UNITED STATES MARINE CORPS
MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LA 70114-1500

ForO 4790.3B
MMO
JUN 24 2015

FORCE ORDER 4790.3B

From: Commander, Marine Forces Reserve
To: Distribution List

Subj: MAINTENANCE MANAGEMENT STANDARD OPERATING PROCEDURES (SHORT TITLE: MMSOP)

Ref: (a) MCO P4790.2_
(b) MCO 4400.150_
(c) UM 4000-125
(d) DoDI 1348.30
(e) MCO 4400.16
(f) ForO 4000.19
(g) MCO 4790.25
(h) MCO 4400.160
(i) MCBUL 3000
(j) MCO 3000.13
(k) ForO 4733.1_
(l) TI-4733-OD/11
(m) TI-4733-OD/21
(n) MCO P4400.82_
(o) MCO 5600.31_
(p) MCO 5320.12_
(q) MCO 4855.10_
(r) MCO P11262.2_
(s) MCO 8300.10_
(t) MIL-STD-91621
(u) TM 4700-15/1_
(V) NAVSUP Instruction 4200.98_
(W) DOD 4140.25M

Encl: (1) Maintenance Management Standard Operating Procedures

1. Situation. To establish policy and procedures for Marine Corps ground equipment maintenance within the Marine Forces Reserve (MARFORRES). This Order will serve as a basic source document for the conduct of all maintenance management activities except when directives issued by this Command and Higher Headquarters take precedence.

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

2. Cancellation. ForO P4790.3A.

3. Mission. To publish instructions, policies, procedures, and technical information for the conduct of effective equipment maintenance and maintenance management programs that are unique to MARFORRES within the parameters of the references.

4. Execution. Effective upon receipt, Commanding Officers (CO) will ensure compliance with this Order, and issue amplifying instructions as required.

a. Commander's Intent and Concept of Operations

(1) Commander's Intent

(a) Purpose. To provide maintenance management policy and guidance to all reserve units. This Order describes the variations encountered when dealing with supporting activities and other services, while providing direction and guidance to meet Marine Corps regulations. APPENDIX A is a list of acronyms used throughout this Order. APPENDIX B is a reference list with their titles used throughout this Order.

(b) Method. Commanders and/or Inspector-Instructors (I-I) will familiarize themselves with the responsibilities for personnel charged with maintenance management at all levels. Understanding many I-I staffs do not retain Active Component (AC) maintenance managers, maintainers, or technicians; this Order provides information to mitigate this Force-wide constraint. Therefore, step-by-step procedures, sample format letters, and timeline constraints for administrative requirements are provided to aid in planning, execution, and establishing desktop procedures.

(c) End State. An effectively managed and safely controlled maintenance management program in support of ground equipment maintenance operations unique to MARFORRES.

(2) Concept of Operations. Commanders and I-Is will ensure strict compliance with the instructions contained in this Order and the references cited herein. In the case of conflicting policies or regulations, the most stringent policy or regulation shall apply. Conflicting policies will be reported to MARFORRES G-4, via the Major Subordinate Command (MSC) G-4, by the most expeditious means possible. For the

purpose of this Order, the term commander is used to refer to CO and I-I.

b. Subordinate Element Missions. Comply with the intent of the references and the contents of this Order.

5. Administration and Logistics. Recommendations concerning the contents of this Order will be forwarded to MARFORRES G-4 via the chain of command.

6. Command and Signal

a. Command. This Order is applicable to MARFORRES.

b. Signal. This Order is effective the date signed.

S. A. WENRICH
Chief of Staff

DISTRIBUTION: D

Directives issued by this Headquarters are published and distributed electronically.

LOCATOR SHEET

Subj: MAINTENANCE MANAGEMENT STANDARD OPERATING PROCEDURES
(SHORT TITLE: MMSOP)

Location: _____
(Indicate location(s) of copy(ies) of this Manual)

RECORD OF CHANGES

Log completed change action as indicated.

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

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Chapter 1

General Information

1. Introduction

a. Maintenance is a readiness determinant. One of MARFORRES' primary goals is to maintain maximum combat readiness at all times. This goal is achieved through a balanced program that adequately trains personnel and maintains materiel for the overall readiness of an organization. Command interest in maintenance and maintenance management is perhaps the single most important factor for a successful maintenance program. The purpose of this SOP is to establish procedures that will properly and effectively use personnel, facilities, support equipment, and repair parts to ensure a high level of equipment readiness within MARFORRES.

b. Units are instructed to contact the applicable MSC G-4 for clarification and guidance in the event that there is a conflict between this SOP, published Marine Corps Orders (MCOs), policy notices, or other publications.

2. Objectives

a. To establish command and staff relationships in the conduct of MARFORRES equipment maintenance program and to identify the relationships between Global Combat Support System-Marine Corps (GCSS-MC) and other related Marine Corps programs of record.

b. To provide policies and procedures aimed at assisting commanders and maintenance personnel in planning, controlling, and administering MARFORRES maintenance management programs.

c. To ensure equipment maintenance management requirements are identified and the responsibilities for their accomplishment are assigned to the appropriate command level and staff agency.

d. To provide detailed guidance for the management of equipment maintenance at all levels of command.

e. Procedures herein are governed by reference (a).

3. Command Responsibilities

a. The management of assigned equipment is an inherent command responsibility. Reference (a) outlines a commanding officer's responsibilities for the maintenance management of all equipment assigned to his/her accounts. In so doing, Unit Commanders will:

(1) Establish and conduct equipment maintenance programs per the procedures set forth in this Order.

(2) Be prepared at all times to advise their respective MSC and MARFORRES G-4 on the status of materiel readiness and maintenance within their respective units.

(3) Report through normal channels to the MARFORRES G-4 on all maintenance related difficulties.

(4) Be highly encouraged to create policies and processes for taking full advantage of local maintenance activities within their region, to include both government and civilian agencies.

(5) Assign a Maintenance Management Officer (MMO) in writing when their command is authorized field Level of Maintenance (LOM) in more than one commodity area. This responsibility may be assigned as an additional duty for an officer or a staff-noncommissioned officer (SNCO)/senior maintenance Marine.

b. All MARFORRES units will perform field LOM in accordance with reference (b) and only the authorized maintenance actions as prescribed in their respective table of organization (T/O) logistics capabilities statement. Repairs will be performed at the lowest authorized LOM. LOM will be consistent with the nature of the repair, authorized repair parts, tools, equipment, time available, capabilities of personnel, tactical situations, or local conditions. Equipment requiring repairs beyond the scope or capability of one's LOM will be evacuated to the next higher level. When practical, units may request support from Increased Levels of Maintenance (ILM), Inter-Service Support Agreements (ISSAs), and Memorandums of Understanding (MOUs). Units can also request maintenance support from 4th Marine Logistics Group (MLG).

4. Staff Responsibilities

a. General. The Commander's staff is primarily composed of the G-1/S-1, G-2/S-2, G-3/S-3, G-4/S-4, G-6/S-6, and the special staff composed of the adjutant, MMO, supply officer, where assigned. All staff officers contribute to the overall effectiveness of the Maintenance Management Program. In addition to standard staff action requirements, staff officers must establish appropriate maintenance management relationships between the Commander, MMO, and other staff and supervisory personnel. The AC/S, G-4 MARFORRES has staff cognizance for all maintenance management within MARFORRES.

b. G-1/S-1. The G-1/S-1 serves as the principal staff officer in all matters pertaining to personnel management. The G-1/S-1 has responsibilities for publication allowances, requisitioning of publications, maintenance of publications, publication listing, and the internal distribution control. Cognizant staff officers' recommendations for assignment of maintenance personnel will assist the S-1 in the effective use of personnel resources.

c. G-3/S-3. The G-3/S-3 serves as the principal staff officer on all matters pertaining to operations and training. The MMO in conjunction with commodity managers will coordinate with the G-3/S-3 to ensure required military occupational specialty (MOS) technical subject training is provided to all maintenance personnel. The MMO will determine maintenance management training requirements and make the appropriate recommendations to the G-3/S-3. Allocating time to conduct equipment maintenance training (to include maintenance stand downs) will be included in all training schedules.

d. G-4/S-4. The G-4/S-4 serves as the principal staff officer in all matters pertaining to logistics. This includes those matters directly related to materiel readiness, equipment maintenance, and management of equipment maintenance resources.

e. G-6/S-6. The G-6/S-6 serves as the principal staff officer in all matters pertaining to the employment and maintenance for garrison and tactical communications assets.

f. MMO. The MMO serves as a special staff officer/SNCO under the staff cognizance of the G-4/S-4. The MMO is responsible for exercising staff supervision over all aspects of the unit's Maintenance Program. The MMO, in concert with commodity managers, assists the commander by coordinating the

unit's maintenance resources. The MMO exercises principal staff cognizance over the maintenance management functional areas as listed in Chapter 1 of reference (a).

g. Maintenance Officer. In units authorized by T/O, the maintenance officer is considered a special staff officer. The maintenance officer oversees the performance of maintenance on all equipment and maintenance operations. The maintenance officer's responsibilities include, but are not limited to, coordinating, planning, and using and disposing of maintenance resources.

h. Commodity Managers. Commodity managers are those officers/SNCOs assigned duties as managers of special or technical commodity areas. Commodity managers work closely with the MMO in developing maintenance programs.

i. Supply Officer. The supply officer serves as a special staff officer to the unit commander. The supply officer is responsible for supply support for the unit maintenance program. The MMO assists the supply officer in determining supply support requirements for maintenance operations under all operating conditions.

j. Using Unit Account Manager (UUAM). Per reference(c), a senior logistician within a using unit that assigns, revokes, and manages the GCSS-MC roles and functionality for users within their command and assigned units.

k. Fiscal Officer/Comptroller. The MMO, in conjunction with the unit's supply and fiscal personnel and in coordination with the command's comptroller, must develop the unit's Job Order Number (JON) structure allowing information collection and permitting sound command decisions based on readily available information. The comptroller is responsible for entering the JON into GCSS-MC.

l. Logistics Systems Functional Resource Group (LSFRG). The LSFRG is a hierarchical group that is organized and trained to resolve user's GCSS-MC problems at the lowest level. The LSFRG acts as a help/service desk for GCSS-MC.

5. Desktop Procedures and Turnover Folders

a. Commanders will ensure the development and use of

desktop procedures and turnover folders by key maintenance management and maintenance personnel per reference(a).

b. Turnover folders and desktop procedures will be reviewed semi-annually or two months prior to turnover of personnel for accuracy and applicability by a commodity manager.

c. Desktop procedures and turnover folders will be maintained by the billets indicated below. The list is not all encompassing and some units may not possess all listed billets. Personnel assigned to "Chief" billets will have a turnover folder; those with the title "clerk" in their billet will have a desktop procedure. Smaller units may have one individual performing several billets. It is more practical to have the turnover folder/desktop procedure address billets separately to enable the unit to provide the information to individuals assigned to one or more of the billets.

	Desktop Procedures	Turnover Folder
(1) Maintenance Management Officer	O	M
(2) Maintenance Management Chief	O	M
(3) Commodity Manager/Chief	O	M
(4) Maintenance Officer	O	M
(5) Maintenance Chief	O	M
(6) Responsible Officer	O	M
(7) UUAM	M	M
(8) Calibration Control Clerk	M	O
(9) Publication Clerk	M	O
(10) Modification Control Clerk	M	O
(11) Records Clerk	M	O
(12) Layettes/DSI/Parts Clerk	M	O
(13) Tool Room NCO	M	O
(14) Technical Training NCO	M	O

(15) Safety/Hazardous Material (HAZMAT) NCO	M	O
(16) Maintenance Management Specialist	M	O
(17) Quality Control	M	O
(18) Maintenance Management Clerk	M	O

KEY: M = Mandatory O = Optional

d. MMOs will ensure those personnel assigned oversight of maintenance management functional areas have established turnover folders and desktop procedures in each of their commodity areas.

6. Maintenance Management Standard Operating Procedures (MMSOP)

a. Reference (a) establishes the requirements for MMSOPs within units. The Order also states that when instructions published by higher headquarters (to include this Order) are sufficiently clear, completely applicable at unit level, and sufficiently detailed, such instructions should be referenced in lieu of repeating the contents of the instruction. This directive may be used as the unit MMSOP by including the following statement in the Commander's Maintenance Policy Statement: "ForO P4790.3B will be utilized as this unit's MMSOP". This MMSOP will be supplemented by unit Maintenance Management Policy Notices (MMPN), when applicable.

b. Each unit is required to amplify its authorized levels of maintenance for each commodity and identify each commodity's supporting activity. This policy will be included in the unit's MMPN if this manual is used as the unit's MMSOP. Figure 1-1 and Figure 1-2 are examples of unit Maintenance Management Policy Notices. Unit commanders will review and validate MMPNs annually. MMPNs requiring changes will be reissued and added or updated to the annual checklist. Figure 1-3 is an example of the MMPN annual checklist.

7. Recognition of Performance. The annual Secretary of Defense (SecDef) Maintenance Award has been established to recognize excellence in maintenance in accordance with reference (d). A MARADMIN is published yearly announcing the award criteria and submission due dates for field level unit maintenance program awards. Annually, six field-level maintenance units may be awarded SecDef maintenance awards, two from each

competitive category (large, medium, and small). One of these six winners may then be recognized as the "Best of the Best" and awarded the SecDef Phoenix Trophy. Active and reserve force units (to include Marine Corps air ground task forces and supporting base units) whose primary mission is to perform maintenance (below the sustainment level) are eligible. Units having reserve associated units shall recognize the associated unit's contributions in their submission. Competitive categories are: large (over 1,000 authorized personnel); medium (301-999 authorized personnel; small (up to 300 authorized personnel). Submissions for this award are outlined per MARADMIN and reference (d).

UNIT LETTERHEAD

4790
MMO
Date

MAINTENANCE MANAGEMENT POLICY LETTER X-XX

From: Commanding Officer
To: Distribution List

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE X-XX

Ref: (a) ForO P4790.3_

1. Purpose.

2. Cancellation. This letter will remain in effect until revision or when indicated by the appropriate authority.

3. Information.

4. Scope.

5. Certification. (If necessary, this and other paragraphs can be utilized.)

COMMANDING OFFICER

Distribution: (as appropriate)
Copy to: (as appropriate)

NOTE:

1. MCO P4790.2_ requires that commanders publish Maintenance Management Standard Operating Procedures (MMSOP) when the unit is authorized to perform field level maintenance for more than one commodity area. The reference also states that these commanders will publish MMSOPs except when maintenance procedures are adequately covered in the higher headquarters' MMSOP. In such cases, the higher headquarters' MMSOP may be used in lieu of the unit MMSOP.

Figure 1-1. Sample Maintenance Management Policy Notice (MMPN) Policy Letters Formats

2. ForO 4790.3_ is the current SOP for maintenance management in MARFORRES. It is applicable to all units within MARFORRES and provides guidance in the functional areas of maintenance management. The requirement to restate this guideline is unnecessary and a time-consuming administrative burden.

3. In the spirit of reducing this burden on MARFORRES units, commanders need not publish a MMSOP if they choose to adopt and follow the guidelines set forth in ForO 4790.3_ and applicable Maintenance Management Policy Notices (MMPN). The commander should cancel the current unit MMSOP and issue unit MMPN. Each commander will also publish amplifying guidance in the form of policy notice when special operational maintenance requirements or geographic constraints require detailed procedures. At a minimum, a unit MMPN covering the commander's maintenance policy to include authorized LOM and a checklist of the unit's MMPNs in effect will be published.

4. The MMO will ensure that references and the regiment, group, battalion, and squadron MMPNs are made available for maintenance and supply personnel requiring their use. This guidance does not preclude commanders from publishing a MMSOP if desired.

5. MARFORRES G-4 is responsible for making any changes to ForO 4790.3_. Changes will be issued to each MSC, who will then ensure distribution throughout their respective MSC.

6. All MMPNs will be filed in turnover folders or desktop procedures.

Figure 1-1. Sample Maintenance Management Policy Notice (MMPN) Policy Letters Format--Continued

UNIT LETTERHEAD

4790
MMO
Date

From: Commanding Officer, (Unit)
To: Distribution list

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE X-XX, MAINTENANCE MANAGEMENT TRAINING

Ref: (a) MCO P4790.2_
(b) ForO 4790.3_

1. Commodities will submit training schedules for their respective areas to the S-3, via the MMO for inclusion in the training schedule.

2. Maintenance management training will be held each Thursday in Bldg. 456, MMO Classroom, from 1500-1630. All maintenance management personnel and at least one representative from each commodity will attend. A copy of each class roster will be forwarded to the S-3 for inclusion in training records.

3. The MMO will report the level of participation in the maintenance management training program to the Commanding Officer.

I. M. COMMANDING

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Figure 1-2. Sample MMPN Maintenance Management Training

UNIT LETTERHEAD

4790
MMO
Date

From: Commanding Officer, (Unit)
To: Distribution list

Subj: MAINTENANCE MANAGEMENT POLICY NOTICE X-XX, MAINTENANCE MANAGEMENT POLICY NOTICES (MMPN) IN EFFECT ANNUAL CHECKLIST

Ref: (a) ForO 4790.3_

1. In accordance with the reference, the following MMPNs are published and in effect:

NOTICE NUMBER	DATE	SUBJECT
X-XX	DATE	Commander's Maintenance Policy Statement
X-XX	DATE	Maintenance Management Training

2. Remove all MMPNs and replace with the above listed notices.

3. The point of contact is 1stLt Jean L. Piccard at phone number XXX-XXXX.

I. M. COMMANDING

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Figure 1-3. MMPN In Effect Annual Checklist

Chapter 2

Maintenance Operations

1. Introduction

a. MARFORRES units will establish a maintenance management program, at all levels of command, in the management of equipment maintenance. Reference (a), directives issued by higher headquarters, and this Order set forth these management procedures.

b. Ground maintenance management consists of management policies, procedures, and goals designed to improve equipment readiness. MARFORRES units will accomplish this through training and supervising personnel in the following areas:

(1) Testing

(2) Modifications

(3) Calibrations

(4) Inspections

(5) Preventive Maintenance Checks and Services (PMCS)

(6) Corrective Maintenance (CM)

(7) Preserving equipment

2. Assignment of Operators

a. Due to the ratio of operators to equipment within MARFORRES, it may not be feasible to assign an operator to each item. Commanders are directed to reduce the quantity of equipment per the training allowance (T/A) in order to maintain a manageable quantity of equipment for the operators on hand. Also, commodity managers will review MCOs and Technical Manuals (TM) for Table of Authorized Material Control Number (TAMCN) specific operator assignment requirements.

b. When an individual is required to operate equipment, that individual will ensure that all operator/crew level PMCS are accomplished prior to the use of the equipment.

3. Allocation of Maintenance Training/Performance Time

a. Commanders will place equal emphasis on equipment operators and supervisor training as that given to operational and tactical training. The MMO will coordinate with the training officer of the unit to ensure training is scheduled and accomplished. The unit's annual training plan will include the commander's policies on maintenance and maintenance management training. This specific training will receive emphasis equal to that given to operational and tactical training. This emphasis does not necessarily mean equal time allotted, however, it must be balanced within the schedule. Additional training guidance is outlined in Chapter 4 of this SOP.

b. Before, during, and after deployments, tactical exercises, Annual Training (AT), or other significant training events commanders will ensure that adequate time is allocated for completion of required equipment maintenance. During the planning for upcoming drills, MMOs and Maintenance Management Chiefs (MMCs) must coordinate with the training officer to ensure adequate time is built into the schedule for maintenance efforts. To this end, units may schedule a maintenance stand-down (MSD), as required. Each MSD must be properly planned and included in the unit's annual training plan. MSDs should be the unit's focus of effort during the designated period to achieve maximum effectiveness. Additional MSD guidance is listed in Chapter 8, paragraph 2 of this SOP.

4. Shop Operations

a. Unit MMOs, Maintenance Officers, MMCs, and commodity managers are responsible to the commanding officer for the effective operation of maintenance. Unit MMOs, Maintenance Officers, MMCs, and commodity managers will establish procedures which provide for systematic forecasting and scheduling of equipment maintenance, orderly work flow, safe and efficient use of resources, and a functional Quality Control (QC) program. Reference (a) provides detailed shop operation requirements.

b. Commanders will designate, in writing, the title, authority, and responsibility of commodity managers. Commodity managers, in turn, will designate, in writing, the title, authority, and responsibility of key maintenance personnel. Figure 2-1 is an example appointment letter.

c. Additionally, commanders will designate all areas where maintenance operations will be performed.

d. Commanders and commodity managers must strictly govern priority assignments on Service Requests (SR) and tasks in GCSS-MC per reference (c). The following guidance is provided:

(1) MARFORRES is assigned Force/Activity Designator (F/AD) IV with the associated priority designators of 07, 09, and 14. Units deploying to activations, exercises, and AT's are authorized to use F/AD III (priorities 03, 06, and 13). This authorization applies only to equipment slated for deployment. Use of F/AD III is authorized commencing 90 days prior to the actual deployment date and 30 days upon return of equipment. A F/AD change request will be submitted to the GCSS-MC service desk via the MSC LSFRG. The downgrade of the exercise requisitions back to F/AD IV after the deployment will be executed by LSFRG.

(2) Assign priorities to all service requests and tasks in accordance with reference (e). Additionally the following guidance is provided:

(a) Assign Urgency of Need Designator (UND) "B" at a minimum for all dead lining repairs.

(b) UND "A" service requests must be used sparingly. Widespread use of UND "A" requests at all levels will diminish the effectiveness of the priority request system, particularly when dead lined equipment is required for operational commitments.

(c) Commanders will personally review or delegate in writing personnel authorized to approve all UND "A" and "B" service requests and tasks before induction of the equipment into the maintenance cycle. Commanders will have personnel authorized, in writing to receipt for repaired equipment on a continuous basis.

(d) The MMO is required to maintain Uniform Materiel Movement and Issue Priority Systems (UMMIPS) training rosters for all personnel designated, in writing to approve UND "A", "B", and "C".

(3) Upon completion of the dead lining tasks the service request will be downgraded to the appropriate UND.

(4) When equipment has been evacuated to the supporting Intermediate Maintenance Activity (IMA) and requires a priority change, the owning unit must change the priority to match the IMA Service Request (SR).

e. Organizational Maintenance and Supply Support. As set forth in reference(c) the unit commander will ensure all requisitions will have the appropriate Required Delivery Date (RDD) or Not Mission Capable Supply (NMCS) indicator assigned.

f. Intermediate Maintenance Support. Expedite the return of equipment from the IMA, which has been repaired under UND "A".

g. SR Authority. SRs will be approved by personnel designated in writing by the Commanding Officer. Provide a copy of the letter of authorization to the appropriate supporting activities.

h. SR Priority Upgrade. Commanders will assign priorities to SRs and tasks per reference (a) and (b). In order to meet operational requirements, the unit commander may authorize a priority upgrade on maintenance and supply requests. If the equipment is evacuated to the IMA, the commander or a designated representative will request a priority upgrade via GCSS-MC and send the correspondence directly to the supporting facility. In situations that require an immediate response, a telephone call to the supporting establishment will suffice in lieu of official correspondence. However, follow-up all telephone requests with official correspondence identifying the need for the immediate change to the equipment's priority. All priority upgrade requests will be signed by personnel designated in the unit's letter of authorization. Commanding officers or personnel designated to sign UND "A" must sign the SR Priority Upgrade Request in the task notes field of that SR.

i. Changing Priorities. Follow the current GCSS-MC procedures in reference (c) to change a SR's priority.

j. Use of Deadline Control Dates (DCDs) on SRs. Proper use of the DCD will provide the MMO with an indicator of the operational status of a non-reportable Principal End Items (PEI) or a component of a PEI. Do not use a DCD if the equipment is in a degraded status or when critical repairs do not deadline the end item.

k. Urgency of Need Designator Assignment. Reference (e) and (f) defines the relationship of priorities to UNDs and F/ADs.

5. Equipment That Exceeds Maintenance Capabilities

a. Unit capabilities are defined in current T/Os. The following resources are available and can be requested via the chain of command.

(1) Unit provided maintenance contact team. For example, "C" company requests armorer support from its Battalion.

(2) Respective General Support/Direct Support Combat Logistics Battalion (GS/DS CLB), 4th MLG (i.e. maintenance support request). Additional details are outlined later in this chapter.

(3) Inspect, Repair Only As Necessary (IROAN) Program. The IROAN program is detailed in paragraph 5 of chapter 8.

(4) Memorandum of Agreement (MOA) or Understanding (MOU) with USMC units. The MOA or MOU may be used to document mutual agreements of facts, intentions, procedures, limits on future actions, and area of present of future coordination, or commitments, etc. MOAs must be routed through the chain of command up to the MSC level for approval. For, example a MOA or MOU may be written between two units that reside at the same site in order to define maintenance relationship (i.e. maintainer support, equipment usage, or facilities usage).

(5) Increased Level of Maintenance (LOM). Increased LOM is discussed in detail later in this chapter.

(6) ISSAs. ISSAs are routed through the chain of command up to the MSC. The MSC will submit ISSAs to MARFORRES Facilities for final approval. An ISSA represents a commitment by a government agency to provide specified services material or support to another government agency. For example, a MARFORRES unit is collocated on an Army post and has an ISSA with the local Army maintenance organization in order to receive services. Refer to reference (f) for additional information.

(7) Contracted Logistics Support (CLS). CLS is discussed in paragraph 9 of chapter 8.

(8) Commercial Services. Details concerning commercial services can be found in paragraph 10 of chapter 8.

b. Evacuation Criteria

(1) When repairs exceed the unit's authorized LOM, evacuate equipment to the next higher level. Prior to evacuation, equipment will have:

(a) Completion of required organizational level maintenance that will affect the next higher level of maintenance's ability to perform services.

(b) Identified organizational level requisitions.

(c) Collateral equipment removed, unless required by the higher level of maintenance.

(d) A SR must be opened and related in GCSS-MC at the LOM authorized by the using unit.

(2) Unit Recall. Units will not recall any equipment evacuated to the IMA until all required repairs are complete. The following exceptions apply:

(a) As specifically authorized by the MSC.

(b) While awaiting non-critical repair parts on valid requisition.

c. Maintenance Support Team. Respective GS/DS CLB, 4th MLG or the appropriate detachment will provide maintenance support teams. Submit requests for maintenance support teams according to 4th MLG maintenance support processes.

d. Authorization to Increase Designated Level of Maintenance

(1) MSC Commanders may authorize the temporary assignment of higher LOM when such assignments provide for the more effective use of available maintenance resources, enhance equipment readiness, reduce excessive backlogs which may exist

at the IMA or result in an overall savings in maintenance costs. MSC commanders are authorized to approve temporary (six months or less) increases to the authorized LOM. MSC G-4s will submit a copy of the request for increase to LOM to the MARFORRES G-4 Maintenance Branch. An sample request for an Increase Level of Maintenance (ILOM) can be found in Figure 2-2. Requests must meet the criteria established in reference (a) and will be a one-time repair for a specific TAMCN. Unit MMOs must maintain requests and approvals for one year after the ILOM is no longer required.

(2) Commanders who request a temporary assignment of ILOM will be guided by the following considerations:

(a) Availability of necessary maintenance resources, knowledge, qualifications, and personnel.

(b) The assignment will not interfere with the accomplishment of the regularly assigned levels of maintenance.

(c) Higher LOM activities cannot perform the required maintenance within acceptable time frames.

6. Limited Technical Inspection (LTI) Maintenance Support. Use LTIs to determine the extent and level of maintenance required to restore equipment to a specific condition. The following guidance applies:

a. MARFORRES units will use organic maintenance resources to perform LTIs required by:

(1) Temporary loans, internal and external, to MARFORRES.

(2) Small arms Pre-Fire Inspections (PFI).

b. Equipment declared as excess materiel, and is designated for either internal MARFORRES redistribution or transfer, as directed by higher headquarters (Disposition of Military Equipment (ME) apply).

c. Accident investigations not involving intermediate level repairs, unless otherwise directed.

d. Responsibility for the completion of LTIs is divided between using units and IMAs based on the type of LTI.

e. LTIs will be attached to SRs.

7. Performance of Maintenance Services

a. Policy. Ensuring continual maintenance is one of the commander's most important responsibilities regarding maintenance management. All equipment Preventative Maintenance Checks and Services (PMCS) will be performed on a scheduled basis in accordance with appropriate TMs except when additional guidance has been published by higher headquarters. When no requirement to conduct PMCS is stated in the appropriate TM or no equipment manual exist for equipment, no scheduled maintenance interval needs to be designated and no scheduled maintenance needs be accomplished beyond organizational level. For those items with a stated scheduled maintenance requirement and no interval designated, the commander will designate an interval based on guidance received from the equipment commodity manager for MARCORLOGCOM.

b. Coordination of Unit Maintenance Requirements. Commanding officers will exert every effort to combine optimum utility and efficiency from all maintenance resources available to them. Commanders will monitor the maintenance requirements of their subordinate units and ensure that requirements do not exceed capabilities. Commanders will designate alternate sources of maintenance support as necessary to balance workloads in subordinate units and determine overflow levels at which work can be evacuated to the next source of maintenance support.

c. Post Exercise/Deployment Maintenance. Post exercise/deployment maintenance is one of the most neglected maintenance operations. The S-4/MMO, in coordination with the S-3, will schedule adequate time following each training exercise, AT, tactical operation, or deployment to perform preventive maintenance/corrective maintenance (PM/CM). Post exercise maintenance will be incorporated into the unit's Training Exercise Employment Plan (TEEP) in order to restore the unit's readiness posture in the shortest time possible.

d. PMCS. PMCS will be completed as dictated by appropriate technical manual and the preventive maintenance schedule. PMCS schedules will be maintained in GCSS-MC. However, the PM schedule may be altered to accommodate operational commitments, not to exceed the maximum service intervals. When a scheduled event (e.g. AT or Integrated Training Exercise (ITX)) or deployment exercise conflicts with a scheduled PMCS every effort will be made to conduct required services in advance.

(1) MARFORRES is directed to maintain a T/A in order to adequately operate and maintain an inventory with limited organic capabilities. T/A is defined as the limited amount of equipment required to train to core Mission Essential Tasks (METs) and allows a reduction of the T/E inventory on hand. Training time available is reduced to 36 training days a year, therefore it governs the amount of operational time for equipment. AT periods are the critical periods where equipment availability is required therefore staggering the PMCS scheduling during this time may not be feasible. PMCS scheduling considerations should maximize training time available during training periods where most or the entire inventory can be serviced or efficiently supported by overflow maintenance request considerations as required. Availability of efficient resources, maximizing training time scheduled for organic capabilities, and equipment readiness should be the driving factors in the PMCS schedule. LOM tasks will be performed if the capability of the unit possesses the proper equipment, facilities, and trained personnel. A concerted effort must be made to ensure that these responsibilities are not tasked to the trained maintainer. This will ensure that a manageable workload is maintained for the operators. Commanders are ultimately responsible to ensure proper maintenance is conducted on all pieces of gear in accordance with reference (g).

(2) Additional or shortened PMCS, other than mandated, are necessary when equipment is operated in harsh and caustic environments such as salt water, sand, or extreme temperatures. Equipment will be checked for all probable areas of contamination, washed thoroughly with fresh water, and serviced per the applicable TM. This special PMCS will serve as the semiannual, annual, or biennial PMCS, providing all PMCS requirements are completed.

(3) Commanders must ensure both maintenance services and operational commitments are balanced to ensure mutual support. Proper maintenance services should not be postponed until it is convenient or until the next scheduled maintenance stand-down.

(4) Required PM services will be the responsibility of the responsible officers (ROs).

(5) CM services will be the responsibility of the assigned commodity officers/managers and maintenance officers/managers within their LOM.

(6) Perform PM/CM actions in accordance with the procedures established in the appropriate TMs.

8. Equipment Records

a. Forms and records for all equipment will be maintained in accordance with reference (h) and (i). The forms and records described in these references are the minimum required for proper operation and maintenance. MMOs will verify that all equipment records are maintained per the references.

b. Maintenance management procedures require updating applicable records as services, repairs, and modifications are completed. Also, frequent auditing of equipment records and unannounced records inspections by responsible commodity managers are necessary to ensure accuracy.

c. Per reference (c), contact information, serial number, service request type, priority, echelon, group, problem summary, problem codes, operational status and notes are required fields when opening a SR.

d. Responsibilities for the preparation, care, and handling of equipment records remain with the responsible officer. The MMO will continually work with all commodities to ensure compliance with this requirement.

9. Reports

a. GCSS-MC. Units will use GCSS-MC for recording and managing maintenance activities. GCSS-MC is the program of record that provides timely and manageable data which originates at the source of equipment maintenance. Assigned MMOs will reconcile with the unit readiness officer on a monthly basis prior to the submission of the readiness report in the Defense Readiness Reporting System-Marine Corps (DRRS-MC). Any substantial change of readiness of equipment listed in reference (i) will be reported within 24 hours in accordance with reference (j).

b. Responsibilities for report validation and reconciliation are delineated in reference (a). When a command elects to increase the reporting or reconciliation requirement from these procedures, additional guidance must be provided in the command's MMSOP or MMPN.

10. Modification of Equipment

a. Responsibility. Owning unit commodity managers are responsible for ensuring all equipment modifications are properly applied, recorded in the GCSS-MC Install Base, and reported via a modification control program. In cases where the modification cannot be inputted in GCSS-MC, document the modification on a spreadsheet and submit a remedy ticket through the LSFRG.

b. Modification Control Program

(1) Modification control points may be established at the commodity. However, when the unit is required to assign an MMO, the MMO will be responsible for reviewing the modification control program. When the unit is not required to assign an MMO, the commodity maintenance officer will be responsible for maintaining the modification control program.

(2) The RO is responsible for ensuring that all modifications are completed and recorded for all equipment. Equipment modifications are published in Modifications Instructions (MIs) and listed in the Marine Corps Publications Distribution System (MCPDS), Publication Library Management System (PLMS). MARCORLOGCOM creates parent/child relationships for MIs within GCSS-MC and it is the responsibility of the owning unit to verify and update the status of the equipment as it pertains to that MI. In the event that the MI is not loaded in GCSS-MC the owning unit will manage the MI per reference(c).

(3) Upon initial receipt of equipment, operators and maintenance personnel, as appropriate, inspect items to ensure all applicable modifications have been applied. When the nature of the modification is such that the responsible officer is unable to determine if the modification has been completed, evacuate the equipment to the appropriate level of maintenance for verification, or request an inspector to perform on site verification. Upon completion of the inspection, initiate a service request requesting application of any applicable modification and update all equipment records.

11. Support and Test Equipment

a. Calibration. Test, Measurement, and Diagnostic Equipment (TMDE) are sophisticated tools that require control, inventory, and maintenance. The main emphasis of TMDE

maintenance is accuracy, which is validated through calibration. Support and test equipment consists of tools, TMDE, and monitoring equipment. They are required to support equipment maintenance and are authorized by organizational T/E and garrison tool allowances approved by the commander. The preferred method for calibration services is to use local station services to the maximum extent possible. Contact MSC MMO or MARFORRES MMO for calibration ISSAs. Additional information concerning calibrations can be found in reference (k).

b. Commanders are responsible for all support and test equipment and will verify that it is used in accordance with the appropriate TMs, properly accounted for, and stored securely when not in use.

c. The precision required for TMDE requires periodic calibration and load-testing. Pay strict attention to the calibration and load-testing requirements set forth in applicable TMs.

d. All authorized support and test equipment is required to be on-hand, serviceable, and properly used to maintain equipment. Support and test equipment will be properly inventoried, controlled, and given PMCS, CM, calibration, and modification as required. At least annually, units will evaluate all TMDE and ensure that it is the correct calibration category consistent with its mission and determine when an item is required or not required.

e. Technical Instructions (TI) in the 4733 series provide guidance to determine those items of equipment in the inventory that require calibration. These items will normally be listed in the FEDLOG and assigned an operational test code (OTC) of 3. If calibration requirements cannot be determined from the applicable references, request assistance through the local calibration facility.

f. MARFORRES units will ensure that the following is accomplished for all TMDE requiring calibration or repair:

(1) Units will utilize GCSS-MC for scheduling calibration on all TMDE except survey equipment and those included in the Infantry Weapons Gage Calibration Program (IWGCP). Reference (c) for additional information concerning scheduling survey and IWGCP equipment.

(2) Evacuate all items requiring calibration to the supporting calibration facility using a SR, except for items in the IWGCP. Evacuate IWGCEP items in accordance with reference (l). Evacuate survey equipment per reference(m).

(3) The owning unit will properly pack the TMDE in an appropriate container to protect the equipment from being damaged. Request Transportation of Things (TOT) from MSC G-4, if necessary, to ship TMDE to and from the calibrations facility.

(4) The calibration facility will repack the TMDE for delivery back to the owning unit upon completion of the calibration or repair.

12. Safety

a. A conscientious effort must be made to recognize, eliminate, and warn against safety hazards encountered in maintenance areas. The overall safety program for each organization shall be under the cognizance of the MARFORRES Safety Officer located at Marine Corps Support Facility, New Orleans.

b. The unit's safety officer shall ensure that applicable instructions are given and complied with to affect a smooth flow of maintenance and maintenance production. Applicable safety publications will be referenced and posted to ensure all safety precautions are taken. These directives should be utilized to develop procedures to locate and eliminate any hazards that may result from maintenance operations.

UNIT LETTERHEAD

4790
MMO
DATE

From: Maintenance Management Officer (or appointing authority)
To: Gunnery Sergeant Bill F. Murray EDIPI/MOS USMC

Subj: APPOINTMENT AS THE (ADD BILLET TITLE HERE)

Ref: (a) MCO P4790.1_ (Add applicable references to specific commodity here)
(b) MCO P4790.2_
(c) MCBUL 3000
(d) ForO P4790.3_

1. Per the references, you are hereby appointed as the Engineer Chief for Marine Forces Reserve G-4, New Orleans, LA.

2. You will be guided in the performance of your duties by the above references and your turnover folder or desktop procedures. You are directed to familiarize yourself with and consult all applicable orders and directives pertaining to this assignment.

3. The following is your billet description:
(List billet description here. Recommended but not required.)

I. M. APPOINTING

FIRST ENDORSEMENT

From: Gunnery Sergeant Bill F. Murray EDIPI/MOS USMC
To: Maintenance Management Officer (or appointing authority)

1. I have read and understand the references and have assumed all the duties in conjunction with my appointment as designee to be Engineer Equipment Chief.

B. F. MURRAY

Figure 2-1. Example Appointment Letter

UNIT LETTERHEAD

4790
MMO
DATE

From: Senders' Name & Unit/Address
To: MARFORRES G-4

Subj: REQUEST FOR INCREASE LEVEL OF MAINTENANCE (ILOM)

Ref: (a) ForO 4790.3_
(b) TM 4700-15/1

Request Information:

1. Type of ILOM: (Organic, Intermediate, Depot)

2. List the type of repairs:

3. TAMCN:

4. ID Number:

5. Model Number:

6. Personnel: Name, MOS, Rank, I&I or Reserve.

7. MARES Reportable: (Yes or No)

8. Will IEM interfere with unit's mission: (Yes or No)

9. List, by TAMCN, tools/test equipment on-hand to perform IEM:

10. Special instructions:

11. The point of contact for this command:

12. Remember to setup review cycle and submit for review:

I. M. COMMANDING

Figure 2-2. Sample Request for Increased Level of Maintenance (ILM)

Chapter 3

Supply Support

1. Introduction. Units will conduct the requisition, receipt, storage, and issue of repair parts and materiel in accordance with references (a), (e), (h), (n), and this SOP. A key component to any effective maintenance management program is the ready availability of sufficient repair parts and materials to perform preventive and corrective maintenance services. Accurate identification of required repair parts and timely processing of demands is the cornerstone of equipment readiness programs. The culmination of supply support efforts is aggressive follow-up actions on pending demands.

2. Repair Parts Request System

a. Use a SR whenever maintenance resources are expended. When repair parts or materiel are required to complete such services, list these requirements on a SR and forward to the appropriate supply source. Use the SR as the source for entry of demands into GCSS-MC.

b. Priority Designators for Repair Parts. Reference (c), (e), (n), and (o) contain instructions for the assignment of requisition priority designators and the control of their proper use. Assign priority to requisitioned parts consistent with applicable SR. Repair part priorities will vary with the repair categories of the SR in instances where an SR priority has been raised and subsequently lowered due to critical repairs of combat equipment. The use of a Required Delivery Date (RDD) in concert with the priority designation will be used when requisitioning critical parts.

3. Repair Parts Control

a. Maintenance activities are not authorized to maintain repair parts or components except for those associated with specific maintenance, shop overhead, or Demand Supported Items (DSI) (formerly known as Pre-expended Bins (PEBs)).

b. Broken Unit of Issue. Broken unit of issue of common hardware (e.g., bolts, nuts, screws, or washer) will be accounted for and controlled according to reference (b).

c. Non-System Demands. Not all parts associated with an end item are assigned a National Item Identification Number (NIIN) during the provisioning process. Occasionally, a required part has a NIIN assigned but for a variety of reasons, the NIIN is not reflected on the Item Master Organization (IMO). In this instance, units should coordinate with their unit LSFRG for assistance in preparing the remedy ticket to load the NIIN to the IMO via the LSFRG.

d. Excess Repair Parts. Maintenance shops will not hold excess repair parts. The monetary loss to units and the Marine Corps based on stores of excess repair parts is unacceptable and cannot be tolerated at any level of command. Units will identify excess repair parts to unit supply officers.

e. Cannibalization and Selective Interchange

(1) Cannibalization. Cannibalization is considered an exceptional maintenance procedure. Cannibalization is authorized only for mission-essential combat equipment when an operational commitment is imminent, and only when it appears that required repair parts cannot be obtained in a timely basis. Cannibalization will only be used when all other means of repair or replacement have been exhausted.

(a) Authority for Cannibalization. MARCORLOGCOM, as the Marine Corps ground equipment inventory manager per reference (g), is the sole approval authority for cannibalization. Cannibalization will be requested and approved via the disposition of ME process. Commands and maintenance activities will submit disposition of ME cannibalization requests and MARCORLOGCOM will respond with disposition instructions authorizing removal of repair parts from the item.

(b) Commands and maintenance activities will not conduct cannibalization with the objective of building an inventory of operational stocks. When cannibalization has been authorized by a MARCORLOGCOM item inventory manager, serviceable parts will be returned to the supply system for accountability and reissue.

(c) Reporting of Cannibalization. Commanders will incorporate the procedure contained in reference(c) when conducting cannibalization. Commands and maintenance activities will use the cannibalization advice code "CN" in GCSS-MC when parts or components are removed from equipment that will not be

returned to service and applied to other equipment in order to render it operational.

(2) Selective Interchange. Selective interchange is the exchange of selected serviceable repair parts or components from a deadlined item of equipment for unserviceable repair parts or components from a like item. The exchange must be complete to qualify as selective interchange. The difference between cannibalization and selective interchange is that selective interchange addresses the replacement of the removed serviceable repair part or component, whereas cannibalization does not. This fact has led maintenance personnel to the erroneous belief that selective interchange is not cannibalization. By definition, removal of serviceable parts or components from one item for use in repairing another item selective interchange is, in fact, a lesser degree of cannibalization.

(a) Authority for selective interchange

1. Battalion and squadron commanders are authorized to approve selective interchange.

2. Intermediate Maintenance Activities. Direct and general support maintenance activities are authorized to conduct selective interchange for equipment within their purview, and under the following conditions:

a. Equipment or secondary reparable is in the intermediate category of maintenance, or the commander of the unit accountable for the equipment from which the serviceable part or secondary reparable is to be removed has authorized the interchange.

b. Reporting of Selective Interchange. Commanders will incorporate the procedures contained in reference (c) when conducting selective interchange. Commands and maintenance activities will use the selective interchange advice code "SE" in GCSS-MC when serviceable parts or components are removed from equipment in exchange for unserviceable parts or components. A requisition for the replacement part or component may be used in lieu of the actual unserviceable part or component in the exchange.

(3) Recording Cannibalization and Selective Interchange. At the time of the interchange, strict managerial control practices must be implemented.

(a) To exchange components, SRs must be opened on both parent end items. In this case, the SRs should have been previously opened since selective interchange can only be authorized to remove one item from a dead lined status by interchanging a component from another item that is also dead lined.

(b) Prior to the transaction, ensure that the components, with the exception of SECREPS to be interchanged, have been created through a SR.

(c) Do not employ maintenance by cannibalization or selective interchange, except under the following circumstances:

1. There is a need to ensure that a minimum number of mission-essential combat equipment is dead lined at any one time for lack of critical repair parts. Maintenance by cannibalization or selective interchange is considered to be an exceptional procedure and is authorized for only mission-essential combat equipment when an operational commitment is imminent, and only when it appears that the required part may not be obtained in a timely basis. Generally, such procedures will be done at the lowest echelon having the maintenance capability to accomplish the same.

2. As directed by Commandant of the Marine Corps (Code LP).

3. Commanders or Officers-In-Charge of IMAs may authorize the interchange of component end items or secondary repairable as part of the normal maintenance process of reportable equipment. The IMAs indicated herein are those units authorized by the T/O cover page to perform at least intermediate maintenance. IMAs may be an authorized maintenance float or sub-float holder (i.e., maintenance companies of maintenance battalions, and detachments of the MLG.) At the time of the interchange, command and maintenance facility will implement managerial control practices to ensure that:

a. Owning unit commanders of the equipment from which the serviceable parts or components are to be removed have approved such action.

b. The equipment from which serviceable parts or components are to be removed will not, as a result of

such removal, become a candidate for requesting disposition in GCSS-MC by exceeding the one-time cost of repair authorization, or exceed the maximum maintenance cycle time for repair. The conduct of the secondary reparable interchange must be in the best interest of the Marine Corps; i.e., it must be cost-effective and result in the removal of one item of equipment from deadline without degrading another item of equipment beyond economical repair.

c. The unserviceable parts or components and associated supply requisitions are identified with the item of equipment from which the serviceable items were removed. Unserviceable parts/components that are not repairable will be disposed of in accordance with reference (c). When considering secondary reparable interchange action, sufficient time must remain within the maximum allowable maintenance cycle time for supply to properly respond to demands.

(d) Use the service request to track spare parts and equipment removed from an asset during cannibalization or selective interchange.

f. Repair Parts Reclamation. A unit commanding officer may authorize reclamation of repair parts or components from the Defense Reutilization Management Office (DRMO) or other like sources. Strict accountability of such repair parts and components will be affected to ensure excesses are not held.

(1) All scrounged parts usage will be reported on the SR in the Material Tab (WRS field) of the task.

(2) Commodity managers will go through their unit supply office to get the proper authority to draw materiel from DRMO.

(3) Personnel will ensure the Issue Release/Receipt Document, DD Form 1348, is provided to the unit supply section. The unit supply section will maintain the DD Form 1348 on file for two years.

g. Locators (Layettes). Establish locators (layettes) in GCSS-MC. In addition, the following additional guidance is provided:

(1) When a mechanic or technician is ready to apply repair parts, they will receive the repair parts from the layettes. Then the mechanic or technician must ensure all repair parts are properly debriefed in GCSS-MC.

(2) Store parts that have been removed from an item of equipment to facilitate repair in the layette. Parts will be tagged or marked with the appropriate SR number. Do not use parts that have been removed from an item of equipment to repair another item of equipment.

4. Direct Exchange Secondary Repairable Issue Point (RIP)

a. Due to the dispersion of 4th MLG and in the absence of an intermediate supply support activity, secondary reparable, or Condition Code "H" items will be replaced via the MARFORRES RIP. The current edition of the MARFORRES G-4 GCSS-MC Disposition Process Procedures discusses this program in detail and is published by the MARFORRES G-4 Supply Branch.

b. Secondary Depot Level Repairable (SDLRs) will be guided in submission and exchange in accordance with applicable MARFORRES supply and fiscal policy letters until the Marine Corps publishes changes to existing manuals.

5. Replacement of Unserviceable Recoverable Items. The procedures for disposition of ME and reparable are discussed in reference (p) and amplified as follows:

a. To avoid excesses because of recoverable items action by the IMA, units will not place deficiencies on backorder until the following items are received from the IMA:

(1) The completed SR.

(2) The MARCORLOGCOM disposition instructions within GCSS-MC.

(3) DD Form 1348 indicating that the disposition action has been completed.

b. The physical receipt of these documents is the unit's responsibility in order to drop the item from the supply records.

6. Introduction of New Equipment

a. New equipment is continuously being introduced. All new equipment will require some degree of operator and maintenance training, repair parts, supporting tools, and test equipment.

b. Prior to releasing the equipment to the field, MARCORLOGCOM in conjunction with MARCORSYSCOM will publish a User's Logistics Support Summary (ULSS)(also known as a fielding plan) providing specific guidance with respect to allowances, requisitioning authority, required tools, initial logistics provisioning, supporting publications, and personnel training requirements.

c. MARFORRES G-4, upon receipt of a ULSS, will review the support concept and related correspondence. Guidance will be published, as necessary.

d. Responsibilities

(1) Commanders will review the appropriate ULSS for each new item of equipment. Particular emphasis on the support concept and related correspondence should be placed to determine the total quantity, complexity, and associated requirements of the item to be received.

(2) Commanding officers of units receiving new items of equipment will:

(a) Ensure all new items of equipment received are kept in an Administrative Deadline (ADMDL) status until a request to place in service is submitted to MARFORRES G-4 MMO by AMHS message via the MSC. Additionally, coordination and completion of an acceptance LTI is required to initiate the maintenance history of the equipment per reference (a).

(b) Initiate and submit reports, when required, and promptly report any deficiencies encountered with placing the equipment into service to MARFORRES (G-4/MMO) via the MSC.

(c) Ensure readiness reportable assets are reported in GCSS-MC as established by references (c) and (j).

(d) Ensure Product Quality Deficiency Reports (PQDR) and Report of Discrepancies (ROD) are submitted, if necessary.

7. Validation and Reconciliation. Maintenance validation and reconciliation with supply will be accomplished every two weeks. Amplifying procedures can be found in reference (a), (c), and (h). One validation and reconciliation should be scheduled on a drill weekend for training of Reserve personnel. The unit's local policy will outline, in detail, the procedures and

frequencies for conducting validation and reconciliation, however, minimal reconciliation time frames will be enforced.

8. Sets, Kits, Outfits, and Tools (SKOTS)

a. Reference (a), (e), and (n) establish the criteria for the accountability of SKOTS and components of PEIs. Maintenance officers and commodity managers are the supervisory level for control measures applicable to tool sets, chests and kits.

b. Inventory Criteria. Use the following criteria to determine the minimum frequencies of inventories:

(1) Annually, inventory SKOTS and individual hand portable power tools, which are not issued and are securely stored.

(2) Inventory at least semi-annually SKOTS, which are issued to and used by the same individual on a semi-permanent basis, and where locks and a secure storage area is provided.

(3) Semi-annually inventory all other SKOTS and individual hand portable power tools.

c. Discrepancies (e.g., missing or damaged components) noted during a personnel turnover or regular inventory will be resolved per reference (e), (n), and the Manual of the Judge Advocate General (JAG Manual).

d. The owning unit will order shortages within SKOTS discovered at the time of initial issue from the supply system, with the exception of those items, that are not owning-unit responsibility. In this case, submit a Supply Discrepancy Report (SDR).

e. The inventory will include an inspection of all tools for serviceability and cleanliness, and will ensure the tools are free of rust and dirt. Tools that are unserviceable will be repaired or replaced.

f. Replacements for missing or unserviceable tools will be requisitioned through GCSS-MC using a SR. Annotate in the remarks section of the inventory form with the document number for missing items. Also, a tool kit listed SI 10510-OR provides detailed instructions on how to use the Army tools website to

either file warranty claims to order replacement tools. Commanders must ensure that missing tools are challenged. Tool control must be strictly enforced. If the missing item warrants investigation, appropriate actions should be taken.

g. Return excesses resulting from changes to authorized allowances, quantity changes, or any other condition to the Tool Room Supervisor/NCO for redistribution to deficient SKOTS within the unit. Any additional excesses will be returned through the supply system. Maintain a copy of the authorization for special allowance tools on file in the commodity area. Maintain locally produced inventory forms, similar to forms displayed in reference (a) for all special allowance tool sets on file. Many SL-3 inventories were discontinued and moved to the operator's manual for the item. Refer to these before producing local forms.

h. Secure SKOTS issued to individuals when not in the custody of the individual. Maintain tool boxes held in the section tool room in an area secure from pilferage. Units will establish logbooks in tool rooms to account for issues and receipts of special tools, component tool kits, and individual tools.

i. Commanders will establish specific periods for the conduct of tool accounting and inventories in their unit's training schedule.

j. Special Tool Allowance. In order to maintain a special tool allowance, units must be designated as Operational Force (OPFOR). Reference (q) details the units that are designated as OPFOR. Unit COs (not to go below the battalion/squadron level except for detached units) are authorized to establish, in writing, special tool allowances for tools not currently maintained within T/O&E SKOTS or locally fabricated tools which are needed to meet garrison peculiar requirements. Special tool established per reference (e) must also be inventoried and contained on a Sl-3 or SL-3 extract.

9. Temporary Loan and Command Adjust Equipment. MARFORRES units are frequently requested to temporarily loan or command adjusts equipment to augment other units. Once approved by MARFORRES G-4, via a unit's MSC, temporarily loaned equipment will be entered accordingly into GCSS-MC per reference (c).

Chapter 4

Maintenance Management Training

1. Introduction

a. Maintenance and maintenance management training is a command responsibility. The first two priorities of the Marine Corps Training Program are mission-oriented training and skill-progression MOS training. Every MARFORRES unit has a maintenance mission, which is outlined in the logistics capabilities paragraph of the T/O cover page. Maintenance training will be conducted commensurate with the level of maintenance authorized. Unit T/O's list specific equipment operators or technicians who require maintenance related training.

b. Five areas of maintenance related training require emphasis: Operator training; technician training; maintenance supervisor training; maintenance management functional area training; and safety training. Determine operator and technician training requirements by a review of Training and Readiness (T&R) manuals, applicable TMs, and an inventory testing of operator and technician knowledge levels. Aim maintenance supervisory and maintenance management functional area training programs at isolating trouble spots and implementing corrective actions to upgrade procedures. Aim functional area training at clerk-level personnel who operate functional area programs in the commodity area.

c. MMOs will ensure operator, technician, maintenance supervisor, functional area training, and safety training requirements are included in the unit training SOPs and quarterly training plans. Unit S-3s, with the advice and assistance of unit MMOs, will schedule and coordinate maintenance-related training with mission-oriented training, skill-progression training, and operational commitments

2. Training Requirements

a. Commanders will ensure that, at a minimum, Marines are trained to T&R standards and training is scheduled in the annual training plan for each of the following areas: Operator; technician; maintenance; supervisor; maintenance management; and safety. Aim training at eliminating deficiencies determined by evaluation of maintenance personnel and their supervisors.

Design programs to satisfy both the individual Marine to fill positions of higher grade and increased responsibility.

b. Maintenance and maintenance management training may be accomplished in a number of different ways. The following methods may be used: Formal schools; field training; on-the-job-training (OJT); technical training; and cross training. Selecting a method depends on the skill level of the maintenance personnel, the resources available to the unit, the operational commitments of the unit, and the skill level required by maintenance personnel.

c. Maintenance Management. Conduct maintenance management training for all maintenance management personnel, commodity managers, commodity clerks, and selected supply and logistics personnel. Conduct training at the staff and organizational level under the direction of the Regimental or Group MMO. Classes should encompass the eight functional areas to include GCSS-MC training. As all mechanics and technicians in command have an inherent responsibility to learn these functions, all technical MOS' should attend these classes, not just the Marines who happen to be serving in a particular billet. Reference (a) lists recommended topics for maintenance management training.

d. GCSS-MC. Periodically the MMO, commodity managers, or the Materiel Readiness Training Center (MRTC) will conduct GCSS-MC training for all maintenance managers and logistics personnel. Units will continue to develop programs for training all personnel involved with GCSS-MC input, equipment maintenance status, and other related automated logistical management reports.

e. MOS Training. Referred to as 'T&R requirements', classes should be "hard skill", (i.e., trouble shooting, mechanical, electrical, fault isolation, diagnoses, functional repair procedures, functional QC, etc.). Reference (a) lists recommended topics for maintenance training. Conduct MOS training under the supervision of the unit's MMO and commodity managers who are responsible for developing maintenance training programs and performance objectives. Unit-level commodity managers are responsible to ensure that all scheduled training is in accordance with the T&R manual. MMO and commodity managers will recommend changes to the training policy as required. Training of maintenance personnel will include, but not be limited to:

(1) Refresher. Provide mechanics and technicians the level and degree of instructions to enable them to perform maintenance duties commensurate with their rank, MOS, and available reserve training time.

(2) Qualification. Place unskilled mechanics and technicians on a planned schedule of directed training to qualify them for assignment of a primary MOS per reference (r).

(3) Supervisory. Provide maintenance supervisory training to all personnel in positions of supervision. The objective of maintenance supervisor training is to develop in supervisory personnel a working knowledge of those maintenance management and operator training topics (as appropriate) presented in reference(a). Training should enable supervisors to implement, direct, control, and review maintenance programs within their area of responsibility and provide training with the expertise required to effectively and economically operate the unit's maintenance program and to achieve the desired results. This training is applicable to, and should be directed towards, all Marines in the unit who have or potentially will have supervisory responsibilities over any maintenance function, to include administration. Training is not limited to SNCOs and officers (active or reserve component). For all other maintenance MOSs refer to appropriate MOS T&R manual. Due to the geographic dislocation nature of MARFORRES, units are encouraged for use a multitude of avenues and methods to conduct training which can include DCO, ADOS, contractors, FSRs, teleconference, and computer aided training, just to name a few.

(4) Safety. In terms of this SOP, such training is applicable to every maintenance related MOS in the organization, focusing on the new Marine that checks into the unit. Topics should cover all aspects from operations to shop safety.

(5) Special Technical Training. Training is directed at a specific MOS or item of equipment. Use training to upgrade or refresh maintenance knowledge or to provide instructions on new items of equipment. When new equipment is received or new people are introduced to unfamiliar equipment, technical training should be adjusted accordingly.

3. Training Sources. I&I staffs are the principle facilitators of training for Selected Marine Corps Reserve (SMCR) Marines. I&I duty outlines the critical relationship between SMCR Marines and their I&I staff counterparts that ultimately allow the

coordination for effective maintenance training programs.

a. Formal Schools. Formal schools will be used to augment unit training. Marine Corps Combat Service Support School (MCCSSS), Camp Johnson, offers one Maintenance Management Supervisor's Course each year. MARFORRES G-3/Training exercises staff cognizance over quotas and nominations for the Maintenance Management courses at MCCSSS. The Intermediate Maintenance Management Specialist Course is open to Marine Corporals through Gunnery Sergeant who are assigned to or anticipating assignment to a maintenance management billets. Emphasis is primarily upon the duties of MMOs and MMCs, however, command-level applications also receive strong emphasis.

b. Field Training. Commanders will ensure maintenance personnel are provided maintenance training in a field environment and are technically proficient in the performance of all authorized maintenance services under tactical conditions. Commanders will also ensure that necessary maintenance periods are specifically designated on training schedules while operating under field conditions. Perform field training and field maintenance using only T/E equipment. The performance of organizational maintenance is more challenging during deployments and field operations due to increased equipment usage and dispersion of equipment and maintenance assets. During such periods, commanders will place an increased emphasis on the performance of organizational maintenance. Field maintenance training exercises will include equipment recovery, evacuation, and the use of field maintenance resources.

c. Managed On-The-Job-Training (OJT). Use managed OJT as a program leading to the assignment of an MOS or as refresher training on new or unfamiliar procedures and equipment. Personnel undergoing managed OJT will be teamed with experienced and qualified personnel to ensure that only proper methods and procedures are highlighted to trainees. Managed OJT will be formally scheduled, documented and recorded in unit training records. This type of training is often done on an opportune basis, particularly when a new or unfamiliar method, problem, or procedure is encountered during normal maintenance production. All maintenance personnel are assembled, and an on-the-spot class is conducted by maintenance supervisors covering the subject area. When applied properly, managed OJT can be used to effectively accomplish MOS training, maintenance cross training, and new equipment training. Supervision and instruction of OJT

will stress the application of approved maintenance procedures and techniques to instill sound maintenance practices and habits in the personnel being trained.

d. Correspondence Courses. The Marine Corps Institute (MCI), MarineNet, 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. MMOs will pay close attention to the series of maintenance related courses developed and offered by MCI and MarineNet. Group enrollment is strongly encouraged for those MCI courses related to the maintenance management functional areas.

e. Technical Training. Technical training (skill-progression MOS training) is required for all technicians and maintenance supervisors, and will provide the level of instruction necessary to perform maintenance duties commensurate with rank and MOS. Schedule and conduct specific technical training classes when new types of equipment are introduced or new maintenance personnel are introduced to unit equipment. Conduct refresher training for noted deficiencies. Schedule and conduct specific classes regarding the use and maintenance of all support and test equipment (e.g., use and care of tools, use and care of TMDE, etc.).

f. Materiel Readiness Training Cell (MRTC). The MRTC provides supply and maintenance GCSS-MC training. MRTC trainers can be requested through the MARFORRES G-4 Operations Branch. The MARFORRES MRTC can coordinate with I and II MEF's MRTCs for training.

g. HHQ. Additional Maintenance-related expertise is available throughout the chain of command. Adjacent units and host site units with similar maintenance capabilities can be a valuable training resource. Units in need of training support should not ignore these options.

4. Cross Training

a. While the cross training of maintenance personnel is not directed by this headquarters, it is encouraged as a management tool to be used at the organizational level to assist in the overall maintenance efforts.

b. Cross training provides the shop and maintenance officers with increased flexibility in maintenance operations.

c. When cross training is used, MMOs, MOs, and commodity managers will ensure that:

(1) Cross training is normally confined to personnel within related occupational fields.

(2) Accomplish cross training of personnel from different occupational fields only to fill valid requirements.

(3) Use cross training of personnel effectively within the organizational maintenance program.

(4) Maintenance shops keep a record of all unit personnel who have been cross trained.

5. Training Records

a. Training records provide the SNCOIC or maintenance officer with the means to administer the unit or shop level training program. Without such records, the training program may suffer from an inadvertent omission of necessary training.

b. Maintenance managers will keep the following training records, if applicable, for technical training, which falls under their review:

(1) Annual Training Plans. Annual training plans contain information on training planned for the upcoming calendar year. Conduct a thorough review of the unit's maintenance training posture to determine what specific training areas will receive emphasis during the upcoming year. Compile this information and incorporate it into the annual training plan.

(2) Quarterly Training Directives. The quarterly training directive delineates, specifically, what classes will be conducted during the quarter. It may or may not schedule classes specifically as to time and place, at the unit's option, but should delineate, at a minimum, what training will be conducted.

(3) Monthly Training Bulletins. Monthly training

bulletins will specify where a period of instruction will take place, who will deliver the period of instruction, who will attend, and when the period of instruction will take place. The MMO, MO, or commodity manager will ensure that qualified instructors are assigned.

(4) Attendance Roster. Maintain attendance rosters for each period of instruction held. Figure 4-1 is a sample format for a class attendance roster.

(5) Course Critique. Periodic evaluations of maintenance training will be conducted. The sponsor of the training will maintain records of evaluations. Figure 4-2 is a sample format for a course critique.

(6) Lesson Plans. The sponsor of the training provided will maintain a file of lesson plans if the lesson plans are to be reused. If lesson plans are used more than once, the lesson plans will be reviewed prior to reuse and certified as current, or revised prior to the conduct of training. Figure 4-3 is a sample format for a lesson plan and Figure 4-4 is sample format for an essential data sheet for a lesson plan.

CLASS ATTENDANCE ROSTER

COURSE TITLE _____ INSTRUCTOR _____
LOCATION/UNIT _____ / _____ DATE _____

	LAST NAME	FIRST INITIAL	SECTION/ BILLET	MOS/ RANK		LAST NAME	FIRST INITIAL	SECTION/ BILLET	MOS/ RANK
1.					19.				
2.					20.				
3.					21.				
4.					22.				
5.					23.				
6.					24.				
7.					25.				
8.					26.				
9.					27.				
10.					28.				
11.					29.				
12.					30.				
13.					31.				
14.					32.				
15.					33.				
16.					34.				
17.					35.				
18.					36.				

Figure 4-1. Sample Class Attendance Roster

COURSE CRITIQUE

COURSE TITLE_____ INSTRUCTOR_____
DATE_____ TIME_____ REVIEWER_____

1. Did the instructor present the learning objectives prior to the class? YES NO

2. Was the period of instruction presented in a manner, which was easy to follow? YES NO

3. Were training aids used? YES NO

4. Did the instructor provide detailed answers to questions? YES NO

5. General comments.

Figure 4-2. Sample Course Critique

CLASS TITLE
LESSON PLAN

A.	INTRODUCTION	(2) MINUTES
	1. GAIN ATTENTION:	
	2. MOTIVATE:	
B.	PURPOSE AND MAIN IDEAS:	(2) MINUTES
C.	TRANSITION:	(1) MINUTE
D.	BODY	(40) MINUTES
E.	QUESTION & ANSWER PERIOD	(5) MINUTES
F.	SUMMARY & REVIEW	(5) MINUTES
G.	CLOSING STATEMENT	(2) MINUTES

Figure 4-3. Sample of a Lesson Plan

ESSENTIAL DATA SHEET

SUBJECT	CLASS TITLE
DATE PREPARED	19 August 2014
CLASS ROOM REQUIREMENTS	Whiteboard Seating for twenty Good lighting Electricity
STUDENT REQUIREMENTS	Attendance Paper Student Outlines TM 4700-15/1_
REFERENCES	MCO P4790.2_ TM 4700-15/1_ UM 4790-5
PURPOSE AND MAIN IDEAS	The purpose of this period of Instruction is to enable each student to review and submit PQDR's and records per requirements outlined in Chapter 4.

Figure 4-4. Sample Format of an Essential Data Sheet

Chapter 5

Inspections/Visits/Quality Control

1. Introduction

a. A commander is responsible for personal observation of the maintenance status and operating procedures, which supplement the reports received on equipment operations. Equipment and maintenance management inspections are instruments by which a commander may ascertain equipment status and ensure effective maintenance procedures are being followed.

b. Maintenance inspections are conducted in the form of staff visits, technical inspections, and command inspections. These inspections are conducted by the unit commander, the commander's staff, or by higher headquarters. Inspections may be conducted by various methods and for a variety of reasons. The command will determine the type inspection used based on the inspection objective.

c. Inspections and visits are the principal means available to unit commanders to determine whether their planning and organization are sound, if there are staffs functioning effectively, and if their directives are clear, well understood, and implemented by subordinates. Inspections and visits enable unit commanders to evaluate their units' effectiveness in the use of maintenance resources. Inspections and visits are subdivided into formal inspections, informal inspections, and Field Supply and Maintenance Analysis Office (FSMAO) analyses.

2. Formal Inspections

a. The Commanding General's Inspection Program (CGIP). The CGIP is managed by the G-7 and additional information can be found in ForO 5040.4_.

b. FSMAO. FSMAO analyses are established to provide the Commandant of the Marine Corps with direct field representation at the unit level by analyzing the effectiveness of supply and maintenance procedures. The purpose of FSMAO is threefold: (1) Analyze the effectiveness of unit supply and maintenance procedures; (2) Determine the efficiency of the units being analyzed; (3) Furnish assistance and guidance in supply and maintenance operations and procedures. FSMAO visits are announced each fiscal year (FY). Reference (h) contains

additional FSMAO details and information. Units will retain the maintenance and supply resumes as a working checklist between each analysis.

c. Commander's internal inspection program.

3. Informal Inspections

a. General. Use informal inspections to obtain first-hand information about a unit and its operating procedures. Inspections conducted in an informal manner should stress the exchange of information and ideas and result in reporting a current baseline. The use of FSMAO checklists are recommended when performing inspections.

b. MMO Inspections. Each unit will conduct an internal maintenance management inspection of all maintenance commodities semi-annually, scheduled in coordination with the unit's S-3. Document and retain results on file for two-years.

c. Staff Assist Visit. A Staff Assist Visit (SAV) is designed to assist a unit resolve discrepancies and prepare for a FSMAO inspection. Requests for a SAV can be routed through the chain of command to MARFORRES G-4 Operations Branch via the respective MSC.

4. Formal Inspection Reports

a. Oral Reports. The inspection team from this headquarters will provide oral critiques to unit commanders covering all discrepancies noted during formal inspections. Critiques will be detailed in nature, and provide for immediate resolution of findings.

b. Written Reports. Inspection reports will be prepared by all maintenance management and commodity area inspectors for all inspections conducted by this headquarters. In addition to the completed checklists, inspection reports will include comments and recommended corrective actions for noted discrepancies. Inspection reports will not cite discrepancies not briefed during post inspection oral critiques.

c. Review. Inspection reports prepared by this headquarters will be reviewed, consolidated, analyzed, and maintained by MARFORRES staff officers. Unit commanders will

maintain a file on all maintenance and maintenance management inspections conducted by the unit or higher headquarters.

d. Retention. The unit MMO will maintain maintenance and maintenance management inspection reports prepared by higher headquarters as well as FSMAO reports with endorsements for a minimum of three years or until the next FSMAO.

5. Correction of Discrepancies

a. Correct all discrepancies noted during inspections in an expeditious manner. Preparation for future inspections will include special emphasis on previously noted discrepancies to ensure that no repeat discrepancies occur.

b. As directed, submit reports of action taken to correct noted discrepancies to the appropriate headquarters based on requirements contained in related inspection reports.

6. Quality Control (QC)

a. QC requires a complete equipment checkout to determine proper completion of maintenance actions and that equipment records are completed in.

b. Critical to the effective performance of maintenance is a viable and aggressive quality control program. At a minimum, such programs will ensure the following items are executed:

(1) Each commodity upon availability will assign, at a minimum, a primary QC inspector. Every effort will be made to assign an alternate QC inspector. Such assignments will be made in writing.

(2) QC inspectors will be adequately educated in their responsibilities and the importance of their position.

(3) Commodity Managers will ensure QC inspectors are performing their duties using the appropriate technical manuals.

(4) The SR must be approved signed by the individual performing the quality control inspection. Units with a single mechanic or technician performing maintenance tasks may approve the SR as their own QC inspector after all other options have been exhausted.

c. I-I duty carries significant responsibilities, where Marines work independently and often on small scale staffs. Consequently, collateral duties can consume Marines and divert them from billet responsibilities. However, principal duties by billet involve inspecting and instructing in technical capacity. Organizational units should review and evaluate internal quality control process for a commodity that only has one individual to conduct and possibly inspect maintenance actions. In these cases, a Maintenance Policy Notice that outlines unique considerations should be published.

7. Product Quality Deficiency Report (PQDR). The PQDR is a means of notifying the item manager and manufacturer of deficiencies in materiel, design, or procurement so that action may be initiated to correct the reported deficiency. Submit all product quality deficiencies directly to the PQDR Control Point, Albany, GA per reference (s), and provide an electronic copy of the PQDR to MARFORRES G-4 via the MSC MMO. The unit's MMO will be the coordination point for submission of PQDRs.

Chapter 6

Facilities

1. Introduction. Facilities are real estate or structures that provide support for missions, functions, and tasks. It is important that land and facilities be accorded the same commitment, concern, and support as other warfighting systems. The staff functions and considerations and factors effecting site selection, shop layout, and shop organization are established in reference (a).

2. Assignment and Responsibilities

a. Maintenance area site selection is governed by mission, terrain, size, environment, tactical situation, and associated maintenance requirements. The location of a unit's maintenance facilities is largely determined by the commander who has the responsibility for the selection of the specific command post site and the allocation of space within it. The MMO will advise the commander and commander's staff on the arrangement of maintenance facilities.

b. Commanders must ensure their unit has the appropriate facilities and associated equipment in order to perform that unit's directed LOM. Facility considerations must be taken into account in both field environments and in garrison.

3. MARFORRES Facilities. MARFORRES Facilities provides and sustains safe, secure functional facilities to meet the evolving requirements of the Force. Units should use their chain of command to submit requests for the assignment of additional facilities or improvement of assigned facilities to MARFORRES Facilities. MARFORRES G-4 Maintenance Branch will validate maintenance facility requirements and act as advocate for unit requests.

Chapter 7

Directives and Technical Publications

1. Introduction

a. One of the essential resources contributing to an effective equipment maintenance program is a complete and up-to-date library of maintenance related and equipment associated publications. Commanders will verify that authorized maintenance related and equipment associated publications are on-hand and that effective internal distribution control procedures are established. Units will maintain sufficient publication on-hand to sustain operations. Digitized publication obtained from the Internet, CD-ROMS, or other sources must be maintained on site as either electronic or paper copies. Action is required to increase or decrease allowances as requirements change.

b. The term publication as used throughout this Order includes both directives and technical publications. Examples of directives are Marine Corps Orders (MCOs) and Marine Corps Bulletins (MCBuls). Examples of technical publications are Technical Manuals (TMs) and Modification Instructions (MIs).

c. Technical publication control is a subset of the unit's entire publication control program. The publications control system is divided into four functions: Automatic distribution control; internal distribution control; inventory control; and order control.

2. Responsibilities. The commander is responsible for an effective unit maintenance and maintenance management effort, to include a technical publications control system. The S-1/Adjutant with the advice and assistance of the MMO and other functional area managers are responsible for the overall operations of a unit's publications control system. Marine Corps Publications Distribution System (MCPDS) allows the designated user to view the current listing of publications, maintain and manage the Publication Listing (PL), and order publications on-line. Headquarters Marine Corps (ARD) manages PLs by Individual Activity Codes (IACs). Reference (o) outlines the responsibilities for the commander's PL management. Reference (a) requires the use of a publication control form.

3. Publications Control

a. It is not possible to separate publications control procedures for technical and non-technical publications. The unit MMO and maintenance officers will advise the S-1/Adjutant on matters relating to technical publications and will coordinate maintenance section publication requirements.

b. In setting up a technical library, it is necessary to consider both technical and non-technical publications. Set up a system to support the continuing operation of the technical publications library.

c. MMO or Maintenance Officer Requirements

(1) Establish procedures to update and validate the PL to provide for adequate publications. This will be done continuously during the MMOs internal reviews.

(2) Establish procedures for validation of on-hand technical publications with the updated Publication Listing Management System (PLMS) as it is received.

(3) Establish procedures, through the S-1/Adjutant, for the semi-annual validation of on-hand directives in the commodity areas using PLMS and higher headquarters checklists.

(4) Establish procedures to verify publications on-hand as being applicable to the types of equipment and LOM authorized by the unit.

(5) Maintain MIs for all LOM to verify the application of those required modifications.

(6) Establish procedures for verifying unit's PL or request for changes to publications shown on the units internal publication control form.

(7) Provide training for the maintenance and updating of publications to include incorporating changes into the basic publications, filing changes, and removing outdated or superseded publications from the files.

Chapter 8

Maintenance Related Programs

1. Introduction

a. Maintenance related programs sponsored by HQMC and this headquarters are designed to enhance equipment readiness through the application of special procedures. Maintenance related programs are closely related to the maintenance management functional area programs outlined in this Order, and will be given the appropriate emphasis in day-to-day maintenance operations. Generally, maintenance related programs are equally applicable in all commodity areas.

b. Commanders will assign specific responsibility for the control and management of maintenance related programs.

2. Preventive Maintenance (PM) Stand-Down

a. Commanding officers are ultimately responsible for equipment readiness. The key to a high state of equipment readiness is an aggressive and effective PM program. While in garrison, commanders are encouraged to set aside one day per month for PM or as necessary (depending on equipment density or available personnel). Commanders will ensure PM periods are identified as part of the training schedule while in a deployed or operational environment. A PM stand-down is an example of a type of MSD.

b. PM periods will contain the following features:

(1) Command presence.

(2) Availability of all assigned equipment operators.

(3) Adequate tools, protective clothing, and supervision for operators.

(4) Equipment will undergo detailed supervisor inspection procedures at the completion of operator PM.

c. The designation of a PM stand-down provides an excellent means to conduct operator and technician training. Operator training, which normally encompasses proper and safe equipment

employment and operation, will include periods of instruction dedicated to developing knowledgeable operator PM.

d. MMOs will coordinate with unit S-3 officers to establish PM time frames and attendance requirements. Do not use maintenance stand-downs for other individual unit training.

3. Administrative Storage and Control. In the event that a unit determines that it needs to reduce on-hand equipment for a specific period of time, but not as part of their T/A validation process or a unit activation, the Administrative Storage Program (ASP) is available in order to properly account for and maintain on hand equipment.

a. Unit commanders must request written authorization from their MSC G-4 to establish an ASP. The request must state why the equipment is to be placed in an ASP, a listing the equipment stored by TAMCN, nomenclature, serial number(s), date inducted, and estimated release date. Commanders may induct equipment into the ASP at any time. Once authorized, commanders must provide an updated letter to their MSC G-4 when any additions or deletions to their ASP occur. A courtesy copy of the final original MSC approval letter, supporting documentation, and subsequent change letters will be submitted to MARFORRES G-4 Maintenance Branch.

b. Equipment to be released prior to 12 months from induction will require a written authorization request letter to their MSC G-4 for approval.

c. The minimum storage period is 12 months and the maximum storage period is 36 months per reference (a). Commanders should consider their geographical location and climate conditions when authorizing equipment to be stored outdoors and adjust the storage period to ensure equipment remains in a serviceable condition while in the ASP. Under no circumstance will the maximum storage period for this equipment category be extended. Equipment in the ASP should be evaluated for reduction as part of the biannual T/A validation.

d. Before inducting equipment into an ASP, the owning unit must conduct a LTI of the equipment to ensure equipment is in a serviceable condition.

(1) Equipment placed in an ASP must:

(a) Be in condition code A or B.

(b) Be exercised per applicable TM or Technical Instructions (TI) requirements.

(c) Have any due PMCS conducted and new PMCS scheduled upon removal. The PMCS will be annotated in the remarks section in GCSS-MC and that the equipment is in the ASP.

(d) Be in level A or B preservation per local PP&P facility's guidance.

(2) Inspection of Equipment in the ASP. Preserving items for storage is expensive and time consuming. Once the expense of preserving equipment has been incurred, care should be taken to prevent recurring preservation cost while conducting inspections. Commanders should include ASP inspection procedures and timelines based on their PP&P facility's recommendations and geographical locations in their MMSOP, MMPN, or their endorsement authorizing an ASP. A thorough inspection of unit ASPs should be conducted during formal inspections and assist visits, such as FSMAO visits. At a minimum, command-authorized ASPs will conduct visual inspections as follows:

(a) Items stored outdoors, monthly and after severe weather.

(b) Small arms, monthly during the monthly serialized inventory.

(c) Items stored indoors, quarterly.

(d) Items stored in a dehumidified facility, semiannually.

Note: For the purpose of the ASP, "visually inspect" means to visually look at the equipment to ensure the preservation and packing is still serviceable. "Visually inspect" any security measures (such as banding material, locks, or serialized tags) to ensure that they have not been tampered with. This does not mean that containers or boxes packed by the PP&P facility should be opened to look at the equipment packed inside. Nor does this mean that you must break preservation seals to inspect inside of vehicles.

(3) Accounting and security guidance for level A packed weapons is contained in reference (m) and (n).

(4) Items preserved by a PP&P facility will have a copy of the packing list, with the date preserved and PP&P facility location attached to the equipment or containers, and a copy on file. Items not preserved by a PP&P facility will have the work performed to preserve the item annotated on a SR.

4. Administrative Deadline (ADMDL) Program. Units will use the ADMDL program as a management tool to conserve resources at the unit level. Before using the ADMDL program, units will look at the feasibility of reducing their T/A to conserve resources. Commanders may establish an ADMDL program per reference (a).

5. Inspect and Repair Only As Necessary (IROAN) Program

a. The purpose of IROAN is to extend the service life of equipment. Equipment inducted into IROAN is not subject to a complete rebuild. Additional information concerning IROAN can be found in reference (t).

b. MARFORRES G-4 MMO will publish a message announcing the equipment and procedures for processing IROAN candidates. Detailed procedures, to include the authorization and extent of selective interchange of serviceable components, will be included in the message.

c. Commanders will ensure that equipment nominated for the IROAN program is not subjected to neglect, abuse, or cannibalization.

d. The unit MMO, Maintenance Officer, Supply Officer, and commodity managers are responsible for managing the IROAN program.

6. Corrosion, Prevention, and Control (CPAC)

a. Background. In an effort to stem the damage caused by corrosion, MARFORRES has established a comprehensive CPAC program in-line with the MEFs, and centrally managed by PG-09 at MARCORSYSCOM. MARFORRES will take full advantage of the existing capabilities developed by the CPAC program office to correct the increasing problem of corrosion affecting our tactical fleet of equipment.

b. Responsibilities. Although the corrosion control program corrects many maintenance problems associated with corrosion and enhances the life expectancy of vehicles, this program in no way eliminates the need for quality field LOM being performed at the using unit. In fact, many cases of serious corrosion problems could have been minimized by having a more comprehensive PM program.

(1) MARFORRES G-4 will manage and provide force requirements to MARCORSYSCOM in order to execute this program. The G-4 will maintain updated schedules, notify units quarterly and prior to the team's arrival, and provide final authorization for all schedule change requests.

(2) MSCs will assist in schedule dissemination and endorse using unit responsibilities.

(3) Units and I&I sites will ensure that equipment is clean and accessible when notified of a scheduled visit, have adequate personnel available to provide equipment access (to include weekends), and not interfere with CPAC operations or daily routines. CPAC services will be documented in GCSS-MC by the owning unit.

(4) CPAC program teams will perform corrosion services in accordance with the approved schedule and statement of work. Provide unit representative with training of the MARCORSYSCOM CPAC database.

c. There are four main components to the Program: Mobile Corrosion Repair Facilities (MCRFs); Corrosion Service Teams (CST); Controlled Humidity Protective Shelters (CHP); and custom-fit equipment covers.

(1) MCRFs. The MCRFs are the primary source of repair for MARFORRES equipment that has been damaged due to corrosion. In addition to repairing equipment, MCRFs apply undercoating, spray-in bed liners for trailers, and anti-corrosive coatings to equipment to prevent corrosion from developing. These preventive measures taken by the MCRFs directly contribute to extend the life expectancy of the aging equipment fleet.

(a) Host locations for the MCRFs are directed by MARFORRES G-4 via a unit's MSC. Locations are chosen based upon the density of corrosion category 3 items at any given site or

geographical area. Due to the costs associated with the movement of the MCRFs, equipment will be delivered from outlying units for corrosion repairs when practical. The host unit should expect the MCRF to be on-site for three to six months.

(b) Items designated for corrosion repairs will be delivered to the facility in a clean and operational state. Equipment operators will be provided for movement of equipment in and out of the facility.

(2) CSTs. The CSTs apply corrosion preventive compounds to all tactical ground equipment, to include quad cons. In addition, they perform corrosion assessments to aid in the identification of equipment requiring more extensive corrosion repairs. The CST will also provide training on the use of MARCORSYSCOM's CPAC database in order to keep the unit apprised of the status of their equipment as it relates to the corrosion categories. Those categories are:

(a) Category 1: Item requires no corrosion repair or preservatives, and has been assessed within the past six months. The goal is to maintain the item as a category 1.

(b) Category 2: Item requires surface preparation, spot paint, and preservation at the field LOM. The goal of this effort should be to return the item to category 1.

(c) Category 3: Item requires maintenance performed beyond the organizational level. Spot painting has arrested the corrosion, but the item is now in a condition that requires complete repainting and overcoat. The item must be inducted to the corrosion repair facility for repair. The goal of this effort is to induct the item so that it will return to the unit in a category 1 condition.

(d) Category 4: Item requires repair to sheet metal, major frame components, paint, blasting, and undercoating (e.g. replacement or repair of components such as doors, fenders, and chassis frame rails, or battery boxes due to corrosion) The goal of this effort is to immediately induct the item into the corrosion repair facility so that it will return to the unit in a category 1 condition.

(e) Category 5: The item is degraded to a degree that requires depot level repair and replacement based on the

deterioration caused by corrosion. Once an item is identified as Category 5, the unit must submit a disposition of ME.

(3) CHPs. The most effective way to stop corrosion and prevent further deterioration is to place the equipment into a controlled environment. While extremely effective, consideration must be given to the space required to construct a CHP system. Requests for CHPs should be addressed to MARFORRES G-4, via the unit's MSC.

(4) Custom-Fit Equipment Covers. Equipment covers are effective at reducing the rate of corrosion. These covers are tailored to fit Marine Corps ground equipment and are purchased by MARFORRES through the CPAC program office. When using equipment covers, diligence should be exercised to ensure the covers are properly employed when covering equipment and properly stored when not in use. Requests for equipment covers should also be addressed to MARFORRES G-4 through the unit's MSC.

7. Load Testing and Safety Inspections

a. Perform load testing for all load lifting equipment per reference (r). Maintain load-testing records per references (c) and (u).

b. Conduct safety inspections of hydraulic jacks and jack stands per reference (r).

c. 4th MLG is the primary source for load testing inspections and service. In the event the 4th MLG cannot perform the services required, units are authorized to receive services from a civilian entity. However, the civilian entity must be properly certified for load testing services and adhere to standards set forth in reference (r).

8. Enterprise Lifecycle Management Program (ELMP). ELMP is a HQMC directed program focused on lengthening the lifespan of various types of equipment. Nominations for this program should be in condition code 'F', and/or meet established criteria and submitted for disposition of ME. This equipment is rebuilt or refurbished in accordance with the master work schedule promulgated by MARCORLOGCOM. Equipment that has been refurbished is then released to fill existing deficiencies. A message is published quarterly directing units to provide nominations along with coordinating instructions.

9. Contracted Logistics Support (CLS)

a. CLS assists and augments MARFORRES commands in conducting a portion of that unit's organic PM/CM as detailed. The MARFORRES G-4 Maintenance Branch will serve as the scheduling authority for CLS. They will develop schedules on a quarterly basis and support unit requests as authorized and aligned to Commander MARFORRES (COMMARFORRES) priorities. CLS schedules will be developed with MSC SME staff input. CLS schedules will be release via the AMHS. The following factors will drive schedule development:

(1) Five year training plan equipping priorities.

(2) Battalion/squadron level capability gaps.

(3) FSMAO schedule preparation.

(4) Specific MSC requirement.

(5) Geographic location.

b. Units will request CLS through their MSC in accordance with local SOPs. The MARFORRES MMO will host regularly scheduled meetings with MSCs to validate CLS schedules and build the ground transportation routes that are most feasible and efficient. Changes to schedules and requests for services outside the published schedule will be routed through the MSC.

c. MARFORRES G-4 will provide final authorization for all corrective maintenance and schedule change requests. All units will ensure required documentation for services performed by CLS is accurately completed and entered into GCSS-MC.

10. Fleet Card. The preferred method for maintenance services is through Marine units. MARFORRES units are authorized to use the "dry lease" Fleet Card in emergency situations or when normal maintenance procedures are impractical or uneconomical. All services conducted by a commercial organization must be in inspected by a Marine QC inspector and documented in GCSS-MC. All parts used must be ordered through the Marine Corps supply system. Additional information on procedures for use the Fleet Card can be found in references (v), (w), https://www.navsup.navy.mil/ccpmd/fleet_card/policies, or the MARFORRES Comptroller.

a. The Fleet Card should be used to purchase fuel and related maintenance services for DOD/DON owned and leased vehicles. The Fleet Card, also known as the Wright Express (WEX) Card, is the only authorized card for DON personnel to use for purchasing fuel and related maintenance services for DOD owned and leased vehicles and equipment at commercial establishments.

b. "Wet lease" is a term used for GSA leased vehicles that come with their own WEX cards. GSA wet lease cards stay with the vehicle and the lease rate includes the fuel purchases. Contact MARFORRES Fleet Management or HQMC LFF Fleet Management for approval of unusual requests (e.g. Snow tires for northern sites during winter season). Review additional GSA guidance at www.GSA.gov.

c. The DON Consolidated Card Program Management Division (CCPMD) Office Fleet Card Program provides "dry lease" cards which do NOT come with individual vehicles and are used for DOD owned and leased vehicles and equipment needing fuel and services. The cards can be used for cars, trucks, forklifts, small boats, tugs, barges, weed trimmers, and lawn mowers. These cards are also issued through Wright Express and are also WEX cards. The WEX card can be used at commercial locations, on and off base, wherever they are accepted.

d. Links to commercial stations accepting the WEX card for fuel and maintenance are available on the Fleet Card page of the CCPMD web site under the bank guidance page.

11. Warranty Program. Per reference (m), reserve units possessing organizational maintenance capability which are geographically separated from intermediate maintenance activities, are authorized to make warranty determination and to coordinate warranty actions with the warranty administrator at MARCORLOGCOM through the MARCORLOGCOM LNO resident within MARFORRES G-4. Reserve units not possessing organizational maintenance capability will obtain warranty service through a supporting organizational maintenance activity.

APPENDIX A

ACRONYMS

ADCON	Administrative Control
ADOS	Active Duty for Operational Support
AMHS	Automated Message Handling System
ASP	Administrative Storage Programs
AT	Annual Training
BCS3	Battle Command Support and Sustainment System
CGI	Commanding General's Inspection
CHP	Controlled Humidity Protective Shelter
CLB	Combat Logistics Battalion
CLC2S	Combat Logistics Command and Control System
CLR	Combat Logistics Regiment
CLS	Contracted Logistics Support
COST JON	Cost Job Order Number
CPAC	Corrosion Prevention and Control
CST	Corrosion Service Team
DCD	Deadline Control Date
DLA	Defense Logistics Agency
DMO	Distribution Management Office
DODAAC	Department of Defense Activity Address Code
DON	Department of the Navy
DRMO	Defense Reutilization Management Office
DRRS MC	Defense Readiness Reporting System Marine Corps
DSI	Demand Supported Item
EAP	Equipment Allowance Pool
EEAP	Enhanced Equipment Allowance Pool
EDL	Equipment Density List
ELMP	Enterprise Lifecycle Management Program
FA	Funds Administrator
F/AD	Force Activity Designator
FHG	Force Headquarters Group
GCSS-MC	Ground Combat Support System-Marine Corps
FY	Fiscal Year
GPN	GCSS-MC Procedural Notice
HAZMAT	Hazardous Materials
HTC	Home Training Center
IAC	Individual Activity Codes
IMA	Intermediate Maintenance Activity
ISSA	Inter Service Support Agreement
I-I	Inspector-Instructor
IWGCEP	Infantry Weapons Gage Calibration Exchange Program
JON	Job Order Number
LOA	Letter of Agreement

LOGAIS	Logistics Automated Information System
LOI	Letter of Instruction
LSFRG	Logistic Systems Functional Resource Group
LTI	Limited Technical Inspection
MAGTF	Marine Air Ground Task Force
MAW	Marine Aircraft Wing
MARFORRES	Marine Forces Reserve
MCPDS	Marine Corps Publications Distribution System
MCGER	Marine Corps Ground Equipment Readiness
MCRF	Mobile Corrosion Repair Facility
ME	Military Equipment
METS	Marine Essential Tasks
MFR	Marine Forces Reserve
MHE	Material Handling Equipment
MLG	Marine Logistics Group
MLS2	MAGTF Logistics Support Systems
MMO	Maintenance Management Officer
MMC	Maintenance Management Chief
MMPN	Maintenance Management Policy Notice
MMSOP	Maintenance Management Standard Operating Procedures
MOS	Military Occupational Specialty
MRTC	Material Readiness Training Cell
MSC	Major Subordinate Commands
MSD	Maintenance Stand-Down
MSE	Major Subordinate Elements
NIIN	National Item Identification Number
NSN	National Stock Number
PEB	Pre-expended Bin
PEI	Principle End Items
PL	Publication Listing
PMCS	Preventative Maintenance, Checks, and Services
POA&M	Plan of Action & Milestones
POC	Point of Contact
POL	Petroleum Oil & Lubricants
PP&P	Preservation Packing & Packaging
QC	Quality Control
RFI	Request For Information
RO	Responsible Officer
RSA	Reserve Support Agreement
RSU	Reserve Support Unit
RTC	Reserve Training Center
SABRS	Standard Accounting & Budgeting Reporting System
SAVT	Staff Assist Visit Team
SECDEF	Secretary of Defense
SECREP	Secondary Reparable
SMCR	Selected Marine Corps Reserve

SOP	Standing Operating Procedures
SR	Service Request
STAP	Special Training Allowance Pool
T/A	Training Allowance
TAMCN	Table of Authorized Material Control Number
TEEP	Training Exercise Employment Plan
T/E	Table of Equipment
T/O	Table of Organization
TCPT	Transportation Capacity Planning Tool
TEMP LOAN	Temporary Loan
UMMIPS	Uniform Materiel Movement and Issue Priority System
UND	Urgency of Need Designator
UUAM	Using Unit Account Manager
WEX	Wright Express

APPENDIX B

REFERENCES LIST

(a)	MCO P4790.2_	MIMMS FIELD PROCEDURES MANUAL
(b)	DoDI 1348.30	SECRETARY OF DEFENSE MAINTENANCE AWARDS PROGRAM
(c)	UM 4000-125	RETAIL SUPPLY AND MAINTENANCE EXECUTION PROCEDURES
(d)	MCO 4400.16	UNIFORM MATERIAL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)
(e)	MCO 4400.160	FIELD SUPPLY AND MAINTENANCE ANALYSIS OFFICE PROGRAM (FSMAO)
(f)	MCO 4400.150_	CONSUMER-LEVEL SUPPLY POLICY
(g)	ForO 4000.19	INTERSERVICE AND INTRAGOVERNMENTAL SUPPORT AGREEMENT (ISA) ADMINISTRATION AND MANAGEMENT
(h)	MCO 4790.25	GROUND EQUIPMENT MAINTENANCE PROGRAM (GEMP)
(i)	MCBUL 3000	MARINE CORPS READINESS REPORTABLE GROUND EQUIPMENT
(j)	MCO 3000.13	MARINE CORPS READINESS REPORTING STANDARD OPERATING PROCEDURES (SOP)
(k)	ForO 4733.1_	CALIBRATIONS STANDARD OPERATION PROCEDURES
(l)	TI-4733-OD/11	INFANTRY WEAPONS GAGE CALIBRATION PROGRAM (IWGCP)
(m)	TI-4733-OD/21	INSTRUMENT MAINTENANCE AND CALIBRATION MANUAL
(n)	MCO P4400.82_	MARINE CORPS UNIFIED MATERIAL MANAGEMENT SYSTEM (MUMMS) CONTROLLED ITEM MANAGEMENT MANUAL
(o)	MCO 5320.12_	PRECEDENCE LEVELS FOR MANNING AND STAFFING
(p)	MCO 4855.10_	PRODUCT QUALITY DEFICIENCY REPORT (PQDR)

(q)	MCO P11262.2_	INSPECTION, TESTING, AND CERTIFICATION OF TACTICAL GROUND LOAD LIFTING EQUIPMENT
(r)	MCO 8300.10	MARINE CORPS SERIALIZED SMALL ARMS/ LIGHT WEAPONS ACCOUNTABILITY PROGRAM (MCSSAAP)
(s)	MCO 5600.31_	MARINE CORPS PRINTING AND PUBLISHING REGULATIONS
(t)	MIL-STD-91621	PRINCIPLES OF INSPECT, REPAIR ONLY AS NECESSARY (IROAN) PROCEDURES AND PREPARTION OF IROAN PUBLICATIONS
(u)	TM 4700-15/1_	GROUND EQUIPMENT RECORDS PROCEDURES MANUAL
(v)	NAVSUPINST 4200.98_	DEPARTMENT OF NAVY (DON) POLICIES AND PROCEDURES FOR THE OPERATION AND MANAGEMENT OF THE FLEET CARD PROGRAM
(w)	DOD 4140.25M	DoD MANAGEMENT OF BULK PETROLEUM PRODUCTS, NATURAL GAS, AND COAL ACQUISITION AND TECHNOLOGY
(x)	SI 10510-OR	TOOL WARRANTY/REPLACEMENT INSTRUCTIONS FOR USING ARMY TOOLS WEBSITE
(y)	MCWP 4-11.4	MAINTENANCE OPERATIONS
(z)	TI 4733-OD/1	MARINE CORPS TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE)
(aa)	MCO 5215.1K	MARINE CORPS DIRECTIVES MANAGEMENT PROGRAM