(1) Decisions concerning cannibalization of tactical equipment will be made on a case-by-case basis. Cannibalization may be approved only by the base Commanding Officer or commander of the unit having intermediate third echelon maintenance, or higher, on the equipment. Additional details concerning cannibalization criteria are contained in Chapter 1 of reference (b).

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(2) Request for authority to cannibalize will be submitted to the Commanding Officer, MCB CamLej (Dir, S-4 and MMO). Emergency requests may be made telephonically, backed up by written submission (Figure 3-1). If authorized, cannibalization will generally be accomplished at the lowest maintenance echelon authorized to remove and replace the Part/component.

d. Layette Bins

(1) If more than one repair part has been requisitioned for an item of equipment and it is impractical to install the part individually as they are received, a layette bin will be established either by the organization's supply section or in the maintenance shop.

(2) Organizational commanders must specify procedures for the use and control of layette bins and the responsibility for the maintenance and control thereof. Minimum procedures which must be established are as follows:

(a) Designate by billet that has responsibility for the layette bins.

(b) A copy of the EROSL must be maintained with the parts that are placed in the layette bins.

(c) All parts received by the maintenance shop will have the associated requisition annotated with the Julian date received and the layette bin clerk's initials.

(d) When all parts have been received, the maintenance supervisor will be notified.

(e) When the technician picks up the repair parts, the technician will affix the Julian date received, quantity received, and his/her initials.

(f) Access to the area where parts are stored will be controlled to eliminate the possibility of parts being used on equipment other than for which they were ordered.

(g) ERO bin locations and large parts must be marked per paragraph 2004.4 of reference (b).

(h) Each item on requisition must be validated biweekly.

4. New Equipment

a. Policy for Using/Serviceing Organizations

(1) New items of equipment will be placed on administrative deadline and will not be put into service until all of the following standards of the maintenance phases have been met by the using/serviceing organization:

(a) All authorized stock levels/allowances of peculiar support items (repair parts, components, collateral equipment, kits, test equipment, tools, and technical manuals) are on hand.

(b) Adequate stocks of common support items are on hand.

(c) Sufficiently trained operators are on board.

(d) Sufficiently trained technicians/mechanics are available at all repair echelons.

(e) Adequate funds have been requested in the appropriate fiscal year budget.

(f) Approval to place the new equipment into service has been granted by the Commanding Officer.

(g) Upon receipt of new equipment and before it is placed into service intermediate maintenance activity will perform an acceptance limited technical inspection (LTI).

(2) Product Quality Deficiency Reports will be submitted, as applicable, in accordance with reference (w).

b. Upon activation of new equipment, organizational commanders will notify the Base Maintenance Management Officer.

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5. Marine Corps Equipment Readiness Information Tool (MERIT), LM2/MCBUL 3000 Equipment

a. The Marine Corps Equipment Readiness Information Tool (MERIT) is a ground equipment readiness management decision support tool. This tool is a web-based program that pulls data from the supply and maintenance management legacy systems and transforms the legacy data into information that can be used by unit Commanders to analyze trends and identify ongoing challenges in order to provide a dynamic, adaptable view of equipment readiness.

b. It is imperative that the unit's MMO set up a MERIT account and be uniquely involved and aware of all situations surrounding equipment readiness within their respective units. The center piece of this effort will be the Maintenance Readiness Brief (MRB). The MRB requires the MMO to reconcile with the unit Supply Officer, collaborating personnel, and the Command level involvement on a bi-weekly basis.

6. Validation and Reconciliation

a. Validation

(1) This is the process of validating requirements, cancellations, receipts, scrounges, and current status.

(2) Validation should occur on a daily basis or when changes occur to the MIMMS output reports.

b. Reconciliation

(1) This is the process of ensuring valid requirements are properly logged within the supply system and MIMMS.

(2) Reconciliation must be conducted bi-weekly or more frequently depending on the operational temp and maintenance workload of the unit. Participants should include the MMO, MIMMS clerk, DASF clerk, and commodity managers. A logbook will be maintained to record all reconciliations.

c. Validation/Reconciliation Procedures. The MIMMS/records clerk shall:

(1) Daily

(a) Verify the Daily Transactions List (DTL)

(b) Verify that EROs listed on the Daily Process Report (DPR) located in the appropriate job status.

(c) Ensure all EROs in "short parts" job status have parts on order. EROs in "short parts" without parts trailers must be corrected as soon as possible.

(d) Annotate the DPR with the current and correct data, and reconciled with Supply against SASSY output reports. Prepare and submit the required transactions to correct any invalid data reflected on the DPR.

(e) Verify the priorities of parts on order are either equal to or lower than the priority of the ERO. Upon receipt and installation of parts ordered on UND "A" and "B" requisitions, the ERO must be downgraded accordingly.

(2) Weekly

(a) Ensure that the unit's LM-2 is current and all required RM-4 remarks are posted.

(b) Review all EROS category codes to ensure the ERO accurately reflects the actual condition and status of the equipment.

(3) Bi-weekly

(a) Conduct required reconciliations with all commodities.

(b) Address recurring errors on input transactions, such as: incorrect category, job status, or priority assignment. Trends in input errors should prompt a review of a unit's procedures.

(4) Monthly. Conduct a MAL, LM2 and T/E reconciliation to ensure that all MARES reportable items are resident on the LM2 to include, on-hand quantities, authorized quantities, UTR deficiencies and those items deficient or in excess.

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d. Validation of Repair Parts

(1) Annotate the EROSL with the quantity and date received, along with the signature of the individual receipting for items.

(2) Annotate the EROSL with the layette bin location for those items placed in layette bins. If the ERO number is used as bin assignment, the annotation of the bin location is not required.

(3) Annotate the EROSL when parts are issued to the technicians/mechanics for installation.

(4) When all critical parts have been received for category "M" ERO but noncritical parts remain outstanding, ensure that all critical parts are installed as well as those noncritical parts which are practical to install. Then either the category code will be changed to "N" or open a new ERO. If a new ERO is opened, ensure that the following actions have been accomplished:

(a) All pending parts have been transferred to a new ERO via an "8"card transaction in PCMIMMS. If all parts on an EROSL are not installed, change the ERO number on the EROSL and layette bin. Annotate the old ERO with a new ERO number and parts transferred to the new ERO.

(b) Any parts which have been received and could not be installed shall be placed in the newly assigned layette bin.

(5) Ensure all EROs against which Category Code "M" parts have been received and installed are closed, or the Category Code is changed to "N."

(6) Ensure all receipts, cancellations, PEBs, and scrounges have been annotated on the EROSL and required transactions have been submitted and processed.

(7) Inventory the layette bins biweekly by comparing the EROSLs to the materials/parts in the bins. Annotate the EROSL with any required changes.

7. Tool Sets, Chests and Kits

a. Identification. With the exception of Type 1, SAC 3 items, toolsets, chests and kits will not appear on the Base's T/E. Each organizational commander must ensure that all equipment within this category is identified on the Commanding Officer's Non-FMF Allowance List and accounted for on the organization's Consolidated Memorandum Receipt (CMR) and MAL.

b. Location. Each set, chest and kit within the organization will be located in its appropriate workspace, and responsibility for accounting and maintaining the items will be specified by billet.

c. Inventory

(1) A complete inventory of all sets, chests and kits will be made using the appropriate SL-3, SL-3 extract, or U.S. Army supply catalog for those items resident in the supply system.

(2) For sets, chests and kits procured commercially, a local stock list inventory will be prepared from the accompanying commercial manual.

(3) All common or special tools will be consolidated for the purpose of preparing a local stock list for inventory purposes.

(4) Sets, chests and kits securely held in tool rooms which are issued to individuals will be inventoried monthly, by the individual and/or tool room personnel.

(5) Annual inventories of sets, chests, and kits not currently in use will be conducted during the regular annual physical inventory of property. The original of the inventory will be retained in the organization's files and a copy placed in the set, chest or kit. The set, chest, or kit will then be banded or locked to preclude unauthorized use of the tools contained therein.

(6) Tool sets, chests, and kits that are issued to a RO will be inventoried upon the change of RO.

d. Control

(1) When a set, chest or kit does not have an SL-3 checklist, organizational commanders will ensure locally produced inventory control forms follow the format provided in reference (f).

(2) Sets, chests or kits issued to individuals will be secured when not in the custody of the individual. A duplicate key or a copy of the lock's combination should, when practical, be maintained by the responsible officer.

(3) Sets, chests and kits held by an organization for issue to individuals will be maintained in an area secure against pilferage.

(4) Daily issue and receipt of sets, chests and kits will be recorded in a log book. Minimum entries to be recorded are as follows: date, description, time out, check-out inventory completed, time in, check-in inventory completed and signature. The inventory columns will be initialed by the individual checking the set, chest or kit in or out respectively.

(5) The remarks section of the inventory form will be annotated with the document number for items which are missing or unserviceable. Each organizational commander must ensure that each missing/unserviceable component is placed on requisition and that the section supply maintains current validation of these documents.

(6) Inventories will be maintained on hand for one year and at a minimum contain: the date of the inventory, the signature of the individual conducting the inventory, and the signature of the individual supervising the inventory. Personnel supervising the inventory will ensure that during the inventory the tools are inspected for serviceability and safety and that required maintenance is conducted.

e. Special Sets, Chests, and Kits. These are locally authorized toolsets, chests, and kits which the commanding officer authorizes will be accounted for on the Commanding Officer's Non-FMF Allowance List regardless of dollar value. Requests for local TAMCNs will be submitted to the SMU via the Commanding Officer, MCB CamLej (MMO). The request will be

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accompanied with the locally authorized SL-3 Extract. The commanding officer may vary or change the allowances of the "consist of list" without approval from this Headquarters once the allowance for the kit is established. Any changes authorized must be retained with the set, chest or kit and signed by the commanding officer.

8. Fiscal Support

a. General. Adequate fiscal support is vital to the maintenance effort. Funds are required to purchase required parts, materials, and/or services. Failure to allocate sufficient funds for maintenance preclude the accomplishment of required preventive and corrective maintenance services resulting in increased deadline of equipment and, ultimately, the inability of the activity to accomplish its assigned mission.

b. Budgeting of Maintenance. On a biannual schedule, Base organizations are required to develop their budget estimates for their organization for the current fiscal year, the coming budget year, the budget year plus one and the budget year plus two. On an annual basis, the organizations are required to review and modify budget estimates to accommodate changes to mission goals and accomplishments. Maintenance managers will participate in the development of the budget and ensure that the requirement for maintenance related funds is included in the operations and maintenance budget estimates. Data required to support maintenance estimates can be obtained by reviewing equipment and supply records for past expenditures. The expenditures can then be projected into future operational requirements by considering any changes to the unit mission and the equipment to be supported.

c. Maintenance Funds. Maintenance management personnel will monitor funds to ensure effective utilization as follows:

(1) Provide continuous attention to preventive maintenance to preclude more costly corrective maintenance.

(2) Review maintenance procedures to ensure economy of operation.

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(3) Review equipment records to detect repeated failures indicative of improper or incomplete maintenance.

(4) Ensure compliance with applicable orders.

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UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE NC 28542-0004

SSIC
ID
(Date)

From: Commanding Officer
To: Commanding Officer, Marine Corps Base, Camp Lejeune
(Attn: Dir, S-4, MMO)
Subj: REQUEST FOR AUTHORIZATION FOR CANNIBALIZATION /SELECTIVE
INTERCHANGE
Ref: (a) BO P4790.1DB

1. Per the reference, it is requested that the cannibalization or selective interchange indicated below be authorized.

UNIT	EVAC	OWNING	DATE					
ERO#	ERO#	NOMEN	SERIAL#	TAMCN	ID#	UIC	PRIRDD	EVAC

Repairs parts to be exchanged:

NOMEN	NSN	PRI	DOC#	STATUS	FROM SERIAL#	TO SERIAL#
-------	-----	-----	------	--------	--------------	------------

a. Give an explanation of what repair parts are to be exchanged between what specific equipment.

b. Give the reason why the parts exchange is required indicating that an operational commitment is imminent and that the required repair will not be received prior to the RDD.

2. The point of contact for this exchange is _____ extension ____.

/s/ _____
(Commanding Officer)

Figure 3-1.--Sample Letter Requesting Authorization for Cannibalization/Selective Interchange.

Chapter 4

Maintenance Training

1. General Information

a. Maintenance/maintenance management training is a command responsibility and requires command interest to develop a workable training program. Effective maintenance cannot be accomplished by untrained personnel. Expertise is gained through experience, by application of the principles learned under the supervision of more qualified (experienced) mechanics/technicians.

b. Training provided cannot be limited to "technical" or "MOS" training. It is not sufficient for an operator to know only how to operate the equipment. Operators must also be trained in preventive maintenance requirements. Similarly, mechanics/technicians must receive training on equipment operation, proper maintenance techniques, technical manuals, supply and maintenance procedures, and maintenance related programs. Supervisors must receive training on the Marine Corps supply and maintenance systems, and how to obtain and use required publications.

c. The unit S-3 officer, in coordination with the MMO and commodity managers, is responsible for identifying training needs, establishing training objectives and developing the unit's maintenance/maintenance management training program.

2. Training Requirements

a. Commanders will ensure that required training is contained in the unit's annual training plan and the minimum hours for maintenance and maintenance management training are included. Units will conduct monthly maintenance and maintenance management training at a minimum of one hour for supervisors and two hours for clerks. The accomplishment of this training will be recorded in the training record jackets of individual Marines.

b. MMO will be responsible for the selection of topics, preparation of lesson plans/training aids, and the assignment of instructors for maintenance management training. The subjects

listed herein are considered essential to the organizations maintenance program:

(1) Marine Corps Technical Publications. Acquisition, maintenance, and use of the publications should be stressed. Instruct on the proper procedures in correcting discrepancies in technical publications (NAVMC 10772).

(2) Calibration Program. Purpose of calibration, responsibilities, and documentation required by the activity calibration control program.

(3) Modification Program. Requirement and authority for modification of equipment and the modification control program.

(4) Preventive Maintenance. Requirement, scheduling methods, documentation and preventive maintenance indicators.

(5) Corrective Maintenance. Program established within the organization for accomplishing required corrective maintenance, evacuation procedures, etc.

(6) Equipment Records. Operational and maintenance records, and procedures for completing forms.

(7) Safety. Operational and maintenance safety requirements and practices.

(8) Product Quality Deficiency Reports. Purpose, proper completion of forms, submission of reports.

(9) Supply Support. Use of forms, priority designators, urgency of need designators, control of repair parts, and pre-expended bins while conducting validation requirements and procedures.

(10) Maintenance Related Programs. Purpose, use and procedures of those maintenance related programs set forth in Chapter 8 of this manual.

(11) Desktop and Turnover Procedures. Purpose, requirements, preparation and use.

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(12) Marine Corps Integrated Maintenance Management System Automated Information System (MIMMS/AIS). Inputting maintenance transactions and sending couriers to the unit MMO, and validating output reports and daily transactions on the Daily Transaction List (DTL).

(13) Control of tools, support and test equipment.

3. Initial Training and Skill Progression Training

a. Formal Schools

(1) Commodity managers and maintenance managers shall continually review available courses of instruction and request quotas as needed to ensure assigned personnel receive the benefits which can be gained by this type of instruction. Requests for quotas should be based on the current and planned needs of the organization and preparation of individuals to fill positions of higher grade and increased responsibility.

(2) Organizational commanders will coordinate with the Base MMO in requesting and assigning quotas to formal schools, related to maintenance management training. All quotas when retained must be met, unless an exception is authorized by Director, S4.

(3) Commanders and staff officer need to ensure that only qualified personnel are submitted to fill the quota. Many schools have prerequisites that relate to rank/grade, prior classes, and MOS.

b. Maintenance Management Training

(1) The Marine Corps has established a Maintenance Management Supervisors Course at Logistics Operational School (LOS), Marine Corps Combat Service Support Schools (MCCSSS), Camp Johnson, Jacksonville, North Carolina. This course is available to all ground officers (WO to O-6) and staff noncommissioned officers. Requests for quotas to this course will be coordinated with the Base MMO. Organizational commanders will be advised in advance of this course and availability of quotas.

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(2) 2d MLG has established a II MEF MIMMS School for individuals who perform MIMMS related duties. The Base MMO will solicit nominations from Base units for this course. Due to limited quotas available it will be necessary for the Base MMO to assign personnel to specific classes. This will be coordinated with the affected unit prior to submission of nominees.

(3) The Base MMO will hold periodic seminars, with all units MMO/MMC's attending to discuss mutual problem areas and new programs being adopted.

4. Managed on the Job Training (MOJT)

a. MOJT is that training received subsequent to initial skill qualification training, which provides a Marine with additional skills and knowledge in his/her military occupational specialty to perform at a more skilled level or in a supervisory position. Training standards should be developed and training records managed in accordance with MOS Roadmaps and reference (x). MOJT is probably the easiest and least expensive method of training. For training to be effective an inexperienced individual shall be assigned to work with an experienced individual, who knows how and accomplishes the assigned task in the proper manner.

b. The Marine Corps Institute (MCI) and the Department of the Army, as well as other services, offer a wide range of maintenance related correspondence courses. Commodity managers are strongly encouraged to coordinate with MMOs and S-3s to determine the content and availability of such courses for unit maintenance personnel.

c. Maintenance training is available from the Intermediate Maintenance Activity (IMA), 2d Maintenance Battalion, 2d MLG. Requests for maintenance training will be submitted to the Commanding Officer, MCB CamLej (Dir, and S-4). Requests will state: dates, time, type of training, and number of personnel required. Training support from the IMA will be dependent on commitments and availability of 2d MLG personnel.

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5. Technical Training. The following minimum requirements in the area of technical training are required to be accomplished.

a. Technical training will be conducted whenever new equipment is introduced or new maintenance personnel are introduced to the unit's equipment.

b. Technical training will be conducted in the use and care of various tools, test, measuring, and diagnostic equipment.

c. The adequacy of unit training shall be determined by the administration of skill tests upon completion of the training.

d. Refresher training will be conducted as determined by the condition of equipment and/or the results of inspections.

6. Cross Training

a. Cross training is used to familiarize an individual with aspects of an MOS or occupational field other than normally performed. Cross training of mechanics and technicians increases our maintenance skill base and provides flexibility in meeting maintenance requirements.

b. Cross training will be conducted as follows:

(1) Commodity managers will cross train select personnel within their shops.

(2) Cross training will be confined to personnel with related occupational fields.

(3) Cross training of personnel from different occupational fields will be accomplished to fill skill shortages only.

(4) Cross training personnel must be effectively used within the commodity.

c. Commodity managers will maintain the hours dedicated to cross training in the Marines individual training jacket.

Chapter 5

Inspections/Visits and Quality Control

1. General

a. To supplement information received on equipment status, commanders at all levels must ensure that proper operating and maintenance procedures are being utilized in their organizations. This is achieved through inspections and visits conducted by the commander or members of the staff. Inspections promote efficiency and economy of operations by identifying procedural deficiencies, equipment defects and improper utilization of maintenance resources.

b. Regarding maintenance/maintenance management, inspections need to be conducted at least semi-annually to ensure that regulations and procedures are properly being conducted. Preparation for inspections should be conducted utilizing the Inspecting General of the Marine Corps' (IGMC) Automated Inspection Reporting System (AIRS) checklist regarding each commodity.

c. Maintenance inspections are conducted by higher headquarters in the form of staff visits, technical inspections, or command inspections. The type inspection used should be determined by the command based on the inspection objective desired.

2. Formal Inspections/Analysis

a. Formal inspections are normally announced in advance and conducted in accordance with an established schedule or procedure. Checklists will be used by the inspectors and may be used by the unit to prepare for the inspection. During the period allocated, the formal inspection is the primary activity of the inspected unit and personnel and equipment are made available to the maximum extent possible.

b. IGMC provides a sample checklist that may be used as a guide by all units in the development of checklists suitable to their own inspections. All aspects of the unit are subject to inspection during the inspection period. Types of formal inspections include those conducted by the Data Assurance Team

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(DAT), Field Supply and Maintenance Analysis Office (FSMAO), and Marine Corps Base Commanding Officer Inspection Program (COIP). The Commanding Officer, Marine Corps Base, Camp Lejeune (Dir, S4) will coordinate, schedule and/or conduct these visits, as requested.

c. Maintenance Management Inspections

(1) Maintenance management inspections conducted by the Base MMO will be conducted under the COIP. The inspection will encompass all areas of maintenance and maintenance management under the cognizance of the MMO.

(2) Organizational commanders who have equipment assigned to the Base organizations will establish inspection schedules to evaluate maintenance management as it pertains to user maintenance (e.g., ordnance, motor transport, training aids, engineer, material handling, and comm-elect equipment). If the organization does not own the equipment but is tasked with supporting maintenance, an inspection will be scheduled to evaluate 1st echelon maintenance of those units which it supports.

(3) Reports of the inspection will be distributed to the commander of the organization inspected, the Base Inspector, and Base MMO.

3. Informal Inspections

a. While formal inspections normally encompass all areas of a unit's operation, informal inspections may examine only a specific area of operation. Checklists still are required to be used. Informal inspections are usually conducted while a unit continues normal operations.

b. Informal inspections are encouraged at all levels of command. This tool can provide the commander with an appreciation for the strengths and weaknesses of the maintenance and maintenance management procedures and personnel. It also provides a visible expression of his command interest in the unit's maintenance management program.

c. Informal inspections related to maintenance management may be requested from the Base MMO. Requests must be submitted

in writing to the Commanding Officer, MCB CamLej (Dir, S-4, and MMO).

d. At the unit level the MMO/MMC will be responsible for unit informal inspections.

4. Visits

a. Introduction. Visits are used in the same manner as inspections to obtain first hand information. Visits may be conducted formally, in which case they take on the aspects of a formal inspection or they may be conducted in a very informal manner stressing exchange of information and ideas. Visits fall essentially into three categories: command visits, staff visits, and liaison visits.

b. Command Visits. The importance of visits to the operating/maintenance areas by organizational commanders cannot be overemphasized. Periodic unscheduled visits by the commander will provide information on working conditions, conditions of equipment, and procedures actually utilized that may not be available from any other source. The information obtained by the Commander is not the only benefit of command visits. The impact on morale and the recognition afforded maintenance personnel will result in an increase in the efficiency of the unit maintenance program.

c. Staff Visits. The most common type of visit is the staff visit where one or more staff officers of a senior headquarters visit a subordinate organization for a specific purpose. Staff visits are appropriate to investigate troublesome areas and afford the opportunity for immediate feedback. Staff visits are of particular value in providing assistance and instructions to the visited organization.

d. Liaison Visits. Visits for the exchange of information, familiarization, and coordination are frequently necessary, and always beneficial, between organizations where no junior-senior relationship exists. Liaison for the exchange and development of mutual support are beneficial and encouraged.

5. Inspection Reports

a. Immediately following an inspection, a critique, covering all items noted during the inspection will be given to the unit commander and personnel inspected by the inspecting party. This critique is not the same as a formal report in that some discrepancies may not appear in the formal report. The critique will cover all areas inspected, highlighting both the positive and negative aspects with a goal of improving or helping the unit's maintenance management program.

b. An inspection report will be prepared by all maintenance or maintenance management inspectors for all formal inspections conducted by this command.

c. All inspection/analysis reports will be thoroughly reviewed and analyzed by unit maintenance/maintenance management personnel. Reviews should not be confined to reports on individual sections or to the reports from particular inspections, but should include a review of previous inspection reports. These reviews provide a tool for evaluation of the unit's internal training and inspection program by helping to identify holes in these programs as well as deficiencies in the maintenance and maintenance management programs of the unit. Trends identified by these conjunctive internal reviews indicate significant shortfalls in the programs, and areas requiring special emphasis.

d. Specific instructions for the conduct and submission of command inspection reports are contained in BO 5041.2, SOP for Readiness Assistance Visits (RAV's) and Inspections.

e. Analysis reports will be maintained on file by inspected units for a period of two years. Previous two assist visit reports will be maintained at the commands. A copy of informal inspection and technical assist visits will be maintained at Base MMO for five years.

6. Correction of Discrepancies

a. All discrepancies noted during the inspection will be corrected in an expeditious manner. Preparation for future inspections will include special emphasis on previously noted discrepancies to ensure they do not reoccur, and to determine

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whether internal training and inspection program corrections have had the desired effect.

b. Reports of action taken to correct discrepancies noted in formal inspections will be submitted to the Commanding Officer, MCB CamLej (Dir, S-4, MMO) within 30 days after receipt of the inspection report unless otherwise directed in the report.

Chapter 6

Publications and Directives

1. General

a. Publications and directives provide the "how to" information required to effectively operate and maintain equipment and implement established programs. It is essential that the necessary publications and directives be available and that their use be understood by all personnel who need the information they contain in the performance of their duties.

b. In setting up a publication library, it is necessary to consider both the technical publications and non-technical publications because both are contained in the library.

c. Publications. Those manuals and technical publications which contain instructions for operations and/or maintenance services, or contain data utilized in performing maintenance. Technical publications associated with Marine Corps equipment may be published by the Marine Corps, other services, or commercial vendors. Reference (y) provides information on the Marine Corps Technical Publications System.

d. Directives. Those orders and bulletins published and distributed by all levels of command to establish policies and set forth procedures for the conduct of programs in the Marine Corps.

2. Responsibilities

a. Commanders. Commanders shall ensure that required publications and directives essential to the command's mission are available and the personnel are trained in their use, acquisition, maintenance, and disposition.

b. S-1/Administrative Officers

(1) Exercise primary staff cognizance over the organization's overall publication control and distribution system.

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(2) In conjunction with the organizational S-4/MMO, establish the publication requirements and internal distribution, as well as providing a copy of the internal distribution to all commodity areas.

(3) Requisition publications, maintain requisition files, and validate and clear documentation when requisitions are received.

c. Maintenance Management Officer (MMO)

(1) Exercise staff cognizance over the acquisition, maintenance, and use of technical publications.

(2) Ensure that organizational training programs include required training on publications.

(3) Provide technical assistance to the Unit Publication Control Point (UPCP) in establishing the internal distribution for publications received.

(4) Meet annually with the unit commodity managers to provide instructions, inspect, review the Publication Listing (PL), update libraries, and to ensure commodity managers supervise the inventory and maintenance of their publications.

(5) Ensure that commodity managers are familiar with the provisions in the current edition of reference (z) and that a sufficient quantity of NAVMC 10722s (Recommended Changes to Technical Publications) is available within each commodity area, either electronically or hardcopy.

(6) Ensure that commodity managers establish technical publications control procedures.

(7) Make certain that a Unit Control Log is kept for assigning and recording control numbers for submitted NAVMC 10772 in Julian date and sequential number sequence. This can be done by either the UPCP or MMO.

d. Commodity Managers

(1) Establish required technical libraries within their areas of responsibility.

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(2) Provide required training in the acquisition, use, and maintenance of publications.

(3) Utilize the Publications Listing Management System (PLMS) for inventory and control.

(4) Provide input to the unit MMO on publications required from automatic distribution.

(5) Ensure that maintenance personnel are trained properly on how to submit NAVMC 10772's. Make certain to request unit control number from unit MMO before submitting NAVMC 10772.

(6) Upon entering PLMS, determine if the master library file needs updated and all required publications are on hand and current. Ensure that superseded/canceled publications and directives are disposed of and that requisitions are submitted for new publications which are authorized, but not on hand. The master library file may be downloaded from www.marines.mil under the publications tab.

(7) Annually, conduct a wall-to-wall inventory of all publications in accordance with instructions contained in this SOP.

(8) Maintain a consolidated list of publications required in their areas of responsibility.

3. Inventory Lists

a. Publication Listing (PL)

(1) The PL is an electronic display of all publications in Marine Corps Publication Distribution System (MCPDS). Each PL is unique because the system shows a value in the quantity field for a PCN for which the activity is currently on distribution.

(2) In establishing the PL, senior headquarters must not include publications required by a subordinate organization which has its own Individual Activity Code (IAC) and PL. However, it must be determined who in the subordinate organization's staff that will provide publications for

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commodity areas under the operational control. Publications should be provided through only one UPCP to preclude wasteful duplication.

(3) The PL shall be reviewed annually to evaluate publication requirements and should coincide with receipt and review of the latest revisions to the PLMS master library file. The annual review will be conducted on a fiscal year basis. Units should make the changes in MCPDS to the PL to ensure accurate accountability of the unit's publications.

b. Commands/Organization. All commands/organizations below the Headquarters Marine Corps (HQMC) level that issue directives are required to establish a distribution and allowance system for those directives issued. This is for all subordinate organizations which receive them. Subordinate commanders are responsible for further distribution of these directives within their organizations.

4. Checklists for Effective Publications

a. Catalog. A NAVMC 2761 Catalog of Publications is published by HQMC quarterly. This catalog lists publications (non technical, stocked and non stock) used by the Marine Corps. All publications listed throughout this catalog have assigned PCN.

b. SL 1-2, Index of Authorized Publications for Equipment Support. The SL 1-2, published weekly by Marine Corps Logistics Base (MCLB), Albany, Georgia provides a listing of all technical publications authorized by the Marine Corps to be used in operating and maintaining Marine Corps equipment. The index is arranged in equipment identification (ID) number sequence.

c. SL 1-3, Index of Publications Authorized and Stocked by the Marine Corps (PASMCM). The SL 1-3 provides a listing by Publication Control Numbers (PCN) and short title of all publications stocked by the Marine Corps Logistics Base, Albany, Georgia.

5. Publications Control System

a. General. The establishment of a publications control system is accomplished in four interrelated functional areas of

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the system: determining requirements, establishing internal distribution, inventory control and requisitioning process. The program is laid out so that organizations can begin at any point, omitting any steps previously accomplished correctly.

b. Determining Requirements. To determine an organization's requirement for publications it is necessary to ascertain the types of equipment to be supported, the echelon of support provided, and the quantity of publications required and in what locations. Internal distribution is accomplished by the following:

(1) Using the T/E (or allowance list), prepare a publication control form, per reference (b), Appendix B, for each type of equipment rated/supported. The publication control form (PCF) may be a locally produced form or an automated form PLMS.

(2) Some end items of equipment have components that have publications of their own. Those publications are not always listed under the major end item in the SL-1-2 or PLMS. The component, that may be an end item itself, may have to be researched separately.

(3) Refer to the master list in PLMS or the SL-1-2 to determine the publications required for each type of equipment. Only those publications required for the echelon of maintenance authorized in the "Logistics Capabilities" paragraph of the T/O cover page should be listed, except all Modification Instructions (MI) should be listed and held regardless of the echelon of maintenance authorized.

(4) The number of copies of each publication required is dependent on the number of technical libraries to be established, the number of copies in each library, the quantity of equipment to be supported and the method of employment of the equipment.

(5) Technical publications of a general nature may not be listed under specific equipment. The determination of requirements is accomplished in the same manner as the equipment oriented publications and should be recorded on the PCF without equipment identification data.

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(6) Directives (Non technical Publications). The procedures used in determining the requirements for directives is similar to that used for technical publications, except that there is no publication to indicate specific requirements needed.

(7) The PL is used in determining the organization's directives requirements. The PL should be reviewed by the each subordinate element receiving publications through the internal distribution system of the organization.

(8) PCF's should be prepared for non-technical publications required in the same manner as technical publications.

c. Final determination of requirements in a subordinate element of an organization is accomplished through a careful analysis of quantities required of individual publications by the commodity manager. The minimum number required should be entered on the PCF as the section's requirement. It must be remembered that all publications received under an allowance must be maintained.

d. The UPCP and the S-4/MMO should jointly chair a meeting where all the requirements of the organization will be consolidated. The results of this consolidation should be recorded on the Internal Distribution Listing (IDL) or other authorized distribution form.

e. Once the consolidation is complete the UPCP and the S-4/MMO can compare the IDL with the current PL and allowances established by other senior headquarters for their publications. The UPCP should then take the necessary steps to ensure changes to the PL are made.

f. Internal Distribution. The basis of the organization's internal distribution of publications will have been established with the completion of the IDL per the procedures established above. There are, however, additional procedures which must be developed and explained in the organization's directive dealing with publications.

(1) Directives received on automatic distribution will normally be processed and distributed by the UPCP. This

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distribution must be accomplished per the internal distribution indicated on the IDL.

(2) Directives received as a result of requisitions submitted will normally be received through the mail by the organization's central files, mail room, or administrative section. Publications received by requisitioning will be sent to the section who ordered them. The requisition should be recorded as having been filled and the publications delivered to the commodity area which placed the requisition. Commodity managers should ensure that one central point for receipt of publications is designated within their shops. This will facilitate validation and reconciliation procedures and ensure accurate inventory control procedures.

g. Inventory Control

(1) Inventory control is the means used to ensure that the publications received are properly maintained. This area of the publications control system will be used daily by the publications librarian in the subordinate elements of the organization.

(2) Organizations listed under the PL will ensure the following actions are completed:

(a) That upon receipt of the most recent SL-1-2, SL-1-3, and master library file all additions are recorded on the PCF and PL.

(b) That additions are placed on order if not received by automatic distribution.

(c) That all deletions are appropriately taken off the PL.

(d) Upon receipt of publications which have been requisitioned the PCF is adjusted to reflect the current status of quantity on hand, quantity on order and location.

(3) PLMS is a program that will assist with managing a pubs library. PLMS is an excellent tool to create PCF and may be accessed from any user computer from the Marine Corps website.

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6. Requisitioning, Validation and Reconciliation. Once a need for a specific publication is identified, the requesting organization will submit a request to order publications to the S-1/Adjutant or designated Unit Publication Control Point (UPCP). Upon ordering the publications, the S-1/adjutant or designated UPCP should provide the commodity with a status on the order.

7. Publication Libraries

a. A technical library will be maintained in locations deemed necessary by the unit commanders and this manual as well as other directives from higher headquarters.

b. Publications may be arranged in alpha numerical order by publication number (i.e., ID number, SSIC, MI, SI, TI), or grouped by equipment type by TAMCN. Maintenance facilities will maintain a technical library for assigned equipment in the shop section or available in an electronic format.

c. Electronic publications should be available to all personnel requiring access. They must also be the most current version with all applicable changes and erratum. Electronic publications are still identified in MCPDS and should be identified on the unit's PL.

8. Errors and Recommendations

a. The primary means by which technical publications are changed is through input from the various armorers, technicians, mechanics, and maintenance management personnel in the field.

b. The Marine Corps' Recommended Changes to Technical Publications (NAVMC 10772), as established by MCO P5215.17C, provides a medium for accelerated information feedback to the prospective agency to immediately cause the necessary corrections, changes, and/or revisions, as appropriate, to the Marine Corps equipment support publications concerned.

c. Commanders of those organizations which use the technical publications will accomplish the following:

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(1) Ensure all maintenance/maintenance management personnel are indoctrinated on the purpose and use of the NAVMC 10772.

(2) Ensure personnel can locate NAVMC 10772's either electronically at <https://pubs.ala.usmc.mil/navmc/> or have hard copies readily available in areas technical publications are used.

(3) Ensure that the NAVMC 10772 is submitted by the individual detecting the need for the change, unit control number should be requested from the UPCP or MMO. Forward a copy of the completed NAVMC 10772 to the UPCP and MMO.

Chapter 7

Maintenance Related Programs

1. General. Many programs have been established in the Marine Corps which have a direct effect on maintenance. These programs have been designed to ensure more effective management, increased control and an improved readiness posture.

2. Product Quality Deficiency Report (PQDR)

a. Reference (w) establishes the criteria and provides instructions for the submission of Product Quality Deficiency Reports (PQDRs).

b. The purpose of the PQDR is to provide information to activities responsible for development, procurement, or management of equipment concerning deficiencies in design, material, or procurement so that action may be taken to correct the reported deficiency. PQDRs shall be prepared and submitted by the individual who discovers the deficiency. They will not be delayed administratively to correct grammar or spelling.

c. Organizational Responsibilities

(1) Ensure all maintenance/maintenance management personnel are familiar with the contents of reference (w).

(2) Provide an adequate and readily accessible supply of SF368 (PQDR) in all maintenance shops or ensure that personnel know how to access the electronic form at <http://www.logcom.usmc.mil/pqdr/default.asp>.

(3) Ensure all following procedures are accomplished during submission:

(a) For a Category I PQDR. Suspend the use of such material and notify the Commander, MCLB Albany, Georgia, (808-1) directly by message. The CMC (LMA-2), major Marine Corps commands, the supported and supporting units will receive information copies. The message shall be completed in accordance with MCO 4855.10B. The notification shall include the reasons for the suspension of use and other pertinent details. This action shall be followed with the submission of a

SF 368 (PQDR) within 48 hours of the message transmittal. The SF 368 shall be prepared in accordance with reference (w) and shall contain the message date time group (DTG), the same report control number as used on the message, a complete explanation of the circumstances that necessitated the suspension, a request for disposition instructions, and a statement of location of the exhibit.

(b) For a Category II PQDR

1. Suspend the use of the item or material, as necessary; submit a PQDR using the SF 368 form as outlined in MCO 4855.10B.

2. Forward the PQDR in triplicate to the Commander, Logistics command), Albany, Georgia, 31704-5000 (screening point), with a copy to the Commanding Officer (Dir S-4, MMO)), Marine Corps Base, Camp Lejeune, North Carolina 28542-5001.

3. Forward the PQDR within 30 days after discovery of the deficiency.

4. Hold defective material as an exhibit for possible use in the investigation of failure.

(c) Enter "C" for category I; and "R" for category II, (for example, M00973-83-006 R). The category I DTG and the message report control number shall be shown in item 22, for the SF 368 follow-up.

(d) For all PQDR Categories

1. Maintain all backup/supporting documentation and/or exhibits until the screening point calls for the data or receipt of the control number and disposition instructions from the screening point.

2. Upon notification from the screening point that data/exhibits are not required, repair/overhaul, return items to stock, using the appropriate condition code or make disposition in the best interest of the government.

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3. Use the appropriate priority designator of MILSTRIP requisitioning procedures when forwarding documentation, exhibits or samples.

4. When material deficiencies cannot be appropriately analyzed at a given user/maintenance level, the maintenance activity supporting that level shall assist in analysis and failure documentation prior to submission of the PQDR.

d. The Base MMO will report any deficient PQDR responses to the Commander, Marine Corps Logistics Bases (MCLB), Albany, Georgia, 31704-5000 (screening point), for corrective action. If the subsequent corrective action is still deficient, report it to the Commandant of the Marine Corps, Headquarters, U.S. Marine Corps, and Washington, DC 20380 (LMA-2).

3. Determination of Economical Repair

a. Per reference (a) Marine Corps Cost Factors Manual provides the instructions to be followed in determining the eligibility of an item of equipment, except for commercial-use vehicles, for repair. The purpose of this program is to ensure, to the maximum extent possible, that total repair costs are determined prior to commencing work on the equipment. The objective of the program is to preclude excessive expenditure for repair of equipment which should be washed out of the system as uneconomical to repair.

b. All Base organizations involved in repair of Marine Corps equipment will prepare an estimate of repair costs prior to commencing work on an item of equipment. In the case of minor repairs (estimated cost of repairs equal to ten percent of less of the standard unit price or one-time expenditure limit of engineer equipment) estimated repair cost will be entered on the ERO/SRO. A Limited Technical Inspection (LTI) Form need not be completed for minor repairs but is required for all major repairs (estimated repair cost ten percent of the standard unit price or one-time expenditure limit).

c. Proper maintenance of equipment records is essential to this program. Organizational commanders will ensure compliance with the record keeping requirements established in reference (f).

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4. Corrosion Prevention and Control Program (CPAC). The CPAC program serves to improve readiness and combat capability, to extend the service life of both current and future vehicle and equipment inventories, and to reduce the maintenance requirements and associated costs. The program focuses on both preventive measures, taken at the time equipment is received, and corrective measures, that identifies, develops, and implements technologies and processes that will correct current equipment deficiencies resulting from corrosion and moisture intrusion damage. Any requirements for the CPAC program should be submitted to Commanding Officer, MCB CamLej (AC/S, Logistics).

5. Warranty Programs

a. Upon receipt of new equipment, the commodity manager must annotate the commencement dates of any associated warranties in the remarks column of the equipment record. A warranty shall not be used as a substitute for proper logistics planning and acquisition of the elements of integrated logistics support for the system or as a means of acquiring interim contractor support.

b. Warranty considerations shall become part of the acquisition planning process and acquisition documentation. Supply support procedures for warranted items shall operate within the existing Marine Corps supply system. Existing Marine Corps maintenance management procedures shall be used to document maintenance on warranted items.

(1) Warranty claims shall be submitted by the warranty coordinators at II MEF. Prepare a PQDR message and forward to MCLB Albany per MCO 4855.10, with an information copy to the warranty coordinator.

(2) Use an EROSL as a source document to report repair parts used/provided by the warranty dealership, using a "WP" advice code in order to establish demand/usage history. Ensure this usage data is reported to PCMIMMS and SASSY per the current edition of UM 4790-5 and MCO 4105.2 as the following:

(a) When consumable repair parts for a warranty item are required, the using unit shall submit a MIMMS "4" parts transaction with a "WP" advice code. This transaction will

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generate usage data via a "DHA" but will not pass a requisition to SASSY. The actual requisitioning of the required parts will be accomplished per the instructions provided by the warranty administrator.

(b) Upon receipt of the warranty part, the using unit shall submit a MIMMS "8" parts transaction with the authority code of "2 to indicate receipt" for the item on the Daily Process Report and close the parts trailer while capturing lead time data.